A Knowledge Management Project for the Sustainable Growth of a Workforce Management Team

Tiago Dias Carvalho

Master's Dissertation

Supervisor: Maria Teresa Peixoto Braga Bianchi de Aguiar



Mestrado Integrado em Engenharia e Gestão Industrial

2018-01-22

Abstract

With the increased competition and significant growth in the complexity of operations, knowledge management becomes a central issue for a growing business. The present dissertation focuses on a workforce management team from a luxury apparel retailer, Farfetch, which after 9 years of existence continues to expand. This project aims at the creation of a knowledge management infrastructure and the improvement of the knowledge sharing routines of this team.

For the creation of knowledge management infrastructure, a set of requirements were identified that served as a term of comparison between several platforms. After identifying the best option for the team, a platform structure has been developed that incorporates all the different knowledge themes that the team needs to manage. Associated with these themes are standard templates so that the pages of the platform are easy to create and that they maintain a consistency, regardless of its author. The team received training on how to upgrade the platform and about 80 pages were created. The creation of these pages has also revealed opportunities for improvement in terms of metrics consistency and process efficiency.

In parallel, the team meetings were restructured, in order to guarantee a greater efficiency of time and a better knowledge transfer. These improvements were possible with the introduction of daily meetings supported by a kaizen framework, greater transparency of the work of different team members by and a greater focus on problem solving.

As a result of this project, opportunities for improvement have emerged. First, the need to complement time-related metrics for solving a customer problem was detected. A new metric has been studied and recommended to company executives who included it in the weekly reports. In addition, a project prioritisation tool was created to ensure that working time is being used to the best of its ability.

The cases presented clearly demonstrate the need to ensure the continuity of the implemented knowledge management initiatives and to continue to explore opportunities for improvement in the team processes that they reveal.

Resumo

Com o aumento da competição e com o crescimento significativo da complexidade das operações, a gestão de conhecimento torna-se um tema fulcral para uma empresa em expansão. A presente dissertação foca-se numa equipa de gestão de força laboral de uma empresa de venda de roupa de luxo online, a Farfetch, que após 9 anos de existência continua a expandir-se. Deste projeto resulta a criação de uma infraestrutura de gestão de conhecimento e a melhoria de rotinas de partilha de conhecimento desta equipa.

Para a criação da infraestrutura de gestão de conhecimento foram levantados requisitos que serviram como termo de comparação entre várias plataformas. Após identificar a melhor opção para a equipa, desenvolveu-se a estrutura da plataforma que incorpora todos os diferentes temas de conhecimento que a equipa necessita de gerir. Associados a estes temas estão modelos base para que as páginas da plataforma sejam fáceis de criar e para que estas mantenham uma consistência, independentemente do seu autor. A equipa recebeu sessões de formação sobre como atualizar a plataforma e cerca de 80 páginas foram criadas. A criação destas páginas revelou também oportunidades de melhoria em termos de consistência de métricas e eficiência de processos.

Em paralelo, as reuniões da equipa foram restruturadas, de forma a garantir uma maior eficiência de tempo e uma melhor eficácia na passagem de conhecimento. Estas melhorias foram possíveis devido à introdução de reuniões diárias suportadas com um quadro kaizen, maior transparência do trabalho de diferentes membros da equipa e um maior foco na resolução de problemas.

Como resultado deste projeto, surgiram oportunidades de melhoria. Em primeiro lugar, foi detetada a necessidade de complementar as métricas relacionadas com o tempo de resolução de um problema dos clientes. Uma nova métrica foi estudada e recomendada aos quadros da empresa que a incluiram nos relatórios semanais. Para além disso, foi criada uma ferramenta de prioritização de projetos, de forma a garantir que o tempo de trabalho está a ser usado da melhor forma possível.

Os casos apresentados demonstram claramente a necessidade de garantir a continuidade das inciativas de gestão de conhecimento implementadas e de continuar a explorar oportunidades de melhoria nos revelados processos da equipa.

Acknowledgements

Since I am faced with the herculean task of putting into words a proper acknowledgement for these people I could not help it but to write it in their own native language. In the words of Nelson Mandela: "If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart."

Gostaria de começar por agradecer a quem mais diretamente esteve envolvido neste projeto. À Farfetch, pela oportunidade de realizar este projeto. Ao meu orientador, Nuno Carvalho, pela passagem de conhecimento, pela tua paciência e pelo teu apoio constante. Ao André Leitão, por me dares a liberdade de atacar novos desafios. Agradeço também à minha orientadora da FEUP, a professora Teresa Bianchi de Aguiar, pelos seu discurso motivador, pelos seus bons conselhos e correção minunciosa.

Um enorme obrigado aos meus pais por me trazerem ao mundo. À minha Mãe, por me saberes ler sem eu falar, por me mandares mensagens todos os dias e por não perceberes que já tenho 23 anos. Ao meu Pai, por nunca esperares menos de mim do que eu poderia ser, por sempre acreditares que eu sabia qual era o meu caminho e pela tua bondade genuina e inocente, mesmo neste ano tão chato.

À minha avó Geninha, por me dares a sopa de joelhos e me lembrares para ter juízo e ao meu avô Toninho por seres o meu herói. À minha avó Nini, por tentares sempre ser tu a fazer tudo por mim. À minha tia Sónia, por nunca me deixares ser cromo. Às minhas primas Beatriz e Leonor, por acharem que eu sou o maior.

Aos meus irmãos e amigos: David Araújo, Dinis Santos, Diogo Almeida, Francisco Antão, Francisco Estevão, Hugo Pena, João André, João Fernandes, Rodrigo Valente, Tiago Costa e Tomás Tavares. Tentei descrever como seria a vida sem vocês, mas já nem a consigo imaginar.

Aos meus amigos de faculdade, pelas manhãs, tardes e noites de estudo e pelas tardes, noites e manhãs de festa.

Не можам да завршам без да се заблагодарам на мојата кралица, Дарија. Иако се обидувам секој ден да и кажам колку многу ми значи, зборовите никогаш нема да бидат доволни. Ти благодарам за твојата бесконечна и безусловна љубов и тоа што никогаш не ме оставаш да бидам тажен или мрзелив. Буци, те сакам најмногу.

Tiago Dias Carvalho

Contents

1	Intro	oduction 1
	1.1	Farfetch
	1.2	The Workforce Management Team
	1.3	Project Motivation
	1.4	Goals
		1.4.1 Improving the Explicit Knowledge Management
		1.4.2 Improving the Tacit Knowledge Management
	1.5	Methodology
	1.6	Dissertation Structure
2	Lite	rature Review
	2.1	Knowledge
		2.1.1 Data, Information and Knowledge
		2.1.2 Tacit and Explicit Knowledge
	2.2	Knowledge Management
		2.2.1 Benefits for Companies
		2.2.2 Knowledge Management Systems
		2.2.3 Standardization
		2.2.4 Ownership
		2.2.5 Measuring Success
		2.2.6 Dangers of Knowledge Management
	2.3	Organizational Culture in Knowledge Management
		2.3.1 Values, Norms and Practices
		2.3.2 Influence of Culture in Knowledge Management
		2.3.3 Cooperation of Groups
		2.3.4 Incentives for Knowledge Sharing
		2.3.5 The Role of Management in Shaping the Organizational Culture 11
	2.4	Effective Team Meetings
	2.5	Daily Kaizen
	2.6	Priority Management
		2.6.1 The Scoring Method
		2.6.2 The Analytic Hierarchy Process
3	Prol	blem Overview 18
0	3.1	The Workforce Management Team
	0.1	3.1.1 Forecast and Staffing
		3.1.2 Scheduling
		3.1.3 Real Time Management
		3.1.4 Reporting and Data Analysis
		3.1.5 Workforce Management Optimisation
	3.2	Problem Statement
	9.2	3.2.1 Data Validation for Projects
		3.2.2 Prioritisation of Projects
		3.2.2 Thoritisation of Frojects

VI

		3.2.4	Knowledge Management	23
		3.2.5	Meetings	23
		3.2.6	Analysts Separation	26
		3.2.7	The Future	27
4	Imple	emente	ed Solution	28
	4.1	Knowl	ledge Base Platform	28
		4.1.1	Requirements Verification	28
		4.1.2	Platform Research and Selection	30
		4.1.3	Structure of the Knowledge Base	31
		4.1.4	Templates Creation	33
		4.1.5	Development of the Knowledge Base	37
	4.2	Impro	vement Points	37
		4.2.1	Incoherences Mitigation	38
		4.2.2	Processes Optimisation	38
		4.2.3	Introduction of a New Metric	39
	4.3	Meetin	ngs' Structure	40
		4.3.1	Team Meetings	40
		4.3.2	Analysts Weekly Meeting	42
		4.3.3	Kaizen Meeting	44
	4.4	Priorit	ty Management	46
5	Conc	lusions	s and Future Work	48
			ledge Base, Incoherences and Processes Optimisation	48
	5.2		few Metric	49
	5.3		yts' Meetings	49
	5.4		Meetings	49
	5.5		ement in the Strategic Process of the Projects	50
	5.6		ty Management	50
	5.7		sts Separation	51
			•	
A	Furtl	her Des	scription of Farfetch's Business Units	56
В	The	Custon	ner Service Daily Report	57

Acronyms and Symbols

AHP Analytic Hierarchy Process

CS Customer Service DS Delivery Support EV Earned Value

FRT Full Resolution Time

KPI Key Performance Indicator

PS Partner Service PV Planned Value

SPI Scheduled Performance Index

WFM Workforce Management

List of Figures

1.1	Farfetch's Organisational Diagram
3.1	The Workforce Management Cycle
3.2	The Freedcamp Platform
3.3	The levels of priority in Freedcamp
3.4	Daily Performance Report for the Customer Service Team
3.5	An example of the files previously used for Knowledge Management
3.6	The Template for the Team Meeting at the Beginning of the Project
3.7	The old template for the analysts' meeting
3.8	Distribution of the WFM Analysts (light blue) and of the WFM team (dark blue). 26
4.1	Knowledge Base Platform's Flowchart
4.2	Comparison Between the Different Platforms
4.3	The Structure of the Knowledge Base
4.4	The Page "How to Add an Anchor" of the Getting Started Section
4.5	The Page "Status of a Ticket" of the General Section
4.6	Metrics' Template - Main Metrics
4.7	Metrics' Template - Children Metrics
4.8	Application of the Metrics Template - Part 1
4.9	Application of the Metrics Template - Part 2
4.10	The Reports' Template
4.11	The How-To Send an E-mail Template
4.12	The Processes Template
	The Incoherences Spreadsheet
	The Distribution of the %RT3 Metric
4.15	The Planning Slide of the New Template for the Team Meeting
	The Team Meeting Feedback Form
	The new template for the Analysts' Meeting
	The Confluence Space for the Analysts' Meeting
	The Analysts' Daily Kaizen Board
4.20	The Current Draft of the Team's Kaizen Board
	The File Used to Prioritise Projects
4.22	The File Used to Determine the Criteria's Weight
B 1	The Customer Service Daily Report 58

x LIST OF FIGURES

List of Tables

2.1	Prioritisation Matrix's Template	15
2.2	Saaty's scale	16

xii LIST OF TABLES

Chapter 1

Introduction

Knowledge management is generally accepted as something that brings value to any company, regardless of the field. However, in most cases, only the operational work gets attention form the employees and knowledge management is not followed through with the consistency it requires.

The present dissertation arises from a compelling need to improve the knowledge management of the workforce management team of the online luxury fashion company Farfetch. In this context, the project will approach the creation of a technical infrastructure where knowledge can be stored and the development of knowledge sharing routines.

1.1 Farfetch

Farfetch is an online fashion retail platform based in London and founded in 2007 by the portuguese entrepreneur José Neves. In 2015 the company joined a restricted group of startups designated by "unicorns" after being valued at over 1 billion dollars. Currently Farfetch is a truly worldwide company, selling products from over 700 boutiques to customers located in 190 countries and employing over 2000 people throughout its 11 offices across the globe.

Farfetch has four different business units: Black & White, Browns, Store of the Future and, the most commonly known, farfetch.com.

Black & White is a full-service agency, providing multichannel e-commerce white-label solutions to luxury fashion brands, based on Farfetch's core systems and services. Browns is a boutique acquired by Farfetch in 2015 that apart from working as a retailer, allows Farfetch to trial its technology. Browns is closely connected with Store of the Future, which is the business unit that develops such technology. Further elaboration regarding these business units can be found in the appendix A.

Farfetch.com is the portal in which the luxury fashion products are displayed and sold to the final customers. Behind the website there is a whole structure (presented in the next subtopic) to provide the best experience to Farfetch's clients, which are not only the costumers, but also the brands and boutiques. This will be the business unit in which this dissertation will focus on.

Farfetch operates in both the B2B segment, dealing with brands and boutiques, and also in the B2C segment, represented by the individual customers and these relationships have to be beneficial for all parties. The customers get to shop at one single address and buy from a lot of different boutiques, some of which would not be reachable otherwise. The boutiques are provided 2 Introduction

with online marketing, a web platform to display their products at a global stage, the production process of having the images of their products online, customer support services, delivery services, solutions for payments and fraud checking. This means that independent retailers can boost their position in the market while maintaining their identity.

As a result from providing these services, Farfetch gets commissions for each sale without having to hold inventory since the boutiques are the owners of the products. This allows for scalability and Farfetch benefit from economies of scale, which is the main reason why the boutiques could not have the same services individually at similar price points. However, this also means that Farfetch is responsible for handling a delivery service with many stock points (the same products can be shipped from different boutiques), which makes it hard to control stock. Moreover, the standards for the quality of service are especially high since the luxury field so demands and one mistake can affect hundreds of boutiques.

1.2 The Workforce Management Team

Farfetch is divided into eleven departments as seen in the part (a) of Figure 1.1. The Operations department, highlighted in grey, is constituted by eleven teams, of which four are relevant for this project. These teams (workforce management, customer service, delivery support and partner service) are highlighted in the part (b) of Figure 1.1.

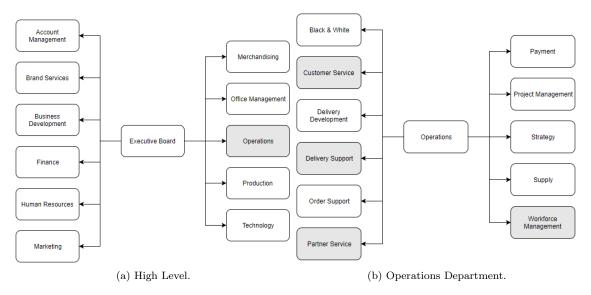


Figure 1.1: Farfetch's Organisational Diagram.

The dissertation will mainly focus on the Workforce Management Team (WFM), which supports other teams through workload forecasting, capacity planning, working hours scheduling, real time management, data analysis and reporting. The teams directly supported are the teams of Customer Service (CS), Partner Service (PS) and Delivery Support (DS). In a situation where there is a need to refer one of these teams and not any in particular, for simplicity sake they will be referred as business related teams. Each of the analysts of the WFM team works directly with one of these teams.

The Customer Service Team deals with any issues regarding the end consumers. It provides support in more than 10 different languages, through e-mails, phone calls or social media interactions. The Partner Service team interacts with the partner boutiques and brands, guiding them to provide the best experience for the customers and also to support them as Farfetch's clients. The Delivery Support team communicates with the transportation couriers in order to solve problems regarding shipments or returns.

The managers of these teams are the ones more focused on the strategic work and the ones who work more closely with the Workforce Management team in optimisation projects. On the other hand, the agents of these teams are the people responsible for answering the clients' queries and solving their problems. Their work can be through incoming and outgoing phone calls or through written dialogue.

1.3 Project Motivation

To keep up with the very fast growth of Farfetch, the Workforce Management team had to focus more on operational work and knowledge management was not properly done.

The main concern comes to the level of reporting and data analysis. Due to the lack of metric definition, metrics started being calculated differently for the different business related teams. Without any place to check what the metrics were really calculating, this caused confusion to the external users and invalidated any cross-team performance measurement.

Besides that, the lack of standardisation made the differences between the analysts' work more complex. This means that it was more difficult for them to fill in and assure reporting for another business related team, in times when the main responsible was absent.

In general, for the team, the visibility of each others' work was very limited, which reduced the opportunities for people to help each other out. This was critical in times when a person was developing the same thing which had been previously created by another person and therefore was unintentionally generating duplicated work.

With the growth of the team (11 in the beginning of September to 16 by the end of the year), effective knowledge sharing became more challenging, so knowledge management was needed more than ever to assure a sustainable growth.

1.4 Goals

This project aims to create a knowledge management system for the workforce management team and can be divided into two categories. The first category concerns explicit knowledge management and relates to documentation whereas the second category deals with tacit knowledge includes communication related goals.

1.4.1 Improving the Explicit Knowledge Management

The main goal regarding the explicit knowledge management is to have a functioning knowledge management platform, where any important information would be stored. This platform should be able to assure the data governance of the metrics measured by the team, to provide a clear explanation of what is shown in the reports created and to store how-to guides for the team's 4 Introduction

processes. Besides, it is crucial that the platform is built in a way that ensures its sustainability so that it continues to be used after the end of the project.

These points should guarantee that the metrics and the reports are more standardised and therefore clearer for their users so that the team members can better support each other at an operational level in times of need.

1.4.2 Improving the Tacit Knowledge Management

Regarding the tacit knowledge, the main goal is to improve the communication within the team to share insights that can benefit the workflows. One expected outcome is to obtain a better functioning of the weekly team meetings, that increases the visibility of the work of the members of the team.

The analysts' communication will be targeted in specific, in order to make them more comfortable with the information of every business related team and to reduce duplicated work.

1.5 Methodology

As knowledge management impacts the processes indirectly, it is complicated to measure results associated with such projects. Therefore, in order to guarantee the success of this dissertation, the implemented solutions are highly based on the information gathered during the literature review.

Another important focus of this project is the sustainability of the tools created. Therefore, an iterative approach was chosen, where the main driver for the fine-tuning of the tools was the feedback from the team members, which increased their acceptance. Moreover, training was provided to the team members to guarantee that they had the skills to use the tools after the project ended.

1.6 Dissertation Structure

The content of this dissertation is structured as follows.

Chapter 2 presents the state of the art of the main themes addressed: Knowledge, Knowledge Management, Organizational Culture in Knowledge Management, Effective Team Meetings and Priority Management.

Chapter 3 describes in detail the Workforce Management team and an analysis of the main problems of the workforce management team that negatively impact a successful knowledge management.

Chapter 4 explains the progresses made with this project by showcasing the methodologies used and the final implemented solutions.

Chapter 5 concludes the dissertation. It suggests focus areas for future work that can further impact the knowledge management success in the Workforce Management team.

Chapter 2

Literature Review

The present chapter provides a general review on knowledge management, team meetings and priority management, in order to better understand the importance of these themes and to present some of the work developed in these areas. In section 2.1 the concept of knowledge will be studied and a distinction will be made between explicit and tacit knowledge. Section 2.2 focuses on the topic of knowledge management and what is necessary for a successful implementation and section 2.3 evaluates the impact of the organisational culture in these initiatives. In section 2.4, several good practices on how to hold effective team meetings will be presented and in section 2.5 there will be a deeper focus on the daily kaizen philosophy. Finally, in section 2.6 the importance of priority management will be described and two methodologies will be studied.

2.1 Knowledge

2.1.1 Data, Information and Knowledge

Before understanding the concept of knowledge management, one must first understand the concept of knowledge itself. Even though knowledge is a commonly used term, the distinction between data, information and knowledge is seldom made (Ackoff, 1999).

Data can be described as "symbols that represent the properties of objects and events" (Ackoff, 1999) or simply as raw numbers and unstructured facts (Vance, 1997). Due to its nature, data is considered to have the least impact for a typical manager (Thierauf, 1999).

Information also represents properties of objects and events and therefore is nothing more than data structure-wise (Ackoff, 1999). What makes it more valuable is that information is already contextualized, categorized, calculated and condensed (Davenport and Prusak, 2000). Thus, information can be seen as data with relevance and purpose (Bali and Lehaney, 2009) and can already provide answers to questions starting with who, what, when, where or how many (Ackoff, 1999).

Knowledge is "a fluid mix of framed experiences, values, contextual information, expert insight, and grounded intuition that provides an environment and framework for evaluating and incorporating new experiences and information" (Gamble and Blackwell, 2001). It is the most action-oriented out of the previous concepts and is capable of solving how-to problems through instructions (Ackoff, 1999). Knowledge can be kept in organizations not only in documents or repositories but also through routines, practices and norms (Gamble and Blackwell, 2001).

6 Literature Review

In another definition, knowledge is seen as "personalized information (which may or may not be new, unique, useful, or accurate) related to facts, procedures, concepts, interpretations, ideas, observations, and judgments" (Tuomi, 1999). Knowledge is always subject to the individual's previous experiences and is molded according to how its owner evaluates the inputs from his/her own surroundings (Davenport and Prusak, 2000). Due to this degree of personalisation, knowledge cannot be found outside of an individual (Tuomi, 1999).

Even though the commonly assumed hierarchy goes from data to knowledge, it is interesting to study the inverse logic. If knowledge is bound to a person, then knowledge must exist before information can be formulated or data measured. In this case, knowledge is seen as the first block of the chain and only after it is articulated and structured, can it become information, which consequently is assigned a fixed representation, becoming data. This philosophy rejects the idea of "raw data" as data is always dependent of some previous process (Tuomi, 1999).

2.1.2 Tacit and Explicit Knowledge

Authors often differentiate between different perspectives of knowledge. Most commonly, this distinction is made between explicit and tacit knowledge.

The explicit dimension of knowledge is formalized and codified (Brown and Duguid, 1999) and is communicated verbally, through writing or through drawings and symbols (Polanyi, 1975). This kind of knowledge is rather simple to identify, store and retrieve (Wellman, 2009) and is associated with the concept of "know-what" (Brown and Duguid, 1999). Explicit knowledge is usually found in databases, memos, notes or documents (Botha and Snyman, 2008). For example, an owner's manual that explains how to properly operate an electronic product contains explicit knowledge (Nonaka, 1994).

On the other hand, tacit knowledge refers to knowledge that is harder to define or to transfer because it is largely dependent of its involving context and has a personal nature (Nonaka, 1994). This perspective of knowledge is only found in the minds of human stakeholders (Botha and Snyman, 2008). This type of knowledge is comprised of cognitive and technical elements. The former consist of mental maps, cultural beliefs, values, attitudes, paradigms and viewpoints, while the latter is composed of concrete crafts and skills, capabilities and expertise to apply on a specific context (Botha and Snyman, 2008). One example of tacit knowledge is knowing how to read a customer and using the correct methodology to approach him/her based on that analysis (Nonaka, 1994). This perspective is often linked to the concept of "know-how" (Brown and Duguid, 1999).

Several authors see explicit knowledge as simpler in a way that is not able to carry the richness of the know-how experience that is capable of creating deep-rooted competitive advantage. (Bukowitz and Williams, 1999; Cook and Brown, 1999) Tacit knowledge is seen as more likely to spark breakthroughs in the organization (Wellman, 2009) through thoughts that are more "inconsistent" than "rational" (Hedlund, 1994). Therefore, its absence can result in a deficient capability for innovation (Gamble and Blackwell, 2001). The few that suggest otherwise put a great deal of focus on the impact that technology can have in storing and spreading knowledge, favouring technology enabled knowledge management processes (Bohn, 1994).

However, the discussion of which perspective is more important is not paramount because they are both mutually dependent and reinforcing. Tacit knowledge builds the background needed for creating a structure that is able to interpret and develop explicit knowledge (Polanyi, 1975).

In fact, knowledge should be seen as a spectrum rather than just two defining points, where all elements are at some level a mixture of both explicit and tacit knowledge (Botha and Snyman, 2008).

Due to the complexity of the knowledge concept, it is not achievable to find one single perfect knowledge management system or to have a perfect approach to knowledge management. It is instead necessary to accommodate a variety of solutions that complement each other (Alavi and Leidner, 1992).

2.2 Knowledge Management

2.2.1 Benefits for Companies

Companies always thrive to have assets that can give them a competitive advantage. However, an asset is only the source of a competitive advantage if it is scarce and hard to replicate (Barney, 1991).

Resources associated with knowledge are socially complex and difficult to copy, which makes them assets with potential to create long-term sustainable competitive advantage (Alavi and Leidner, 1992). As a matter of fact, the point of knowledge management is to help the organization to compete by collecting and leveraging the collective knowledge (von Krogh, 1998).

For example, Ford managed to reduce the development time for their cars from 36 to 24 months and the delivery delay from 50 to 15 days, just by sharing knowledge within the company and with dealers (Gazeau, 1998). This proves that is important to not only create knowledge and learn but also to not forget or lose track of that same knowledge (Darr and Epple, 1995). However, most workers still believe that their organization's best knowledge is not accessible and that mistakes are committed several times (Gazeau, 1998).

One of the most important knowledge-assets of any company are the people that work there and therefore it is crucial for their wisdom to be protected (Porter-Liebskin, 1996). A big percentage of companies suffers significant setbacks when key staff leaves and the loss of only one employee can already result in damaged communication with clients and/or suppliers and even a considerable loss of income (Consulting, 1998).

More and more, the power associated with knowledge comes not from hiding it, but from transmitting it in a way that makes it productive (Drucker, 1995). By this logic, companies that can generate an internal "absorptive capacity" from their knowledge resources have a competitive advantage in their markets. Previously acquired knowledge should be used to recognize the value of new information, assimilate it, and apply it to create new knowledge and capabilities (Cohen and Levinthal, 1990).

2.2.2 Knowledge Management Systems

However, in order to do so, the company needs to have already captured the organizational knowledge and to be able to locate it. To have quick access to the knowledge, there must be an effective storage and hassle-free retrieval mechanisms (Johannessen and Olaisen, 1999; Kraatz, 1998). This free access to knowledge opens the doors for collaboration, which is widely considered as a major key for knowledge creation and its transmission within an organization (Leonard and Sensiper, 1998; Teece, 1998).

8 Literature Review

One of the most significant examples of how important knowledge sharing can be for the growth of a company are open-source developments. Android, Linux and Wikipedia are all examples of systems that massively benefited from being either open to modifications from anyone or having their source code freely available. Benefits include faster product development, better understanding of what functionalities are important and a wider adaption of the products (Gold and Segars, 2001).

One important thing to retain from these distinctions is that knowledge systems implemented in organizations will not seem dramatically different than information systems. However, even when knowledge has to be articulated into information, it must be expressed in a way that enables users to interpret it (Alavi and Leidner, 1992).

Besides, these systems should only contain information which can be actively processed in the brain of the user through reflection, enlightenment or learning. Hoarding large amounts of informations adds little value (Alavi and Leidner, 1992). Actually, people can be discouraged of accessing for knowledge they are aware that exists when the sheer volume of information provided is too large (Powell, 1998).

Creating a computer-mediated forum can result in a more frequent sharing of best practices and beliefs, confirmation hypothesis and interpretations and communication of new thoughts (Henderson and Sussman, 1997). Through the nest of knowledge, workers can question assumptions and arrive at either new insights or at better interpretations of the reality faster than by doing so on their own (Boland and Te'eni, 1994).

2.2.3 Standardization

The likelihood of a knowledge management project to succeed increases when they make use of a broader infrastructure of both technology and organization. In terms of desktop computing and communications, the bare minimum should be for each worker to have access to a networked computer with standardized productivity tools that allow for an easy creation and exchange of documents. In any case, the initiative will always have an easier time taking off if the tools and skills used are already in place beforehand (Davenport and Beers, 1998).

The more variable the knowledge management processes are, the more the company must deal with exceptions, which reflects on a less efficient integration of knowledge and a less consistent final product. The processes should be defined to be as standard as possible from the beginning and should be flexible enough to accommodate a certain degree of complexity. Making the knowledge management processes a part of the working routine is also a step forward towards a better standardization and, therefore, a more successful integration of the knowledge (Grant, 1996).

2.2.4 Ownership

Knowledge sharing initiatives are more interactive and generate a better learning environment than those solely focused on knowledge acquisition, which foments better results. Companies and institutions from very different areas share the view that it is beneficial for their managers to share their knowledge on the business to less experienced members. Not only do the newcomers gain valuable insights but the managers themselves also refine their knowledge while sharing it (Tobin, 1998).

2.2.5 Measuring Success

The description and dimensions of knowledge management processes are not as clear and well defined as they are for instance for financial ratios. Not only have they been less developed through time but they also have an inherent greater complexity (Hart and Banbury, 1994).

This is not to say that an effective knowledge management is not a big driver in the development of key aspects of organizational performance. In fact, it is usually associated with a learning curve that makes the organization more capable of creating value. (Galunic and Rodan, 1998)

The main problem arises when trying to measure the success of a knowledge management project. Often the benefits for the business are indirect and it is quite challenging to correlate the knowledge management's achievements to financial indicators (Kaplan and Norton, 1992). Moreover, shareholders and possible investors are mostly interested in the firm's capability to make money and generate profit rather than in its knowledge sharing culture (Davenport and Beers, 1998).

As knowledge management projects have to deal with complex variables such as organic growth that have an inherent uncertainty, they can raise suspiciousness against other fact-based initiatives. That is why some knowledge managers try to frame the project in terms that are more business-friendly, such as indicating that cycle times will be reduced through a reutilization of the resources (Davenport and Beers, 1998). Therefore, it is necessary to focus on finding reliable key performance indicators and this will indeed require a use of less traditional options. One option to judge the outcomes is to verify if the organization improved in capabilities such as: anticipating opportunities for new products/services, rapidly commercialize new innovations, anticipate surprises and crisis, decrease market response times, avoid overlapping development of corporate initiatives, streamline its internal processes and reduce redundancy of information and knowledge (Gold and Segars, 2001).

Other examples of indicators are: growth in the volume of content and usage, the likelihood that the project would survive without the support of a particular individual or two and if the project is seen as an organizational initiative rather than someone's individual project (Davenport and Beers, 1998).

2.2.6 Dangers of Knowledge Management

One of the dangers of the implementation of knowledge management projects is that content continues to be used past its real usefulness (Alavi and Leidner, 1992). This can happen when knowledge management turns into a structure of single-loop learning where errors are detected and corrected but the status quo is never challenged (Argyris and Schon, 1978). Consequently, it will also make the organizations resistant to change (Denison and Mishra, 1995). On the other hand, if there is no routine of systematically updating the platform with new information and only the existent content is updated, the knowledge base will also become out-of-date.

However, when properly implemented, knowledge management can increase both responsiveness and innovativeness (Hackbarth, 1998). To assure that, it is necessary to keep the basic concepts underlying the practices of the knowledge base up to date (Malhotra, 1999).

10 Literature Review

2.3 Organizational Culture in Knowledge Management

2.3.1 Values, Norms and Practices

Culture can be defined as a set of values, norms and practices.

Values are found at the deepest level of a culture and are described as rooted and tacit preferences on what the organization thrives for and how it aims to achieve that. Because they are so embedded in the organization and its people, it is very hard to change values. However, when that happens, there is potential for a great impact.

Norms are an expected pattern and come at a level above, being more identifiable and susceptible to changes. They are usually associated with how individuals interact at a social level within the corporation.

At last, there are practices, repetitive behaviors, universally understood such as the structure of weekly meetings (or their existence in the first place) or simple things as how to answer the phone. They are the most visible parcel and the most capable of being re-shaped. Therefore, they can unveil small quick-wins for knowledge management projects (De Long and Fahey, 1997).

2.3.2 Influence of Culture in Knowledge Management

Creating knowledge is the successful outcome of an innovation process which necessarily involves interaction between individuals (Badaracco, 1991). This generation of knowledge cannot occur on its own because, unlike data, knowledge develops in the human brain, invisibly and solely under the right organizational climate (Davenport and Beers, 1998). Therefore, focusing on the culture is a need for a firm that wants to properly manage its knowledge (De Long, 2000). In fact, having the wrong organizational culture is the main hurdle against the creation and management of knowledge assets (Gold and Segars, 2001).

Cultures determine which knowledge is meaningful and useful and which knowledge is dispensable. Consequently, the unit will focus on acquiring and developing knowledge on the socially approved fields so it is important that they are aligned with the business goals.

It is not uncommon for knowledge managing activities or skill-building training classes to be undervalued when compared with daily tasks, which compromises medium and long term results.

If people are not willing to share, no amount of IT investments or good project management practices will be sufficient to achieve the knowledge-sharing and business goals because they do not influence how the culture works, and that is the real bottleneck (Shermon, 2016).

Culture should be seen as the foundation of a house - even though no one ever lived in a foundation, neither has someone lived in a house without a foundation. Therefore, when presented with a toxic culture regarding knowledge management it is best for the project to focus just on improving these conditions, in order for subsequent projects to be able to actually leverage the knowledge (Davenport and Beers, 1998).

2.3.3 Cooperation of Groups

Some authors state that a community with close ties can foster the creation of knowledge, as people are more comfortable at presenting ideas and challenging each others' premises. These interactions result in everyone having a similar understanding of reality, almost as if there is a non-physical knowledge based shared by the group (Brown and Duguid, 1999).

However, other authors argue that weakly tied groups can achieve better results in the knowledge creation process. These groups come up with a greater number of new ideas because they have a more diversified knowledge and perspectives (Robertson and Newell, 1996).

2.3.4 Incentives for Knowledge Sharing

It is common that business strategies require for the knowledge of individuals to be shared and combined for further efficiency and effectiveness. However, social norms can hinder the implementation of knowledge management projects.

Many companies measure their employees' performance solely on individual brilliance, which promotes an individual ownership of the knowledge rather than collective and cross-functional efforts. When that is the case, sharing information is seen as something that will decrease the employees' power within the organization and put their position at risk (von Krogh, 1998). This is an even greater issue if the corporation has a history of downsizing and the trust levels have not been replenished.

This incentive for hoarding the knowledge can also come from structural elements, which have the purpose of better articulate different functions within the organization but end up serving as internal boundaries for the knowledge flow. Again, if some particular functions, divisions or locations are rewarded for owning the knowledge, they will not feel compelled to share it (O'Dell and Grayson, 1998).

Another structure-related blocker for cross-functional knowledge sharing are status differences. When a business unit is valued above another it makes it harder for the latter to contribute and can create a greater sense of competition when its own unit's ideas are higher valued without proper judgment. Nowadays, this problem is ever-growing because companies need a more efficient integration between functions to assure success.

Therefore, it is crucial to guarantee that such aspects of the organization's culture are not working against the objectives of the knowledge management (De Long and Fahey, 1997). In order to keep workers motivated to set aside time to learn new things, share their knowledge and help other employees' outside their own function or division, there should be a fitting incentive system (Argote and Epple, 1990).

2.3.5 The Role of Management in Shaping the Organizational Culture

Even though managers recognize the importance of culture for the successful implementation of knowledge management projects, they are seldom able to articulate the culture-knowledge relationship in ways that lead to action De Long and Fahey (1997). This, however, does not mean that they cannot have a positive impact on shaping culture to be more knowledge management friendly. As expected from any change management project, results benefit from the involvement of senior management (Davenport and Beers, 1998).

Managers should make clear for the entire organization that knowledge management and organisational learning are keys for the corporation to thrive and they should clarify which types of knowledge in particular are the most critical for the company. It is also within their power to financially support any infrastructure resources needed to assure the development of the project. (Davenport and Beers, 1998).

12 Literature Review

Besides identifying and adopting behaviors which can portray that certain knowledge building activities are essential, managers should also circle out and eliminate norms and practices that are barriers to those behaviors (De Long and Fahey, 1997).

When communicating their vision (which needs to be clear), managers should also clarify that all employees should be involved and held accountable for their contributions for the knowledge management project (O'Dell and Grayson, 1998).

On a more practical note, managers should also allow employees to allocate more time to support the knowledge management projects. The lack of time should not be a barrier to make knowledge available and shared with others, to teach and mentor each other and to use their expertise to innovate and find ways of working smarter (Glazer, 1998; Cranfield University, 1998).

As seen before, performance reviews can influence negatively this field of action. It is up to managers to implement reward systems based on team performance and collective accomplishments as well as discourage an environment of harmful competition. At companies such as E&Y and McKinsey and Co., consultants are partially evaluated on their contributions for knowledge repositories and human networks (Davenport and Beers, 1998).

Departmental meetings are also a way to steer the group into a knowledge creating and sharing path. Different opinions should be respected and even encouraged and conflict should be managed in a constructive fashion rather than considered mindless.

Another example of where managers can make a difference is on how to deal with mistakes. Errors should not be hidden, ignored or heavily penalised but instead be exposed as a source of knowledge for future best-practices. This mindset should be correctly passed down to the workers.

To sum up, a senior management that is truly committed to knowledge management can create aspects of a knowledge-oriented culture, support changes in performance measurements and can also allocate financial resources to build the correct infrastructure. Therefore, if there is lack of support from the senior management, the firm should focus on improving a single knowledge oriented process or function and not expect any large scale revolution. Davenport and Beers (1998)

2.4 Effective Team Meetings

Meetings are taking up an increasing number of hours of the workday and it is known that focused and deliberate conversations are critical to organisational performance (Axtell, 2017a). However, a 2012 survey from Salary.com on U.S. professionals showed that meetings are ranked as the number one office productivity killer.

This section will focus on how to achieve quality meetings, which complement achieving the goals with leaving employees feeling more connected, valued and fulfilled (Axtell, 2017a).

To start it is important to consider who is invited for the meetings. People often feel like either they lack the skills to contribute to the meeting or that what is being discussed is not relevant for them. Consequently, they consider their attendance as a waste of time. Therefore the people present at the meeting should be either affected from the announcements or capable of finding solutions for the problems discussed (Hartman, 2014).

Afterwards, it is important to make sure that the objectives of the meeting are clear. This can be achieved by sending an agenda with the topics, provided that vague titles such as 'status updates' are avoided (Hartman, 2014). Allowing people to add their own topics to the agenda reduces the number of off-topic points raised unexpectedly in the middle of the meeting (Schwarz,

2.5 Daily Kaizen 13

2013). However, it is necessary to keep a realistic number of topics in the agenda. If too many topics are chosen, some, if not all of the goals will be compromised and therefore people will not be as motivated and focused for the following meeting (Sundheim, 2016).

The topics should be prepared before the meeting starts. If the topics are not complex, there will not be a need to go through them in a meeting and if they are complex, they need smart and focused preparation if it is expected to achieve something of value out of the meeting (Sundheim, 2016).

For the meeting itself it is also a good practice to always start and end on time. People appreciate when their time is taken seriously and they will more likely be on time if they are aware that the time frame is rigid. As the majority of people can only be truly engaged for sixty minutes, meetings should not last longer (Hartman, 2014).

During the meetings and when moving to a new topic the leader should make sure that everyone is ready to move on. This guarantees that the issue will not be raised again and that the meeting will stay on track. If this is successful and the team still runs out of time before all the topics are addressed it means there is an underestimation of the time needed (Schwarz, 2013).

When someone feels the need to raise some off-topic discussion, instead of immediately shutting that person off, (s)he should be invited to explain how does it relate with the topic at hand. This can either prove that it is irrelevant or it can reveal a connection that has not been considered. Then, the team should decide if they would like to take on that topic, leave it for later or for a future meeting. Even if the topic is not related it can be more important to address it than to keep with the ongoing discussion if it concerns some highly emotional issue. Sometimes focusing on how the team works together is more critical than any other operational or strategic discussion (Schwarz, 2013).

The last key aspect of a meeting is assuring that there will be effective follow-up. The meetings should end with clear agreements on specific action points with associated responsibles and deadlines. People should be free to negotiate the dates to assure that they are comfortable with the compromise. When there is a risk for a certain action to not be delivered on time, the person responsible of it should be expected to notify the supervisor. It is not possible to demand perfection in delivery but the team should strive for perfection in communication (Axtell, 2017b). The higher the completion level of action points, the more progress is being done toward the goals and the higher is the sense of accomplishment of the team (Axtell, 2017b).

2.5 Daily Kaizen

In companies where the continuous improvement culture is not engraved, management tends to focus on problem solving but not on finding the roots of the problems and mitigating them. The kaizen philosophy achieves these objectives by focusing on company development through consistent incremental improvements, complementary to disruptive changes, such as technological breakthroughs. According to Martinho (2016), in order to obtain a sustainable growth, there should be a focus on the following values:

- Value creation with a focus on the customer;
- Waste (Muda) elimination;
- Visual Management to facilitate the decision making process;

14 Literature Review

- Working in the field (Gemba) to find improvement opportunities;
- Workers involvement and accountability, regardless of their position.

By following these values it is possible to generate value without large financial investments. The expected outcomes of their implementation are: improved product and processes quality, a reduction in costs and lead time and an increase of the workers' motivation (Imai, 2012).

Although many continuous improvement projects start, many of them end up unsuccessfully because they fail on behavioral aspects. Therefore, it is key to create in the company routines with the right behaviors (Bessant and Gallagher, 2001). The daily kaizen is a 5-level methodology which assures the correct implementation of the projects on this issue. Since only the first 2 levels were addressed in this project, the literature review will only be focused on them.

The level 0 focus on defining the natural teams, teams who work together on a daily basis and perform tasks with the same goal in mind. These teams can not be too large, as so would hinder the efficiency of the meetings. Afterwards, the concept of daily should be introduced to the teams and each level should be explained in detail.

The level 1 focuses on the implementation of daily kaizen meetings. These meetings last between 5 and 15 minutes and have a standardised agenda for each particular team, focusing on improving the communication amongst the workers, making the teams aware of how to reduce waste, defining action plans, controlling several indicators on a regular basis and preparing the managers to immediately react to problems. A team board is generally used to support the meeting structure.

The involvement of all the workers is an essential part, as they are the ones working closest with the processes and therefore they are the ones who can more easily suggest improvement ideas. Promoting this disruptive way of thinking is a cornerstone of the continuous improvement culture.

2.6 Priority Management

When managing the projects of a company, it is usual to think that everything is important and that nothing can be dropped without serious consequences. However, if everything is called a priority, then nothing is.

When leadership teams do not identify few key priorities, they pass onto their lower-level workers the task of deciding which tasks are more important. Since these workers have a much more limited sense of the company's strategy it is not possible for everyone to be on the same page or to guarantee the effectiveness of those decisions (Ashkenas, 2016). A proper prioritisation creates a strategic alignment across the company and clears all doubts for the operational teams when faced with decisions, increasing the success rate of projects. Ryanair, for example, clearly focus on efficiency over customer service and this makes their employees allocate their time accordingly.

It is true that prioritising the wrong things will lead to bad results but this problem is far less frequent than the problem of not prioritising at all. When this is done correctly duplicated efforts are consolidated and unnecessary activities are eliminated, resulting in a reduction of costs that usually goes around the 15% mark (Nieto-Rodriguez, 2016). In the next two subsections the prioritisation methods that were used in this project will be analysed.

2.6.1 The Scoring Method

The scoring method is a methodology that uses a prioritisation matrix for ranking ongoing or prospect projects based on pre-set criteria determined as important. This matrix returns a final score for each project proportionally big to its importance, which allows the management to clearly see in which projects it should focus first and which projects should be put on hold or discontinued.

According to Gosenheimer (2012), to create a prioritisation matrix the following steps should be followed:

- 1. Determine the criteria and rating scale. The first step is to collect factors that will clearly differentiate important projects from unimportant ones. These are called the criteria and it is usual to have 6-12 criteria. According to Cáñez and Garfias (2006) there should be a balance between qualitative and quantitative criteria. Having the business experience and the manager's intuition complementing financial and risk considerations provides solid results. Afterwards, it is necessary to define the rating scale's values, commonly used options are 1-10 or 1-5. These values represent how well the criteria is satisfied, the higher the better. It is essential that each scoring option has its own unique meaning, which is clearly explained on the matrix. This assures objectivity for the filling in process.
- 2. Establish the criteria's weights. When a project is scored the numeric rating given to each criteria is multiplied by its weight, so it is important to give a weight o each criteria proportional to its degree of importance.
- 3. Create the matrix. A matrix should be created with a similar template to the one shown below on Table 2.1.

Criteria	Weight	Scoring Values	Project A	Project B
Required Service/Product	5	1: Not needed 4: Impacts other services 7: Impacts the core service 10: Mandatory	5	35
Value to "Customer"	4	 No value Some value A lot of value Essential 	20	35
Full Disclosure of Costs	2	1: Lots of unknown costs 4: Some costs are known 7: Many costs are known 10: All costs are known	20	20
Total Project Score			75	200

Table 2.1: Prioritisation Matrix's Template

4. Work in teams to score projects. Each project should be reviewed and rated in each criteria. The ratings should be multiplied by the weights and these numbers should be added up to make the final score. It is a good practice to go through the process with the people rating the projects beforehand to make sure that they understand the tool.

16 Literature Review

It is preferable to always rate projects in teams as different perspectives produce more objective results. Another advantage is that if there are many projects to rate it is possible to divide the group into smaller teams to speed up the task.

5. Discuss results and prioritise the list. After all the projects are rated, a discussion should happen to see if the group is comfortable with the ranking order or if some adjustments should be made, in spite of the score. Finally, the projects should be passed on to a masterfile to keep track of all the ongoing projects.

This process can easily be done through a Microsoft Excel spreadsheet. Not only does it not require expensive software to generate a solution but it also does not require to hire consultant experts to analyse the results. Besides, it is a time efficient solution for prioritising projects (Schniederjans and Hamaker, 2003). Priority matrix is a quick and easy method to prioritise complex or unclear issues, it still maintains the consistency of the results if multiple and accurate criteria are chosen. Besides, the fact that an objective way of scoring is being used and the result is also a number helps to take the emotion out of the process and assures optimal results. Although it provides justification for the choice of the projects it does not completely remove the manager's role. Not only does it require human input throughout the process but the final decision should always be reviewed and approved by the manager. (Coldrick and Hannis, 2005)

2.6.2 The Analytic Hierarchy Process

The Analytic Hierarchy Process (AHP) is a structured technique for organizing and analyzing complex decisions, based on mathematics and psychology. It was developed by Thomas L. Saaty in the 1970s and has been extensively studied and refined since then (Pangsri, 2015).

This method uses actual measurements and/or subjective opinions as input and return ratio scales and a consistency index. The decision methods of AHP according to Saaty (2008) are as follow:

- 1. The objective of the process is defined.
- 2. The decision hierarchy is structured. The higher level is the goal of the decision and the lower levels are condensed in criteria, sub-criteria, alternatives, etc.
- 3. The elements in each hierarchical level undergo a pairwise comparison, in order to determine the criteria's relative importance. The comparison is based on a nine level scale shown in Table 2.2.

Score	Meaning	
1	Equal importance	
3	Moderately more important	
5	Strongly more important	
7	Very strongly more importantly	
9	Extremely more important	
2,4,6,8	Compromise values	

Table 2.2: Saaty's scale

4. From the comparisons, the weights of the elements are calculated. Considering $C = \{C_j | j = 1, 2, ..., n\}$ as the set of criteria. The result of the comparison of n criteria can be displayed in a matrix (n x n), in which each element $a_{ij}(i, j = 1, 2, ..., n)$ is the coefficient of the weights of the criteria. This comparison is represented by a square and reciprocal matrix, shown below (Görener, 2012).

$$A = (a_{ij}) = \begin{bmatrix} a_{11} & a_{12} & \dots & a_{1n} \\ a_{21} & a_{22} & \dots & a_{2n} \\ \dots & \dots & \dots & \dots \\ a_{n1} & a_{n2} & \dots & a_{nn} \end{bmatrix}$$

Each matrix (one for each level of the hierarchy) is normalised and the relative weights are calculated. These are given by the main vector (w) that corresponds to the maximum eigen value λ_{\max} as shown below.

$$A_w = \lambda_{\max}.w$$

5. Then, a Consistency Index (CI) can be calculated through the formula below.

$$CI = \frac{\lambda_{\max} - n}{n - 1}$$

The consistency ratio CR is obtained by dividing the CI value by the Random Index (RI).

$$CR = \frac{CI}{RI}$$

If this value exceeds 0.1 the comparison of criteria should be remade, until the consistency is accepted.

6. Finally, the alternatives are evaluated according with the weighting.

Chapter 3

Problem Overview

This present chapter showcases the as-is scenario of the Workforce Management team at the start of the project. Section 3.1 explains in detail the work of the team and how it is divided. In section 3.2 a more in-depth analysis is made for the most problematic areas of the team's work, pointing out the issues that need to be addressed.

3.1 The Workforce Management Team

As previously mentioned, the Workforce Management team provides support to the business related teams (Customer Service, Delivery Support and Partner Service). In order to do so, the team follows the Workforce Management cycle, which can be seen in the Figure 3.1.



Figure 3.1: The Workforce Management Cycle.

In this section, these processes will be explained in detail. As some processes of the Workforce Management cycle are responsibility of the same group of people inside Farfetch's team, they will be described as groups. The team also has 2 members focusing on the workforce optimisation, which will be explained as a complementary group.

3.1.1 Forecast and Staffing

The Forecast and Staffing processes have the goals to create forecast models that accurately show the future working needs of Farfetch's services and to create short and long term staffing plans to be used for scheduling. These tasks are responsibility of the Planning & Forecast Specialist and of the Head of Workforce Management, both based in Porto. During the timespan of this project, another Planning & Forecast Specialist joined the team.

The first step is to take the historical data and define control limits for each of the following metrics:

- Volume of phone calls;
- Volume of tickets;
- Average handle times;
- Worked hours vs scheduled hours;
- Marketing information;
- Shrinkage.

Afterwards, the forecast model is generated and its outputs are evaluated. In case there are values outside the predetermined control limits the forecast can either be adjusted or a warning is created. The final forecast contains information on the planned staffing hours.

When the forecast is ready, it is necessary to build the staffing plan. The recruitment needs are evaluated and generated for a 6 months period. This job is done with the constraint that Farfetch does not hire freelance agents only for specific peak seasons.

3.1.2 Scheduling

Scheduling is the process of arranging, controlling and optimizing work and workloads. The team has one scheduler working in the Porto office and one working from Los Angeles, who allocate resources according to forecast and staffing requirements.

They create models using algorithms and then manually adjust the agents' working hours, breaks and lunch times to the detail of 15 minutes blocks. This team is also responsible for approving holidays for the agents and generating schedule efficiency reports on a weekly basis with intra-day details.

3.1.3 Real Time Management

Having real time data allows the team to make immediate changes to make sure that the number of agents available matches the workload. The team has four real time supervisors, distributed throughout Porto, Lisbon, Los Angeles and Shanghai. A plan is defined every week where the team sees the objectives of the week and analyses possible issues. During the week, they have information on the number of calls in each language queue, how long each customer waited, which agents are available and in which state they are.

The supervisors manage all exceptions (absenteeism or unexpected volumes, for example) and make decisions on the various events that can exist: breaks, meetings, training, overtime, among others. They should be working closely with the team managers to adjust the working strategies.

20 Problem Overview

3.1.4 Reporting and Data Analysis

All important decisions should be taken based on real analytical evidence and so, the goal of this process is to interpret all the relevant data to support those decisions and to report on all the team metrics to ensure visibility of what is happening. The reporting and data analysis team consists of 3 analysts working from Porto, each assigned to one of the business related teams: Customer Service, Partner Service and Delivery Support.

The analysts report on the performance of the previous week on every Monday and report on the performance of the previous day from Tuesday to Friday. The reports can be more focused on the operational performance when they are destined to the team managers or they can give a more high-level overview of the performance to the executive team. On these reports the analysts write notes regarding the main achievements and main problems and try to justify them based on the data through root-cause analysis.

This team also develops other reports on more specific issues for the managers of the team they work with and does analysis for projects created by not only these teams but also for other teams, such as the Continuous Improvement team, to give them data evidence to support their theories and implement improvements in the workflow processes.

3.1.5 Workforce Management Optimisation

Besides having people working directly in this cycle, the team also has a Tools Administrator and an Intern. The Intern is responsible for implementing a scheduling tool for the production team and the Tools Administrator is responsible for the platforms that the agents and managers of the connected teams use. He creates the accounts and manages the permissions of each person, creates macros and new fields to support the needs of the teams and is in contact with the developers of the software products when some problem occurs or when some new feature is needed.

3.2 Problem Statement

During the analysis of the current processes, some problematic areas were identified. In the next subsections they will be described.

3.2.1 Data Validation for Projects

Standing in a fashion luxury business and wanting to stay on top and be seen as a reference, leaves little room for mistakes. Regardless, Farfetch managed to keep an outstanding growth rate throughout its existence and it is safe to say that some of its success is due to its flexibility. No process is ever seen as too fined tuned and the managers of each team are never afraid of trying new iterations of the processes, in the search for performance improvements.

The success of these improvement projects is only possible because the assumptions and models for the future are always supported by analytic evidences. This means that the analysts at Farfetch play a key role, and this is particularly true in the Workforce Management Team.

However, whenever a manager of a business team or someone from an external team needs data validation, the analysts are left out of the strategic process, on the majority of cases. Therefore, it is not clear what are the goals of the projects and why that particular data is needed. Consequently,

3.2 Problem Statement 21

what is requested is not always something possible to measure or other times it is not what best shows the information the requester would like to have. Besides, the analysts are not shown the evolution of the project and what impact the project has in the end. Most of the times, they do not even receive the deserved recognition for their part, which hinders their motivation.

3.2.2 Prioritisation of Projects

The Workforce Management team uses an online project management tool called freedcamp, shown in Figure 3.2. This tool allows them to create tasks and sub-tasks, assign them, set deadlines, set priorities, write comments and update the status of the tasks. It is also possible to filter the tasks by assignee, by deadline or by status, which gives an overview of the projects to the head of the team and makes it easier for each person to have its work organised. This is an especially important tool for the analysts and for the people working in workforce optimisation because their work is mostly project based, while the rest of the team have more operational tasks.

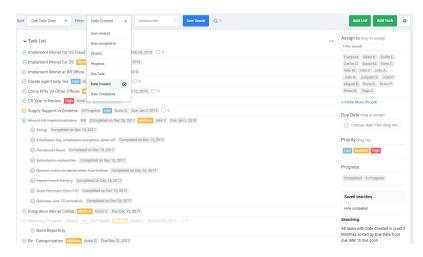


Figure 3.2: The Freedcamp Platform.

However, the previously mentioned lack of involvement that the analysts have on the strategic development of the projects make it hard to do a proper prioritisation of the projects. As a results, projects ranking is highly influenced by the subjective opinion of the requesters and the analysts.

Besides, Freedcamp only allows for the priority setting to be differentiated with three levels low, medium and high, as seen in Figure 3.3. This means that even if the prioritisation is flawless within these three ranges, it is not possible to know which project should be tackled first within the same priority level. Therefore, it is not possible to know if the analysts are using their time to



Figure 3.3: The levels of priority in Freedcamp.

generate the most value possible and sometimes important projects have to be rejected or delayed due to time restrictions, when in fact time is being spent on something not so critical.

22 Problem Overview

This issue is aggravated by the fact that each analyst only deals with projects of its own area regardless of demand or importance. If one area has a surplus of important projects, the other analysts are not capable of help out the analyst responsible for that area because they are not familiar with the data.

Taking into consideration the time constraints and the importance of the analysts' job, it is necessary to maximise the effectiveness of their time.

3.2.3 Reporting

The high standards of the fashion luxury business greatly reflects on the operational teams, which are always expected to have very high levels of performance. Consequently, this puts pressure in the Workforce Management team to assure that gives a precise reporting on the situation.

The reporting requires an ever-increasing level of detail so that the managers from the business related teams can have a very clear picture of the situation in order to identify what is going well and what needs to be tackled. In result, the analysts consistently have requests for new dashboards to be built.

On the other hand, this also means that even when they are sending standardized weekly or daily reports, they still need to pay a lot of attention to what is being shown and they need to spend a lot of time reporting on the metrics that have positive or negative results and giving explanations to why that happened.

In Figure 3.4, it is possible to see an example of the Customer Service daily report, where the graphs were collected from different dashboards, automatically updated, and the notes were made based on the analysis of the data. Not all the graphs were included but the full report can be found in annex.

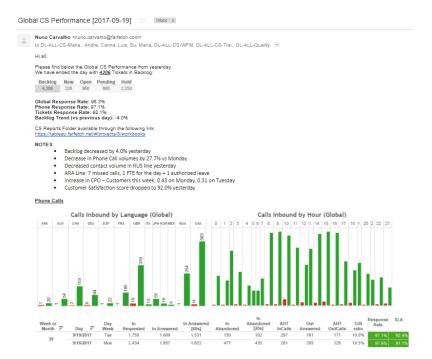


Figure 3.4: Daily Performance Report for the Customer Service Team.

3.2 Problem Statement 23

3.2.4 Knowledge Management

Farfetch grew from 1000 employees in 2016 to 2200 in 2017 and it is expected to reach a staggering number of 3500 people in 2018. In the beginning of this dissertation, September 2017, the Workforce Management team had 11 employees and by the end of the year the number had already grown to 16. With this ongoing growth, data consistency and standardization becomes more and more an emerging problem.

As previously described above, the development of Farfetch resulted in a very high workload for the Workforce Management and with such a high focus on the operational work, the necessity to create proper documentation of the work was neglected. The team had only a few PDF files documenting some processes of the Scheduling and Workforce Optimisation teams and some powerpoint presentations on how to send the daily and weekly reports of the analysts but they were already outdated at the time of the start of this project. An example can be found on figure 3.5.

OneSupervisor 1. Create "0" Service Go To Supervisor Management>Services • Create New service with the name "UKO BW Brand", "USO BW Brand", depending on the localised service • You can duplicate a previous created brand • This service will have no configurations and will only be used to filter out the calls outside of the calendar/customer promise and assign the call to the main service • Tab Properties>Inbound: • Add brand support number with "+" and with "00" • Add DNIS and tick the "audio"checkbox

Figure 3.5: An example of the files previously used for Knowledge Management.

On the analysts' side in particular, the number of dashboards and reports is growing but there is a serious lack of time for process mapping or proper documentation of the metrics used. This way of working is reflected in the fact that similar performance reports for different teams call the metrics by the same name but calculate them with different assumptions. This invalidates any cross-team performance evaluation and can be misleading for people unfamiliarized with each particular report to draw conclusions. This unclarity also keeps people from using the data to create reports independently, resulting in more workload for the Workforce Management team.

The lack of documentation also hinders the efficiency of the analysts. Without a clear knowledge of what the other analysts have done previously, it is not possible to guarantee that, when creating a new query, there is not already something built by another person that they can use for guidance. Therefore, somethings that are made from scratch and are very time consuming, are in fact duplicated work. Besides, this also makes it hard for the analysts to help each other in times of need, because they are not familiarized with each others' data.

3.2.5 Meetings

Next to the tables where the Workforce Management sits there is a Kaizen board that was once used to support their weekly meetings. However, some months prior to the beginning of this

24 Problem Overview

project, it stopped being used. The reasoning behind it was that it needed to be updated by hand and the people from the Los Angeles and Shanghai offices could not do so and also because they could not see the board daily. Consequently, it was replaced by the Freedcamp platform, where the team members write down their tasks.

Nevertheless, o a weekly basis, the team holds a meeting for everyone (the team meeting) and the analysts have another meeting of their own (the analysts meeting).

3.2.5.1 Team Meetings

In order to accommodate the different time zones, the team meeting is held every other week in the beginning of the day with the offices from Portugal and Los Angeles and on the remaining weeks it is held at the end of the day with the offices from Portugal and Shanghai.

The meetings are held on a conference software called BlueJeans, which allows to record the meeting. This recording is then shared with everyone by e-mail so that people that could not join can have access to the discussion.

The participants from the Porto office all gather in a video conference room and the remaining participants join through video call. The software allows screen sharing, so one member of the Porto office shares the powerpoint presentation with everyone.

The structure of the meetings is divided into two parts. The first part focuses on the weekly high level reports of the business related teams. The weekly high level reports or executive reports are sent every Monday to the team managers and the executive board. They have graphs and tables which showcase the evolution of the most important metrics during the previous week and they have notes from the analysts. These notes highlight the most important numbers and events that might have impacted the results, such as bank holidays or problems with the phone system.

The presentation has one powerpoint slide per team, which consists of the same content that is sent through e-mail: the dashboard and the notes. Each analyst presents the performance of the team he works closer with and if there are any questions, the discussion can go deeper into that topic. Figure 3.6 shows this part of the presentation.

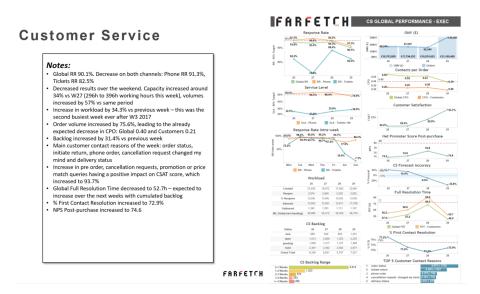


Figure 3.6: The Template for the Team Meeting at the Beginning of the Project.

3.2 Problem Statement 25

The second part of the meeting focuses on task management. The presenter changes from the powerpoint presentation to the Freedcamp platform and the Head of Workforce Management reads out the tasks with a close deadline and checks up if they are up to date or not.

The problem with the executive reports is that they focus directly on the business related teams and not on the Workforce Management team. Therefore, it is not possible to draw meaningful conclusions on the performance of the team solely based on these reports. Moreover, it is not possible to hold any part of the team accountable for the results. Besides, the analysts are the only ones responsible for updating the presentation and presenting the data, so it leaves the rest of the team aside, when they should all be able to present the results of their work of the week.

In the second part of the meeting, the use of the platform creates some problems. Not everyone updates Freedcamp with the same level of regularity or the same level of detail. This leads to some people not having visibility of their work and others having very personal and operational tasks being discussed. These very operational tasks do not add much value to a weekly meeting with everyone present.

Another issue is that when the Head of the team is discussing the tasks, it is usually only clear to him and to the person responsible for the task. The platform only shows the title of the task, but more often than not, this is not self-explanatory and time is not spend properly explaining the tasks or the projects. This means that the visibility of the work is not really being achieved at the desired extent.

This means that, at the start of this dissertation, there is no single point of the week where people share what they are doing with each other in a way that everyone feels involved like a team. This leaves a lot of unused potential where people that have a deep understanding of their own parts of the Workforce Management cycle are not complementing each other.

3.2.5.2 The Analysts Meeting

The analysts also gather once a week, on Wednesdays after lunch. The goals of the meeting are to give weekly updates on their work and to discuss problems that they have encountered that are blocking their work.

One of the main problems of these meetings is that it is only scheduled for thirty minutes. Some days, when the analysts have accumulated more work in the morning and have to start their lunch break later, the meeting also starts late. Since the meeting is scheduled in one of Farfetch's rooms, it is common that someone else has that room booked for as soon as the meeting ends, so it is not possible to continue the meeting for longer than scheduled. Moreover, some weeks the analysts would skip the meeting altogether in order to prioritise operational work.

The analysts keep a log of the meetings with the structure showed in figure 3.7. It shows who was present in the meeting, what were the topics discussed, divided by the business related teams and the action plans that should be done for the following meeting. However, the flow of the meeting is unstructured. Since the topics of the meeting are not defined beforehand, it is not clear what and when they are going to be discussing. Moreover, people sometimes drift away into a new topic without finishing the previous discussion and the action points of the previous meeting are not checked upon, so it is never possible to guarantee that they were done.

With such little time and not enough structure to assure efficiency, it is often not possible to discuss every important topic and almost always the time ran out without mentioning the weekly

26 Problem Overview

updates. This results in a limited visibility of each others' work and of the situation of the different business related teams.

Data: 16/08/17 Semana: 34	Presentes: Todos	Duração : 30 min			
	Temas Tratados				
cs	PS	Delivery			
FRT em PS e DS		FRT for DHL Performance Individual dos Agents			
	Action Plan				
Miguel	Carvalho	Pinho			
Mudar FRT (passar de ticket para interação) Cálculo da performance individual dos agentes de DS: dependendo do ranking de cada categoria, dar uma nota de 100 ao melhor e de 0 ao pior.	Mostrar a query de FRT ao Pinho	Mudar FRT (passar de ticket para interação)			

Figure 3.7: The old template for the analysts' meeting.

3.2.6 Analysts Separation

In order to give a better knowledge of how the Partner Service and Delivery Support teams work, the analysts responsible for these teams started sitting at their tables. This allows them to be more involved in everyday decisions and makes it easier for the managers and the agents to contact them whenever they need to request something from them or to inform them of some change. This is not happening now with the analyst responsible for the Customer Service team because he has been part of the team for longer and he already spent time next to the team in the past.

While this promotes better communication between the analysts and the teams they work with, it hindered it within the Workforce Management team. Any problem that the analysts come across which might use the help from each other is not solved immediately. Messages are easier to overlook than a face-to-face conversation and if the analysts try to find each other at their seats they can not guarantee that they will be successful.

Figure 3.8 represents the office, where the analysts are identified with light blue circles and the Workforce Management team is identified with a dark blue rectangle.

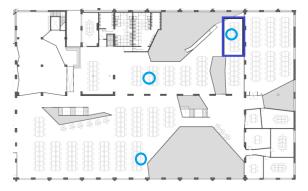


Figure 3.8: Distribution of the WFM Analysts (light blue) and of the WFM team (dark blue).

3.2 Problem Statement 27

3.2.7 The Future

The plans for the future include spreading the support of the Workforce Management team to the Order Support, Production and Black&White teams, giving further emphasis to the social media channel on the reports, and also reporting on new live chat options for the client. At the same time, Farfetch can not afford that the standards of performance drop in any of the currently supported areas.

With the increased workload for the near future adding up to the previously mentioned problems, it is critical to improve the knowledge management culture by investing in solid tools and improving the communication and workflow.

Chapter 4

Implemented Solution

In this chapter, the different parts of the implemented solution will be described. In section 4.1 the process of creating the knowledge base platform is explained, from the identification of the requirements to the creation of the pages. Consequently, some improvement points were identified, which are described in section 4.2. Section 4.3 relates to the changes of the different meetings' structures. In Section 4.4 the process of creating a tool for prioritising projects is described.

4.1 Knowledge Base Platform

In order to create the knowledge base platform the steps shown in Figure 4.1 were followed. These steps (requirements verification, platform research and selection, structure of the knowledge base, template creation and development of the knowledge base) will be explained in detail on the following subsections.

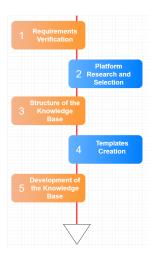


Figure 4.1: Knowledge Base Platform's Flowchart.

4.1.1 Requirements Verification

The design phase of the knowledge base started with understanding which would be the main users of the platform. After discussing with the members of the Workforce Management team,

the main users were identified and ranked by how closely they would have to interact with the knowledge base:

- 1. The analysts of the Workforce Management team, that are the main responsibles for the standardization of the metrics and reports;
- 2. The rest of the members of the Workforce Management team, that should have information relevant to make their work easier;
- 3. The managers of the business related teams, that should fully understand the metrics/reports they work with;
- 4. Members of other teams that work in projects with the Workforce Management team, that should fully understand the metrics/reports they work with;
- 5. Agents from the business related teams, that should understand the metrics on which they are evaluated on.

Afterwards, the desired functionalities for the platform were identified. These functionalities are listed below, without being ranked in any particular order:

- Having a WYSIWYG (what you see is what you get) text editor. The barrier to use this platform should be as low as possible so creating and editing documents should be easy and intuitive, and there should not be a need to learn any coding language to collaborate;
- No need to download software. The set-up of the platform for new users should be as quick as possible. This was specially important for Farfetch because the majority of people can not install new software on their own and need the help from the Technology team. If there was too much hassle to start using the platform, that would keep from people to want to do so;
- Having one account per user. This feature is needed to keep track of who created or edited what;
- Being a private platform. Some sensitive information can be put on the knowledge base, and if that is the case, it is important to guarantee that people external to the company can not have access to the information;
- Having different levels of access. The goal of this feature is to restrict critical functions such as deleting pages from the majority of the users, but still allow them to have access to read, and in most cases edit, the information;
- Being collaborative. It should allow more than one person to edit the same page, preferably at the same time;
- Possible to design templates. In order to assure a standard image of the pages and to make it quicker to create new pages, templates should be created.;
- Connectivity between pages. It should be possible to link pages with each other and preferably organise them in folders or sections.
- Having a good search system. There is no value in having the knowledge stored in a platform if there is not possible for people to find what they need. Therefore, it is essential that the search system is intuitive and provides good results;
- Low Price. There was the possibility to allocate some budget to the development of this platform but it was preferable to spend as little money as possible;

- No limit of pages. It should be possible to keep the platform updated in the future, so there should not be any constraint that makes it unusable in the future;
- No limit of storage. The same reasoning as above applies.

4.1.2 Platform Research and Selection

With all the requirements identified, the next step was to do a research on knowledge base platforms in order to choose the best fit for the Workforce Management reality. 6 different platforms were analysed and will be briefly described next.

The first question to answer was what kind of platform was the most adequate. Within the platforms research the majority were related to the Wiki type but Sharepoint and Zendesk had significantly different concepts.

- SharePoint is a web-based, collaborative platform that integrates with Microsoft Office. It serves mainly as a document management and storage system, so it handles better documents that are already stable. However, it has a cost of 10 dollars per user per month for the option of unlimited storage;
- A wiki is a website on which users collaboratively modify content and structure directly from the web browser. It invites all users - not just experts - to a process of collaboration for editing and creating pages;
- Zendesk is a customer support software. It is used by the Customer Service team in order to manage the contacts from the customers. However, it also has a space for sharing documents.

Despite Zendesk being already used by one of the business related teams, it was not a good strategy to start using it as a knowledge management tool. Firstly, not being a knowledge management platform by nature, it had flaws regarding collaboration capabilities. Moreover, in the likely scenario that a better customer support service would appear in the future, it would require to move all the documentation again.

Between implementing a sharepoint system or a wiki, the latter was preferred. This project required a lot of collaboration on the documents in the process of creating them from scratch or formalising them, so a wiki platform was more fitting. Therefore, the next step was to choose from the different platforms for the creation of wiki websites, which one would be the most adequate. 5 different platforms of this kind were analysed and will now be described.

- MediaWiki is the free open-source wiki package originally created for Wikipedia. It can now
 be used by anyone but it requires to be installed a server, which would not have been easy to
 implement at Farfetch. Besides, it uses mark-up language, which would require collaborators
 to learn how to use it;
- Wikia is a wiki hosting website, which allows to use the software from MediaWiki without having to install it in the server. It generally hosts wikis regarding the topics of gaming, TV shows or movies. However, it requires for the wiki to be public and to have advertisements;
- Wikidot is also a wiki hosting service but it allows for the website to be private and ad-free for paid accounts. Its main constraints are the limit on users, the limit of storage, the maximum size of an uploaded file and the lack of template creation. At the highest price-point (€239.90

per year) the websites have unlimited membership, the total storage allowed is of 200GB and the maximum size of an uploaded file is 200MB, which would fit this project's needs;

- ClickHelp is an online documentation tool focused on creating user manuals for software companies. In order to have an unlimited number of reviewers and up to 2000 pages created it would required a payment of €175 on a monthly basis. With this premium account it would also offer Zendesk integration and reporting on the development of the pages;
- Confluence is part of a group of software tools created by the company Atlassian. Jira was another of this company's tools and was used in Farfetch to manage the IT related issues. Farfetch's Technology team was also using Confluence for their knowledge management, even though no one from the Workforce Management team was aware. This meant that, despite being a paid tool, Farfetch was already paying for it, so it would not incur in any extra costs. Furthermore, it had proven value inside the company and there were already people with expertise that could help the set up of the tool for the Workforce management team.

This tool allows to create different spaces for each team or even for each person. This space is basically an independent wiki that can be either public or private. Pages in public spaces will be considered in the search system, which means it is possible to find information about some topic even if it is not in any space that a person is following, so everything is easily connected.

Requirements	Sharepoint	Zendesk	Mediawiki	Wikia	Wikidot	Clickhelp	Confluence
WYSIWYG editor	Х	х				X	х
No Downloads	х	X		х	x	X	X
1 Account per User	х	х	х	х	х	х	х
Private	Х	х	X		x	х	х
Levels of Access	X	х	х	х	х	х	х
Collaborative	х	х	X	Х	x	х	Х
Templates	X		х	х	х	х	X
Connectivity Pages			X	Х	x	х	Х
Search System	X		х	х	x	х	х
Low Price		х	х	Х			х
No Limit Pages	X	х	X	х	х	х	х
No Limit Storage	х	х	Х	Х	х	Х	x

In Figure 4.2 an analysis of the different platforms is shown.

Figure 4.2: Comparison Between the Different Platforms.

Confluence was the knowledge base platform chosen since it was the only option which fulfilled all the requirements. Moreover, it was the option that offered the best results regarding template creation and also the one that had the most potential for scalability.

4.1.3 Structure of the Knowledge Base

The Workforce Management space in Confluence was divided into 7 different areas, as seen in Figure 4.3.



Figure 4.3: The Structure of the Knowledge Base.

- Analysts' Meeting Notes. This topic will be covered on section 4.3.2, when explaining the re-structuring of the analysts' meetings;
- How-Tos. This section has tutorials on how to do the processes of the team, divided into the different areas. These pages will be analysed further on, in the subsection 4.1.4.3 and 4.1.4.4;
- Metrics. Here is where the metrics are documented. These pages will be analysed further on, in the subsection 4.1.4.1;
- Reports. This area of the knowledge base has pages that explain what is being measured in each graph or table of the reports. These pages will be analysed further on, in the subsection 4.1.4.2;
- Getting Started

This area of the knowledge base has basic tutorials on how to create pages and templates in Confluence so that people can learn how to keep the platform updated. An example is shown in Figure 4.4.

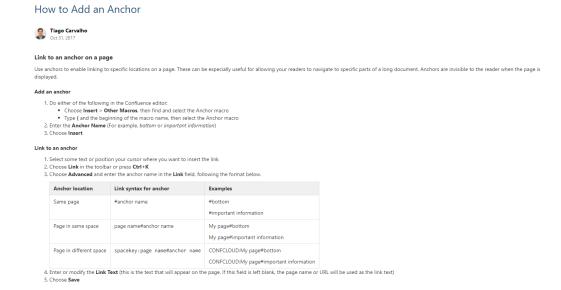


Figure 4.4: The Page "How to Add an Anchor" of the Getting Started Section.

• The Team

This section introduces the team. There is general a page with the people that constitute the team and their role and another page for each sub-team explaining what is done in their share of the Workforce Management cycle. The descriptions are similar to the ones found on chapter 1.

• General

This section consists of any pages regarding the Workforce Management team or the business related teams that are important to understand the processes but do not fit in any of the other sections. It includes pages regarding processes, databases schemes, a summary of the most important KPIs (key performance indicators) and a glossary, among others. You can find an example on Figure 4.5.

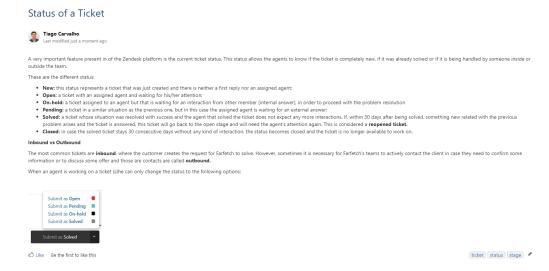


Figure 4.5: The Page "Status of a Ticket" of the General Section.

4.1.4 Templates Creation

Templates are skeletons for the pages with a defined format and structure. As this project focused on creating a solid structure for the knowledge base, as opposed to hoarding as much information as possible, a good amount of time was spent on creating iterations of templates for the pages.

Templates are essential to this project for two main reasons. Firstly, they allow users to create pages in an easier way, which helps to guarantee that the platform will be use after the project is over. Secondly, they ensure the consistency of the pages, regardless of the author.

The iterations of the templates were fine-tuned with the help of the people that would be their main users. The examples shown below are the final version of the most used templates.

4.1.4.1 Metrics' Template

The template is divided into two parts. The first, shown in Figure 4.6, focuses on the main metric, which is a theoretical concept. This concept assures the data governance, or in other words, it assures that the metrics are properly defined and cannot be confused with any other metrics.

Main Metric

The second part, shown in Figure 4.7, focuses on the children metrics, which are the actual metrics used by the analysts.

To better understand the distinction between main and children metrics, let's consider the case of the Full Resolution Time (FRT). This metric measures the time a contact takes to be solved and is reported for all the business related teams. Since the contacts considered are different for each team there has to be at least 3 different metrics. However, creating different pages for each metric has 2 main disadvantages.

Firstly, it would be very time consuming, which taking into consideration all the metrics used by the team would put at risk the implementation of the knowledge base. Secondly, having independent pages would not force the standardisation of the metrics.

By having the Full Resolution Time as a main metric it is possible to force the standardisation of the children metrics (they have to have the same purpose and data collection). This also allows for children metrics to have small differences in assumptions without having to create other pages to accommodate them. For example, the Full Resolution Time, for the Customer Service team, is calculated in two different ways: considering just the contacts coming from clients (not from other teams) and considering all the contacts (clients and other teams). Since they both follow the same criteria and calculations, they fall under the same main metric. The data governance is still maintained and it is easier to maintain the sustainability of the platform.

Metric Name Should be the same as the title of the page Purpose Write what is the point of this metric. Write a description in a way that someone that doesn't know the database can understand it **Data Collection** Explain all the technicalities required to build the formula with the database Write the mathematical formula Formula Unit Write the unit of the metric. P.e. percentage, number of tickets, minutes, days,... Assumptions Explain which things can be different from analysis to analysis and that are important to mention when writing the wiki page of the reports Has a Target Write either yes or no depending on if it should have a target or not Notes Anything you find useful Last Reviewed Month and Year when you are updating it Use the @ to mention your name or the name of someone who can be responsible to explain this metric in case some doubt arises

Figure 4.6: Metrics' Template - Main Metrics.

Children metric									
Name	Assumptions	Target	Dashboard / View	Auxiliary Metrics	Last Reviewed	Reviewer			
Insert the name of the metric. If the metric is used only by a specific team, that team's name should be included in the metric's name.	Elaborate on all the assumptions mentioned above.	In case the table above has a "yes" on the "has a target" row, indicate the target for the metric. If it is a "no", delete this column	Indicate the SQL view and/or the tableau report where the metric is calculated.	If In the formula of the metric includes an auxiliary metric, you should indicate the exact name used when calculating it.	Write the date of the last review	Use the @ to mention your name or the name of someone who can be responsible to explain this metric in case some doubt arises.			
Insert the name of the metric. If the metric is used only by a specific	Elaborate on all the assumptions mentioned above.	In case the table above has a "yes" on the "has a	Indicate the SQL view and/or the tableau report	If in the standardised version of the metric the formula includes an auxiliary metric,	Write the date of the last review	Use the @ to mention your name or the name of someone who can be			

Figure 4.7: Metrics' Template - Children Metrics

During this project it was also understood that some metrics that should have a target in order to control the performance, did not have one. Therefore, this template was designed to expose those cases.

In Figures 4.8 and 4.9, the example of the Full Resolution Time metric is shown.

Metric Name	Full Resolution Time - Interactions						
Purpose	Checking how much time a ticket needed to get solved, on average. A reopened ticket is counted as an independent new ticket.						
Data Collection	This metric does the average of the resolution time. It sums all the times of the solved tickets and divides it for the number of interactions. An interaction is a process that the takes from being created or reopened until it is solved. For example, if a ticket is reopened once and solved, the number of interactions will be 2.						
Formula	$FullResolutionTime = \frac{\sum ResolutionTime}{count(Interactions)}$						
	$-\frac{1}{count(Interactions)}$						
Unit	Time						
Assumptions	Which tickets are considered In which time measure are the results presented (minutes, hours, days)						
Has a Target	Yes						
Notes	Usually tickets are measured in minutes. Keep in mind the time measure used.						
Last Reviewed	November 2017						
Reviewer	Tiago Carvalho						

Figure 4.8: Application of the Metrics Template - Part 1.

Name	Assumptions	Target	View / Dashboard	Last Reviewed	Reviewer
CS Full Resolution Time - Global	Considers tickets coming from customers or from other teams. Tickets that result from a phone call are not considered because they are resolved immediately after the call is over. Presented in hours.	< 72 hours	CS_Tickets_FullTime	November 2017	<u>Tiago</u> <u>Carvalho</u>
CS Full Resolution Time - Customer	Only tickets coming from customers are considered. Tickets that result from a phone call are not considered because they are resolved immediately after the call is over.	< 72 hours	CS_Tickets_FullTime	November 2017	<u>Tiago</u> <u>Carvalho</u>
DS Full Resolution Time - Global	All tickets are considered	-	Del_FullResolutionTime	November 2017	Miguel Duarte
DS Full Resolution Time - Courier	Only tickets coming from couriers are considered.	-	Del_FullResolutionTime	November 2017	Miguel Duarte

Figure 4.9: Application of the Metrics Template - Part 2.

4.1.4.2 Reports' Template

This template tackles the two ways to display information in a report (graphs and tables).

The first part focuses on graphs, which are more common and also easier to explain. Firstly, the title of the graph is referred and an image of the graph is shown. Then, each (children) metric shown in the graph is linked to the page of its main metric and its name is also mentioned. These two lines are repeated for as many metric as the ones appearing in the graph.

The second part focuses on tables, that can be very different from each other. Several options are mentioned in order to accommodate as many alternatives as possible. An image of the template can be seen in Figure 4.10.

Name	Write the title of the Graph
Image	Crop a picture of the graph and paste it here.
Main Metric	Link the page of the metric. In case there isn't one, you should create it first. You should mention the metrics in the order they appear in the graphic (top to bottom and left to right). Make sure you have 1 line for each.
Metric Name	Insert the name of the children metric as written in the metric's page. In case there isn't one, you should create it first
Main Metric	Link the page of the metric. In case there isn't one, you should create it first. You should mention the metrics in the order they appear in the graphic (top to bottom and left to right). Make sure you have 1 line for each.
Metric Name	Insert the name of the children metric as written in the metric's page. In case there isn't one, you should create it first

Name Write the title of the Table Image Crop a picture of the table and paste it here. Information Tables have different structures so you should see what's the best way to describe their content. If there are several rows and columns you should write each of them as a row of this table and link their respective page in this second column. In most cases, you will be able to group them and re-direct to the same page. In those cases, just put them in the same divided by commas. In case there aren't pages of these columns/rows you should create one. If there is something to clarify specific to this particular table, you can add more rows of "Information" to do so. In the exception that there are very specific things you can keep this row's title as "Information" and quickly explain it.

Figure 4.10: The Reports' Template.

4.1.4.3 How to Send a Report by E-mail Template

This template is built for the schedules reports that the analysts send. It starts with explaining the goal of the report, when it should be sent and lists all the workbooks that will be used to send such report. It then has the information of the fields needed to be filled in the e-mail platform.

Afterwards, the process is explained. Each process is divided into small steps and each step is explained through a table, which are numbered according to the number of the step they represent. They also include a link of the dashboard where the information can be found, an image of the part of the report referring to that step and a place for instructions if it is needed to do some filtering before getting the information. This template can be seen in Figure 4.11.

4.1.4.4 Processes Template

This template if similar to the previous one but it is more general so that it can be used for a very broad number of processes, such as how to create a new account for a new brand in Zendesk or how to assign holidays to an agent.

It starts with explaining the reason of the process and then it also has tables to write the number of the step, instructions on what should be done on that step and a picture to give visual aid to the instructions. An example can be found in Figure 4.12.



Figure 4.11: The How-To Send an E-mail Template.

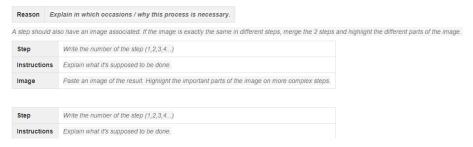


Figure 4.12: The Processes Template.

4.1.5 Development of the Knowledge Base

After the templates were finalised it was decided with the members of the team which would be the things with the highest priority to pass to the knowledge base. Meetings were scheduled with the people responsible for those fields in order to make sure that they fully understood how to work with the templates and with the platform overall. At a following phase, it was expected that the people would update the knowledge base with new pages in an autonomous fashion.

4.2 Improvement Points

Through the development of the pages of the knowledge base, some issues were raised. The following subsections will address these issues and show the associated solutions: incoherences mitigation, processes optimisation and the introduction of a new metric.

4.2.1 Incoherences Mitigation

When updating the metrics pages and the reports pages, some differences were identified. Therefore, a spreadsheet was created where these cases could be noted down and then discussed on the following analysts' meeting. This spreadsheet was created on a google drive folder, which allowed for all the analysts to have access to it and edit it, even in simultaneous.

These incoherences included different naming for the same metrics, different refresh times to calculate the weekly backlog, different order for the same lists or different colour codes. This spreadsheet was also used for other improvement ideas for the reports such as: lack of labels for the metrics, unclear information, numbers too small to read or general best practices not used by all the analysts.

The spreadsheet is shown in Figure 4.13 and had the following topics:

- Title
- Description. This column explains what the issue is and why it is relevant.
- To Do. The To Do section has a suggestion from the writer on how to mitigate that incoherence. After the discussion in the meeting, this section should be changed according to the best solution found.
- Status. The Status uses a colour code to identify the progression of the correction. Before the meeting, this column should stay blank. After being discussed, it should be changed to red if it is considered to be a valid difference due to differences in the business related teams realities. If it is agreed that the issue should be tackled, the colour should be changed to yellow.

On the following meetings the yellow status is reviewed and it should be changed to red if technical limitations do not allow the change, or changed to green in case it is already mitigated.

- Responsible. There should always be clear who were the responsibles for mitigating the incoherences, to assure accountability. It also helped people to keep track on the tasks they had.
- Results. The results column should be filled after the process was complete. It should be "Changed" when the status was green or it should have an explanation on why the incoherence could not be changed in such case.

Title	Description	To do	Status	Responsible	Results
FCR	First Contact Resolution is sometimes mentioned as First Touch, One Touch	Use First Contact Resolution		Pinho	Changed
SLA Phone	The SLA Phone is 60s but it already includes 20s from the recorded message. However for the real-time dashboard the time in queue only starts to count after the 20s	Speak with Quelhas about the wallboard and check if we can edit the metrics		Tiago	The wallboard uses metrics from the system that cannot be changed
Workload	Workload is sometimes mentioned as Demand	Use Workload for new+reopen		Pinho	Changed
SLA step 4	In the delivery report, it is not clear that the SLA for the Step 4 is 2 hours	Write this on the report.		Miguel	Changed
Backlog age	The backlog age is either Monday at 00:00 or Monday at 8:00 for delivery, monday 00:00 for CS and saturday morning for PS	Use monday 00:00		Miguel, Pinho	Changed

Figure 4.13: The Incoherences Spreadsheet.

4.2.2 Processes Optimisation

When creating the pages regarding the processes, the steps were explained at a greater level of detail than the previous documents (for the ones that were previously documented) and it was

guaranteed that every step was accompanied by visual aid to not leave room for mistakes. This more in-depth process mapping was specially important for sending reports by e-mail because it revealed that these processes were usually inefficient. Sending these reports often required having to access several different dashboards, some of which were not even published and public. Considering that these tasks were repeated on a weekly or daily basis, there was an opportunity to save time. Therefore, all the information needed for each report was clustered into the same file, significantly reducing the time spent on these operational tasks.

4.2.3 Introduction of a New Metric

The creation of the reports' pages also induced a reflection over their content. On the Customer Service side, for example, the team has the main objectives of not leaving a client unanswered and of helping the client to promptly fix their issues. The executive report is effective on displaying the performance of the first topic with metrics such as the weekly response rate, the response rate for each day of the week and the service level agreement. However, for the second goal, the two metrics showed are the percentage of first contact resolution and the full resolution time and they do not suffice:

- The percentage of first contact resolution showed the percentage of tickets that was solved on the first reply. It was known that 90% of the cases were replied within 24 hours (based on the usual ticket response rate). However, it was not clear how long did those extra 10% of the clients had to wait for their issue to be fixed.
- The full resolution time measured the average time it took to solve a ticket. Being a mean it did not show how big was the variability between the time the customers had to wait for their issues to be fixed.

Therefore, a new metric was proposed. This metric - the percentage of resolution time in three days (%RT3) - measured the percentage of solved tickets that were solved in three days or less. The number of days was chosen based on the full resolution time's target, which was 72 hours. This metric was evaluated on a weekly basis and the distribution of results from 2015 to 2017 can be found in Figure 4.14.

In order to properly draw conclusions around the metric, it was necessary to choose a target. The target should be a round number so the options of 75%, 80% and 85% were considered. A target of 85% would be too challenging as it was never achieved in more than 21% of the weeks. On the other hand, a target of 75% was reached in over 90% of the weeks in any of the years, so it did not seem to provide enough of a challenge. Therefore, it was concluded that a target of 80% would be the fairest option as the middle ground. Then, it was possible to measure the percentage of weeks that had reached this target. The percentage of the weeks where at least in 80% of the tickets solved were three days or less older were 79% for 2015, 81% for 2016 and 41% for 2017.

Even though the head of the team agreed with the choice of three days for the metric, the same study was done for a maximum number of days to solve of 2 and 5. The boxplots obtained revealed similar results.

This drop was surprising since it was believed that the performance of the Customer Service team had improved throughout the years. This fact concluded that the current metrics were not providing the visibility required and that this metric was an important complement to fully understand how well the team was solving the customers' contacts. Therefore, a presentation was given to the higher management, proposing to start reporting on this metric in the weekly executive reports.

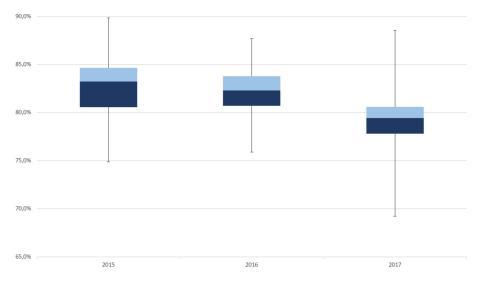


Figure 4.14: The Distribution of the %RT3 Metric.

4.3 Meetings' Structure

In order to improve the tacit knowledge management, it was necessary to improve the team's communication. Therefore, both the team's and the analysts' weekly meeting were addressed in this project and new structures were built for them. Besides, a kaizen board was created for the analysts to start having daily meetings. These changes will be focus of the following subsections.

4.3.1 Team Meetings

The main issues of previous team meeting's structure were the lack of focus on the Workforce Management team's own performance and the lack of visibility of the work of each part of the team individually.

After the exposure of these problems, the head of the Workforce Management team took upon himself the job of restructuring the powerpoint template. He was the main driver of this task since he knew best which metrics clearly showed the results of each of the team's blocks and he planned to use this presentation also as a way to report on them to the board.

In the new presentation, each part of the Workforce Management cycle has its own space, which those members of the team are responsible to update and present. The Forecast, Planning, Scheduling and Real-time Management blocks have to show the agreed metrics and to give highlights on them, as seen in Figure 4.15 for the Planning team. The Reporting and Analysis and Workforce Optimisation teams have notes on the development of their projects and additional slides with visuals to show finished projects. The presentation finishes with a global overview of the team that consists on a slide with the results of the main KPIs and slides with the status of the projects.

The final slides have lists of the projects with bars to show the percentage of completion and text boxes that indicate the current phase of the project. The presentation also has the executive reports in the appendix B in case there is a need to mention them.



Figure 4.15: The Planning Slide of the New Template for the Team Meeting.

A few weeks after the new structure was implemented and the people were already used to it, a feedback form was created to assess the quality of the new format. This feedback focused on two main topics: understanding if all the information displayed in the presentation, especially the one regarding other teams, was clear for everyone; and to check how valuable did people consider that information for their work.

The two questions shown in Figure 4.16 were asked for every graph of the presentation and also regarding the way the projects were presented for the Reporting and Analysis and Workforce Optimisation teams. When all the information regarding a team was covered, there was also an open question so that people could also give general feedback on that part of the presentation and suggest improvement ideas. The form also had open questions regarding the overall structure of presentation.

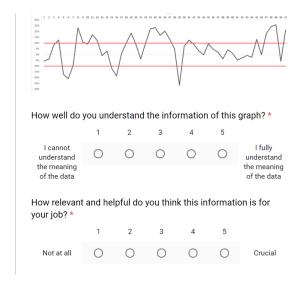


Figure 4.16: The Team Meeting Feedback Form.

4.3.2 Analysts Weekly Meeting

The two main goals regarding the analysts weekly meeting were to increase the time of the meeting and increase its effectiveness.

The first step to was to extend the meeting time to one hour per week. After convincing the analysts and the head of the team of the importance of this change, it was only a matter of changing the booking of the rooms accordingly. Moreover, this hour is now scheduled only for discussing data related issues and work on projects that the analysts have in common, and not for giving weekly updates.

The structure of the meeting was also adapted to assure the effectiveness desired. The main challenge was to keep the documentation as automated as possible because it was a priority for the analysts that the process did not required much time to be kept updated. For that reason, the team took advantage of the template creation capabilities of Confluence and started to document the meetings' discussions there. Using Confluence for multiple functions helped the team to get used to the platform and made it easier to stay organised.

In Figure 4.17 it is possible to see an example of one of the meeting notes. The template automatically adds the date and sets all the analysts as attendees, so in case someone is absent it is necessary to remove that name. It is also necessary to note down who was the responsible for taking the minutes of that meeting.

The template also automatically creates a table with the discussion items and include by default the two topics addressed at the beginning of every meeting. The first one is an introduction, which are five minutes of conversation about anything, not necessarily work related, to build a comfortable and relaxed atmosphere. The second fixed topic is checking the action points that were left from previous meetings. This assures that there is a follow-up on the topics and that the tasks are finished. The following topics have been previously proposed by the analysts and have to be added manually. After the discussion, the minute taker writes down a summary of what was said and decided.

In case it is necessary to do some task in the future, an action point is created, stating the description of the task, the person responsible and the deadline.

All these meeting notes are organised in the page shown in Figure 4.18, where the overall workflow of the meetings is controlled. On the top of this page, the analysts can propose topics for the following meetings by noting down the topic and who proposed it. In the middle of the page, there is a list of incomplete tasks from the previous meetings. Each task has a checkbox, a description, a due date (that defines the order of the list) and an assignee. This list is updated automatically by gathering all of the tasks from previous meetings, whose checkbox has not been checked already. Finally, there is a button that creates a new page with the analysts meeting notes' template and an automatically updated list with all the links from the previous meetings' minutes.

2017-11-22 Meeting notes

Date

22 Nov 2017

Attendees

- Miguel Duarte
- · Nuno Carvalho
- Nuno Pinho
- Tiago Carvalho

Minute Taker

Tiago Carvalho

Discussion items

Item	Proposed by	Minutes
Introduction	-	
Checking of the action points	-	
PS Boutiques Report	Nuno/Pinho	This report should be created for the PS team. CS already has a similar one.

Action items

✓ Nuno Carvalho and Nuno Pinho should check the connections between the multiple databases
☐ 29 Nov 2017

Figure 4.17: The new template for the Analysts' Meeting.

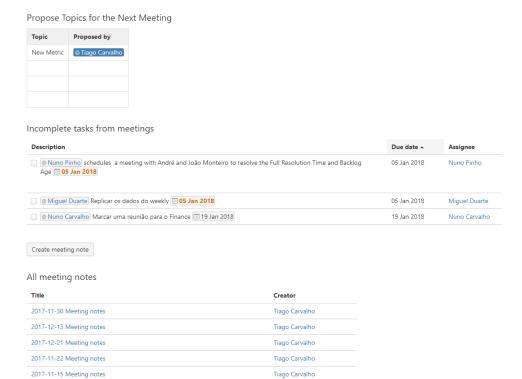


Figure 4.18: The Confluence Space for the Analysts' Meeting.

4.3.3 Kaizen Meeting

The point of not focusing on the weekly updates during the weekly meeting was not to give less importance to this topic, but in fact to make it more important. It was considered to be more valuable to have short daily meetings amongst the analysts where they discuss their tasks. This assures that the other analysts know the projects being developed right from the beginning, which allows for more synergies to be created.

The analysts started to have fifteen minute meetings every day at ten o'clock in the morning. The working day starts at nine and it is ideal to start this meeting as soon as possible, but it is also necessary to give them some time to check their inboxes and plan out their days and at the same time keeping the meeting as early as possible. Moreover, The analyst that works directly with the Delivery Support team was also attending their Kaizen meetings at half past nine.

In order to facilitate these meetings, a Kaizen board was created and it can be found in Figure 4.19. On the top left is the space where the analysts take notes of their daily tasks before the start of the meeting. The majority of the meeting's time is spent going through these tasks, with each analyst presenting his daily work. Whenever someone is presenting some work that another thinks that can face some problems, he can step in. It is common that analysts work on similar projects, so these problems are usually correctly identified and in most cases they can be avoided. In the cases where the problems are more complex, the analysts also offer to schedule a meeting to help each other with their experience, making the process much smoother. In this part of the meeting, people can also ask for clarifications about what the tasks consist on, guaranteeing that the work of every member of the team is transparent and understood by everyone.

In case the conversations start getting out of topic or are just taking too long, they should be cut off. If the discussion only concerns two people, they should schedule some time to go over it on that day. If the discussion involves everyone, the topic should be written down in the post-its that are in the board and placed on the weekly meeting section of the board so that it is not forgotten and it is discussed on that meeting.

On the bottom of the board, there are A3 pages which show the executive reports of the business related teams that are updated on Tuesdays. These are used to quickly update the situation of the teams once a week and to promote pro-active ideas on what to improved, based on the current struggles.

On the right side of the board there is a space to manage the team's projects, divided in the following sections:

- Project. In this column the name of the project is written.
- Team. Each analyst has multiple small magnets with their face printed on. These magnets should be used to indicate who is working on the project. In case of a team project, there should be a main responsible that appears first on the left.
- Impact. In this column, the main reasons for the existence of the project are stated. This promotes reflection that should help on the prioritisation of the projects.
- Deadline. In this column the deadline of the project is written down to bring awareness of when everything should be concluded.
- Phase. In this part the analysts write the current phase of the project.
- RAGB. This column gives visual information on the status of the project by assigning different colour magnets to associate the intended meaning. Red means that the project is blocked

due to external factors or it is in risk of failure. Yellow means that the project is on hold because higher priority task are being put first but there is no inherent issue. Green means that everything is going according to plan with the project and Blue means that the project is exceeding expectations.

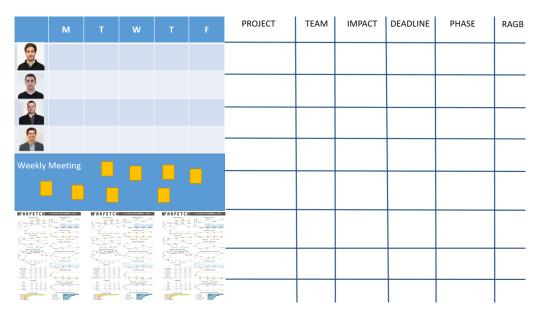


Figure 4.19: The Analysts' Daily Kaizen Board.

With the implementation of the Kaizen board for the analysts, the idea of implementing a Kaizen meeting for the entire team was also evaluated. On one hand, this would hinder the effectiveness of the meeting for the analysts because they could not spend so much time discussing their own issues. Besides, it would be difficult to keep the meeting short if it involves all the members of the team.

On the other hand, it would create a better overview of what the daily tasks of everyone are and might also create synergies amongst the team. The team meeting gives a good overview of the results of each team, but specially for the more operational teams it does not show a clear image of what their daily tasks are. Besides, it would help the analysts to be more aware of the problems the team faced during the week which would help them while reporting on the metrics.

Even though it is not clear if this would be an improvement or not, a draft was created so that it would be possible to try the hypothesis for some weeks and analyse the results. This draft can be seen in Figure 4.20 and would be used as an electronic board.

The team has a screen by their tables where some metrics are shown in real-time to help them be aware of how the day is developing. This screen could be used to display the kaizen board as it is big enough for everyone to see standing side by side. Having this board as a collaborative document such as a google drive spreadsheet would facilitate its filling. It would be complicated for everyone to be physically writing on the same board and also to reproduce such a big board in a physical context.

This draft has the picture of every member of the team organised by the different teams. In front of them, there is space for writing down the daily tasks for each day of the week. In this board the weekend is also included because some members of the teams have to stay during the weekend doing preventive work in case there is some problem with the phone lines, which are not closed during this period. After the daily tasks, the board should have graphs with the most important metrics for the team in order to help visualise what should be the main operational focus of the day. The objectives column is currently being used as a brainstorm of what these graphs should contain. On the far right, there is a block with the on-going issues where people should write down the problems that might affect the team's performance in an out of the ordinary fashion. Underneath, there could be links to important pages, such as the team's Freedcamp space, where all the projects are managed.

		Whiteboard: Daily Focus Points							
		Monday	Tuesday	Wednesday	Thursday	Friday	Weekend	Objectivo	On-going Issues
& Staffing								Gráfico de Forecast 1. Forecast Semanal com dados de Q+1 (Rolling 3 mezes) 2. Análise dos últimos días (perceber quals os drivers para os desvico que esta	Decidir Time Frame da reunillo: *2 minutos por pessoa? Decidir as horas da passagem de testemunho
Forecast								Gráfico de Capacidade: 1. Perceber ser fará sentido ver so dis 2. Over/Unider Semana Actual (ou 5+1)	
Scheduling								Estado dos horáridos Weelenno Bridding	<u>Freedcamp</u>
Sche									CS INTRADAY
	3							Analise: RR/SIA RR/SIA Florecast Ticket: Backing Plann de Anciko:	
nent								O que prioritizar durante o dia	

Figure 4.20: The Current Draft of the Team's Kaizen Board.

4.4 Priority Management

In order to maximise the value provided by the team, it is needed to assure that the projects undertook are the most valuable. Since the majority of the requesters perceive their projects as high priority, it is necessary to develop a tool that removes some of that subjectivity.

The tool that is based on the scoring method of prioritisation and can be seen in Figure 4.21. The first step was to define the prioritisation criteria by looking at published criteria examples from literature and adapting them to the team's reality. The criteria were fine tuned with the help of the members of the team in order to assure that nothing important is missing and that the criteria points are not overlapping. The chosen criteria were: Then, the scoring options were defined for each criteria through a range from three to five different options.

In order to reduce the subjectivity of the process to the minimum, a separate prioritisation methodology was used to assign the weights of the criteria. Therefore, the AHP (Analytical Hierarchy Process) method was used to compare each criteria option against each other as shown in Figure 4.22. After assigning a value to each comparison pair with the guidance of the head of the Workforce Management the results shown in Figure 4.21 were obtained. Associated with these results, was a consistency of 6%, which assured that the comparison was fair.

Criteria	Weight	Scoring Options	Score	Project
Farfetch Strategy:	28%	5: supports more than one pillar 3: supports one of the pillars 1: doesn't support any pillar	3: supports one of the pillars	0.85
Value to Customer	26%	5: Crucial for its functions 4: crucial for a project 3: important for its functions 2: important for a project 1: important to see data	4: crucial for a project	1.05
Risk on performance if not done	13%	5: performance would be seriously affected 3: performance would be somewhat affected 1: performance would not be affected	5: performance would be seriously affected	0.65
Number of users directly affected	12%	5: all of members of multiple teams 4: some members of multiple teams 3: all members of one team 2: some members of one team 1: one person	4: some members of multiple teams	0.48
Time required	10%	5: 3 days or less 4: 3 days to 1 week 3: 2 weeks 2: 3-4 weeks 1: more than 1 months	2: 3-4 weeks	0.19
Feasibility	5%	5: all feature will surely be included 3: some features may not be feasible but the main issue will be solved 1: unsure if it is feasible	3: some features may not be feasible but the main issue will be solved	0.14
Role of the requester	3%	5: board 4: head 3: manager 2: team leader 1: analyst	5: head	0.16
Focus	3%	5: focus on a business related team 3: focus on the development of the WFM team 1: focus on another team	3: focus on the development of the WFM team	0.09
			TOTAL	3.61
			FINAL SCORE	72.22

Figure 4.21: The File Used to Prioritise Projects.

Analytic Hierarchy Template: n	ı= 8	Criteria	1			Priorities for Sel	lecting Projects				
	_		Pairwise Comparison Matrix				<u> </u>			_	
Fundamental Scale (Row v Column))	1		Farfetch Strategy	Value to Custon	Number of user	Role of the Requ	Risk on Perform	Focus	Feasibility	Time required
Extremely less important	1/9	1	Farfetch Strategy	1	1	3	7	3	7	5	5
	1/8	1	Value to Customer	1		3	7	3	7	5	3
Very strongly less important	1/7	1	Number of users affected	1/3	1/3		5	1/3	5	5	1
	1/6	1	Role of the Requester	1/7				1/5	1	1	1/3
Strongly less important	1/5	1	Risk on Performance	1/3					3	3	1
	1/4	1	Focus	1/7				1/3		1/3	1/3
Moderately less important	1/3	1	Feasibility	1/5							1/3
	1/2		Time required	1/5							
Equal Importance	1	1	Requirement-9	4							
	2		Requirement 10	4							
Moderately more important	3		Requirement 11	4							
	4	1	Requirement 12	4							
Strongly more important	5		Requirement 13	4							
	6	1	Requirement-14	1							
Very strongly more important	7		Requirement-15	4							
	8										
Extremely more important	9										

Figure 4.22: The File Used to Determine the Criteria's Weight.

Chapter 5

Conclusions and Future Work

This thesis aimed at improving the knowledge management infrastructure and routines of the Workforce Management team. This section gathers the main implemented changes, giving them a general overview and pointing out the achieved improvements of each one of them. The last section covers a problem that was identified but for which action was not taken.

5.1 Knowledge Base, Incoherences and Processes Optimisation

With the help of the members of the team, almost eighty pages of content were created on the knowledge base platform, twenty-four of them being metrics' pages. The executive reports have also been created for all the business related teams, so the main data related information that the managers from other teams look at is now transparent.

Due to the high involvement of the team on the creation of the pages, they now have the knowledge required to keep adding new content to the platform in an autonomous way. The templates facilitated the process of creating pages because already having the structure was more motivating than starting with a blank page and it also assured consistency across the pages.

The mitigation of the incoherences in the reports also contributed to a greater transparency of information and eliminated the confusion created from having different metrics presented with the same name. The optimisation of the process of sending the reports made this process as automated as possible, freeing some time from the analysts' agenda that allows them to work on other projects.

Despite having all the needed tools developed, an effort still has to be made from the management side into making knowledge management a part of the routine to assure a successful knowledge management practice after the end of this project. In practice, in order to assure the sustainability of the knowledge management space, it is recommended that the team keeps track of which metrics, reports and processes are not yet mapped and documented. Afterwards, deadlines should be set and direct responsibles should be assigned. Finally, there should be routine moments where these developments are tracked, preferably during the weekly meetings as everyone is present. It is expected that if this happens, the identification of incoherences and opportunities to optimise processes will keep happening organically. The optimisation of projects should be given a greater emphasis on the more operational teams as they have more repetitive processes and therefore have a greater potential of time to save.

5.2 The New Metric 49

5.2 The New Metric

The %RT3 metric was believed to be a valuable addition to the executive report because its nature complemented the other metrics already reported. However, since the proposal of this metric was done close to the end of the project, there has not yet been an official answer from the higher management confirming its addition. Nevertheless, taking into consideration that the results of its analysis revealed what it appears to be greater issues on the performance of the Customer Service team, it is safe to assume that it soon will.

For the future, it will be essential to have deeper analysis in order to uncover the reasons that led to these results. The two main suspects are lack of capacity and cross-functional problems. Therefore, it is suggested to do an analysis on the number of people that would have been needed to fulfill the workload versus the number of actual workers and to measure the time each of the other teams is taking to reply to the Customer Service requests. In parallel, the first analysis of the %RT3 metric should also be done for the rest of the business related teams to figure out if they also suffer from the same problem.

5.3 Analsyts' Meetings

The new structure of the analysts' meetings provided better results for the work of the analysts. It allowed for more topics to be discussed and made sure that the action points were not forgotten. Besides, the migration to Confluence made it easier to create minutes for the meetings and to look them up afterwards.

The Kaizen meetings' created more synergies amongst the analysts, identifying and solving problems much quicker and avoiding duplicated work. They also allowed for the work of each analysts to be clear to the rest of the team and made it easier to keep track of projects. Having the updates being done during the Kaizen meetings freed time for the weekly meetings. Adding to the fact that the meeting was 30 minutes longer, it allowed for all the needed topics to be discussed in time. The template used also made it easier to write down the minutes and having action points with responsibles and deadlines made it more effective to finish the tasks in hand.

5.4 Team Meetings

The replies of the feedback form of the meeting showed that the team was very satisfied with the change to the new format. However, it is still needed to analyse the replies in depth in order to understand how to improve the graphs whose data was either not easy to read or not seen as value-adding to the other people's job. It is also needed to evaluate every improvement idea and decide which ones are important to apply.

The most common improvement idea was to expose how the metrics are calculated in a clear way, which would also fix the problem of some graphs not being easy to interpret. Therefore, once the structure of the template is finalised, a page should be created on the knowledge base in order to clarify the information shared.

The draft for the team's kaizen board has to be finalised and the team should try having these meetings on a daily basis for the period of at least two weeks. Afterwards the results should be evaluated and check if it is worth it to keep having these meetings with everyone together. In case

it is decided against it, it would still be beneficial to implement this kind of meetings for each of the teams individually. This would required creating a kaizen board for each and developing a structure to be followed.

5.5 Involvement in the Strategic Process of the Projects

The analysts' lack of involvement in the strategic process of the projects was also mentioned in the problem statement.

One of the reasons for the Kaizen board to include the impact column was to make the analysts responsible to explain the importance of the projects. The prioritisation tool was also intended to make the analysts more aware of the strategic importance of the projects that they were working on because they would need to fill in the scoring options.

Although this topic was not directly approached in this project any further, the head of the team was involved in conversations with the managers of other teams regarding this topic. However, this process still needs to see more improvements in order to stop being an important issue.

5.6 Priority Management

The priority management tool enables a fair prioritisation of the projects assuring that time is being spent working on the most important issues. It also provides a reasoning behind which projects have to be rejected when the resources are limited.

In order to finalise the process it is still necessary to figure out the best way to incorporate this scoring system into Freedcamp - the project management tool used by the team. Since this platform only allows three different levels of priority it might be worth looking into other options and evaluate the benefits. In the meantime, it is suggested that a equivalence between the 0 to 100 score of the tool and the three levels of Freedcamp is set. Then, a project spreadsheet should be created where all the on-going projects should be placed and ordered by order of priority. This would allow to confirm the order of priority within the same Freedcamp levels. Hopefully, this will make the team more prone to other project management tools that can make their work more organised and more efficient.

Another suggestion on these lines would be to replace the lead time metric in which the analysts are evaluated on the team meeting by a scheduled performance index (SPI). Bigger projects are usually the ones that add the most value but they are also the ones that take the longest. This means that the lead time would show worse results when the analysts are actually creating the most value. The SPI is a ratio of the earned value (EV) to the planned value (PV). The PV would be a deadline for the projects, and the progress of the project would be considered uniform for simplicity sake. If the requester adds more features to the projects it should be possible to adjust the deadline in order to keep it realistic. Each week the analysts would evaluate the % of completion of the projects and that would be the EV. If the SPI is less than one, it indicates that the project is potentially behind schedule whereas an SPI greater than one indicates the project is running ahead of schedule. An SPI of one indicates the project is exactly on schedule. Subtracting the SPI from 1, makes it possible to see by what percentage the project is ahead or behind schedule. This would give a clear overview of how well people are keeping up to schedule and not punish bigger projects.

5.7 Analysts Separation

The issue of the analysts separation was presented in the problem statement but was not tackled during this project. In the beginning of the project, there was already a lot of resistance towards this idea from the side of the analysts and the business related teams. Since its benefits were also not clear, it was chosen to focus on the other topics and go deeper in those areas. However, it is still recommended to evaluate this change to be sure which decision is the best. The head of the team will have to be deeply involved in the process to guarantee that this resistance can be overcome in case it is concluded that it is most beneficial to have the analysts working together.

Bibliography

- Ackoff, R. L. (1999). Ackoff's Best. John Wiley & Sons, New York.
- Alavi, M. and Leidner, D. E. (1992). Knowledge management and knowledge management systems: Conceptual foundations and research issues. Harvard Business Review, 70:72–79.
- Argote, L. and Epple, D. (1990). Learning curves in manufacturing. Science, 247:920–924.
- Argyris, C. and Schon, D. A. (1978). Organizational learning: A theory of action perspective.
- Ashkenas, R. (2016). The problem with priorities. Harvard Business Review.
- Axtell, P. (2017a). How to design meetings your team will want to attend. Harvard Business Review.
- Axtell, P. (2017b). How to get your team to follow through after a meeting. Harvard Business Review
- Badaracco, J. (1991). The Knowledge Link. Harvard Business School Press, Boston.
- Bali, R.; Wickramasinghe, N. and Lehaney, B. (2009). Knowledge management primer. Routledge Taylor & Francis Group.
- Barney, J. (1991). Firm resources and sustained competitive advantages. Journal of Management, 17:99–120.
- Bessant, J.; Caffyn, S. and Gallagher, M. (2001). An evolutionary model of continuous improvement behaviour. Technovation, pages 67–77.
- Bohn, R. (1994). Measuring and managing technological knowledge. Sloan Management Review, pages 61–72.
- Boland, R. J.; Tenkasi, R. J. and Te'eni, D. (1994). Designing information technology for distributed cognition. Organization Science, pages 463–474.
- Botha, A.; Kourie, D. and Snyman, R. (2008). Coping with Continuous Change in the Business Environment, Knowledge Management and Knowledge Management Technology. Chandice Publishing Ltd.
- Brown, J. S. and Duguid, P. (1999). Organizing knowledge. California Management Review.
- Bukowitz, W. and Williams, R. (1999). The Knowledge Management Fieldbook. Financal Times/Prentice Halls.
- Cohen, W. and Levinthal, D. (1990). Absorptive capacity: a new perspective on learning and innovation. Administrative Science Quarterly, 35:128–152.
- Coldrick, S.; Longhurst, P. and Hannis, J. (2005). An r&d options selection model for investment decisions. Technovation, pages 185–193.
- Consulting, K. M. (1998). Knowledge management: Research report.

BIBLIOGRAPHY 53

Cook, S. and Brown, J. S. (1999). Bridging epistemologies: the generative dance between organizational knowledge and organizational knowing. Organization Science, 10.

- Cranfield University, T. (1998). The cranfield/Information strategy knowledge survey: Europe's state of the art in knowledge management. The Economist Group.
- Cáñez, L. and Garfias, M. (2006). Portfolio management at the mexican petroleum institute. Research-Technology Management, 49:46–55.
- Darr, E. D.; Argote, L. and Epple, D. (1995). The acquisition, transfer and depreciation of knowledge in service organizations: Productivity in franchises. Management Science, 41:1750–1762.
- Davenport, T.H.; De Long, D. and Beers, M. (1998). Building successful knowledge management projects. Sloan Management Review, 39:43–56.
- Davenport, T. and Prusak, L. (2000). Working knowledge: How organizations manage what they know. Harvard Business School Press.
- De Long, D. (2000). Building the knowledge-based organization: how culture drives knowledge behavior. The Academy of Management Executive, 14:113–127.
- De Long, D. W. and Fahey, L. (1997). Diagnosing cultural barriers to knowledge management. Working paper, Ernst & Young's Center for Business Innovation.
- Denison, D. and Mishra, A. (1995). Toward a theory of organizational culture and effectiveness,. Organization Science, 6:204–223.
- Drucker, P. (1995). Managing in a Time of Great Change. Penguin, New York.
- Galunic, D. and Rodan, S. (1998). Resource recombinations in the firm: knowledge structures and the potential for schumpeterian innovation. Strategic Management Journal, 19:1193–1201.
- Gamble, P. and Blackwell, J. (2001). Knowledge Management: A State of the Art Guide. Kogan Page Ltd.
- Gazeau, M. (1998). Le management de la connaissance. Etats de Veille, pages 1-8.
- Glazer, R. (1998). Measuring the knower: Towards a theory of knowledge equity. California Management Review, 40:175–194.
- Gold, A.H.; Malhotra, A. and Segars, A. (2001). Knowledge management: An organizational capabilities perspective. Journal of Management Information Systems, 18:185–214.
- Gosenheimer, C. (2012). Project prioritisation: A structured approach to working on what matters the most. Office of Quality Improvement of the University of Wisconsin-Madison.
- Grant, R. (1996). Toward a knowledge based theory of the firm. Strategic Management Journal, 17:109–122.
- Görener, A. (2012). Comparing ahp and anp: An application of strategic decisions making in a manufacturing company. International Journal of Business and Social Science, 3.
- Hackbarth, G. (1998). The impact of organizational memory on it systems. Proceedings of the Fourth Americas Conference on Information Systems, pages 588–590.
- Hart, S. and Banbury, C. (1994). How strategy-making processes can make a difference. Strategic Management Journal, 15:251–269.
- Hartman, N. (2014). Seven steps to running the most effective meeting possible. Forbes Magazine.
- Hedlund, G. (1994). A model of knowledge management and the n-form corporation. Strategic Management Journal,, 15:73–90.

54 BIBLIOGRAPHY

Henderson, J. C. and Sussman, S. W. (1997). Creating and exploiting knowledge for fast-cycle organizational response: The center for army lessons learned. Working Paper No. 96-39.

- Imai, M. (2012). Gemba Kaizen. McGraw Hill, New York.
- Johannessen, J.; Olsen, B. and Olaisen, J. (1999). Aspects of innovation theory based on knowledge management. International journal of Innovation Management, 19:121–139.
- Kaplan, R. S. and Norton, D. P. (1992). The balanced scorecard measures that drive performance. MIS Quarterly, 25:10–136.
- Kraatz, M. (1998). Learning by association/interorganizational networks and adaptation to environmental change. Academy of Management Journal, 41:621–643.
- Leonard, D. and Sensiper, S. (1998). The role of tacit knowledge in group innovation. California Management Review, 40:112–132.
- Malhotra, Y. (1999). Beyond 'hi-tech hidebound' knowledge management: Strategic information systems for the new world of business. Working Paper, BRINT Research Institute.
- Martinho, N. (2016). Kaizen Institute Manual: Kaizen Foundations.
- Nieto-Rodriguez, A. (2016). How to prioritize your company's projects. Harvard Business Review.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. Organization Science, pages 14–37.
- O'Dell, C. and Grayson, C. (1998). If only we knew what we know: identification and transfer of internal best practice. California Management Review, 40:154–174.
- Pangsri, P. (2015). Application of the multi criteria decision making methods for project selection. Universal Journal of Management, 3:15–20.
- Polanyi, M. (1975). Personal knowledge. University of Chicago Press, pages 22–45.
- Porter-Liebskin, J. (1996). Knowledge, strategy, and the theory of the firm. Strategic Management Journal, 17:93–107.
- Powell, W. (1998). Learning from collaboration: Knowledge and networks in the biotechnology and pharmaceutical industries. California Management Review, 40:228–240.
- Robertson, M.; Swan, J. and Newell, S. (1996). The role of networks in the diffusion of technological innovatio. Journal of Management Studies, 33:335–361.
- Saaty, T. (2008). Decision making with the analytic hierarchy process. International Journal of Services and Sciences, 1:83–98.
- Schniederjans, M. J. and Hamaker, J. (2003). A new strategic information technology investment model. Management Decision, 41:8–17.
- Schwarz, R. (2013). Dealing with team members who derail meetings. Harvard Business Review.
- Shermon, G. (2016). Disrupting Human Resources Talent Rules. Lulu Publications.
- Sundheim, D. (2016). 3 reasons your strategy meetings irritate your team. Harvard Business Review.
- Teece, D. (1998). Capturing value from knowledge assets: the new economy, markets for know-how and intangible assets. California Management Review, 40:55–79.
- Thierauf, R. J. (1999). Knowledge Management Systems. Quorum Books.

BIBLIOGRAPHY 55

Tobin, D. R. (1998). The knowledge-enabled organization: Moving from 'training' to 'learning' to meet business goals. Addison-Wesley, Reading.

- Tuomi, I. (1999). Data is more than knowledge: Implications of the reversed hierarchy for knowledge management and organizational memory. IEEE Computer Society Press.
- Vance, D. (1997). Information, knowledge and wisdom: The epistemic hierarchy and computer-based information system. Proceedings of the Third Americas Conference on Information Systems.
- von Krogh, W. (1998). Care in knowledge creation. California Management Review, 40:133–153.
- Wellman, J. L. (2009). Organizational Learning: How Companies and Institutions Manage and Apply Knowledge. Palgrave Macmillian.

Appendix A

Further Description of Farfetch's Business Units

Black & White is a full-service agency, providing multichannel e-commerce white-label solutions to luxury fashion brands, based on Farfetch's core systems and services. This includes the set-up of a website, online content creation, fraud-protection, outbound logistics, different shipping options, a wide range of payment methods and multilingual customer service, providing a truly global service.

Browns is a boutique acquired by Farfetch in 2015 that apart from working as a retailer, allows Farfetch to trial its technology. Browns is closely connected with Store of the Future, which is the business unit that develops such technology. The goal of these units is to answer the question of how will people shop for luxury fashion in the future. Store of the future develops technology that bridges the gap between traditional retail and the online world and Browns allows it to go through testing in real scenarios. This way, Farfetch can understand what works out and what does not in order to answer the question and provide these services to their future client boutiques.

Appendix B

The Customer Service Daily Report

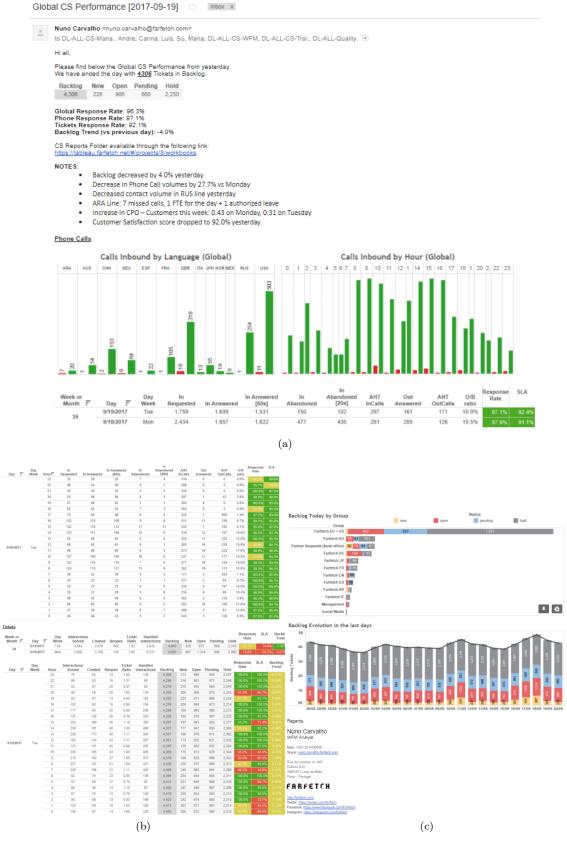


Figure B.1: The Customer Service Daily Report