INSTITUTO
UNIVERSITÁRIO
DE LISBOA

Business Plan: Digital Workplace Solution for Business Management and Employee Engagement

Olena Lisova

Master in Management,

Supervisor:
Maria José Sousa, PhD, Assistant Professor,
Iscte - University Institute of Lisbon

November, 2020

BUSINESS
SCHOOL

Department of Marketing, Strategy and Operations

Business Plan: Digital Workplace Solution for Business Management and Employee Engagement

Olena Lisova

Master in Management,

Supervisor:
Maria José Sousa, PhD, Assistant Professor,
Iscte - University Institute of Lisbon

November, 2020

Acknowledgements

I would like to acknowledge my supervisor, Maria José Sousa, for all the help shown and for motivating me to complete my thesis.

To Fred, I am grateful for all the support that I received and for the technical clarifications.

I would also like to express my gratitude for my family, who gave me the possibility to be where I am today, and to show them my appreciation for every sacrifice they have made for me.

A special thank you to my mother who believes in me, and who is always pushing me to keep going. *Спасибо мамочка!* (“Thank you mom!”)

Resumo

A transformação digital tem mudado completamente os setores e a forma como trabalhamos. Os dados e a informação tornaram-se cada vez mais valiosos, pois ajudam as empresas a tomar melhores decisões estratégicas e operacionais. Além disso, a digitalização trouxe um acesso mais facilitado aos dados por meio de ferramentas digitais.

Com a crescente procura por soluções que ajudem a gerir esses dados, bem como gerir pessoas e processos dentro da empresa, o mercado da indústria de software de gestão de negócios tem crescido com uma vasta variedade de ferramentas diferentes. Contudo, o mercado necessita de uma solução única de gestão ágil e eficiente, que não leve os gestores a perder tempo com a troca constante de ferramentas nem com a duplicação da informação de uma ferramenta para a outra.

Além disso, as empresas trabalham constantemente para obter vantagem competitiva. Dessa forma, o envolvimento e a satisfação dos colaboradores tornou-se num tema estratégico relevante nos últimos anos, pois estudos sugerem que colaboradores com elevado envolvimento se sentem mais comprometidos com os objetivos e resultados da organização.

Com o potencial crescente das ferramentas digitais, o trabalho digital nos postos de trabalho tornou-se uma realidade e tem estado a crescer, mas a perspetiva de melhorar o envolvimento dos colaboradores dentro do meio digital da organização, ainda é um aspeto a ser melhorado. Neste contexto, esta dissertação apresenta o plano de negócios para uma solução de trabalho digital, que visa melhorar a gestão empresarial e o envolvimento dos colaboradores para com a empresa.

Palavras-chave: trabalho digital, solução de trabalho digital, gestão de negócio, envolvimento dos colaboradores, sistemas de informação, plano de negócios

Abstract

The digital transformation has been changing industries and the way we work completely. Data and information have become more and more valuable in today's world, as they help firms to make better strategic and operational decisions. Moreover, digitization has brought to organizations an easier access to data through digital tools.

With the increasing demand for solutions that help manage business data easily, as well as to manage people and processes within the firm, the business software market has been growing with a wide variety of different tools. Nonetheless, the market started to demand to have a single solution for flexible and efficient management, without wasting time of constantly switching tools and duplicating information from one tool to another.

Furthermore, firms constantly work towards achieving a competitive advantage. Hence, the employee engagement and satisfaction has become a relevant strategic topic in recent years, as studies suggest that engaged employees bring better commitment and results to the organization.

With the growing potential of digital tools, the digital workplace has become a reality and had grown since, but the perspective to improve employee engagement within the digital organization is still an aspect to improve. In this context, this thesis presents the business plan for a new proposed digital workplace solution that aims to improve the business management and employee engagement within the firm.

Keywords: digital workplace, digital workplace solution, business management, employee engagement, information systems, business plan

Index

Acknowledgements ..... **i**
Resumo ..... **iii**
Abstract ..... **v**
1. Executive Summary **1**
2. Description of the promoter and the proposed business **3**
2.1. Promoter 3
2.2. Proposed business 3
3. Literature Review **5**
3.1. Defining the Digital Workplace 5
3.2. Outcomes of a Digital Workplace 6
3.2.1. Benefits of a Digital Workplace 6
3.2.2. Downside of a Digital Workplace 7
3.3. Designing the Digital Workplace 8
3.3.1. People: the digital workforce 8
3.3.2. Technology: the digital toolbox 8
3.3.3. Information: the digital content for decision-making 9
3.3.3.1. Information systems 10
3.3.4. Framework for the Digital Workplace 11
3.3.5. Use Cases 12
3.4. Enabling the Digital Workplace 13
3.4.1. Drivers to a Digital Workplace implementation 14
3.4.2. Challenges to a Digital Workplace implementation 14
3.4.3. Best practices to Implementation and Management 15
4. Reference Table **17**
5. Objectives and Methodology **19**
6. Situational Analysis **23**
6.1. Environmental analysis 23
6.1.1. PEST Framework analysis 23
6.2. Industry analysis 25

6.2.1. Market overview 25
6.2.2. Porter's 5 forces Framework analysis 26
6.3. Competitors and Product portfolio analysis 28
6.3.1. Competitors analysis 28
6.4. Firm's analysis 30
6.5. Competitive analysis 31
6.5.1. SWOT Framework analysis 31
7. Business Plan 33
7.1. Business strategy 33
7.1.1. Mission, Vision and Values 33
7.1.2. Strategic objectives 33
7.2. Business model 34
7.3. Brand strategy 35
7.4. Marketing plan 35
7.4.1. Segmentation, Targeting and Positioning 35
7.4.2. Marketing-Mix 35
7.4.2.1. Product 36
7.4.2.2. Price 37
7.4.2.3. Place 38
7.4.2.4. Promotion 38
7.4.3. Sales funnel 39
7.5. Operational plan 40
7.5.1. Organizational structure 40
7.5.2. Human resources management 42
7.5.3. Operational and technical resources 42
7.5.4. Implementation and control strategy 43
8. Financial Viability Plan 45
8.1. Assumptions 45

8.2. Financial projections 45
8.3. Financial viability analysis 49
9. Conclusion 51
10. References 53
11. Annexes 57
Annex A – DIKIW Hierarchy 57
Annex B – Porter's 5 Forces Framework 57
Annex C – Marketing-Mix 58
Annex D – Political factors analysis 58
Annex E – Economic factors analysis 59
Annex F – Social factors analysis 59
Annex G – Technological factors analysis 60
Annex H – Internet usage by language 60
Annex I – Sales quantities (user licenses) 61
Annex J – Monthly operating costs 61
Annex K – Staff number 62
Annex L – Monthly staff gross remuneration 62

List of Tables

Table 3.1 Characteristics of the digital workplace 5
Table 4.1 - Literature Review's reference table 17
Table 6.1 - Competitors analysis 28
Table 6.2 - SWOT Framework 31
Table 7.1 - Strategic objectives 33
Table 7.2 – Brand symbols 35
Table 7.3 - Price plans for DigitalFocus 37
Table 7. 4 - Sales funnel 39
Table 8.1 – Project assumptions 45
Table 8.2 – Investments 46
Table 8.3 – Sales projections 46
Table 8.4 – Operating costs 47

Table 8.5 – Staff expenses 47
Table 8.6 – Working Capital Needs 48
Table 8.7 – Income provisional statement 48
Table 8.8 – Project's Cash-Flow 49
Table 8.9 – Treasury Balance 49
Table 8.10 – Sensibility analysis 50
Table 11.1 - Political factors analysis 58
Table 11.2 - Economic factors analysis 59
Table 11.3 - Social factors analysis 59
Table 11.4 - Technological factors analysis 60
Table 11.5 - Internet Usage by Language – 2020 Q1 60
Table 11.6 – Quantity projections 61
Table 11.7 – Monthly operating costs 61
Table 11.8 – Annual staff number 62
Table 11.9 – Monthly staff expenses 62

List of Figures

Figure 3.1 Information and decision-making hierarchy structure 8
Figure 3.2 - DIKW 10
Figure 3.3 - Components of an Information System 10
Figure 3.4 - Organization and Information System 11
Figure 3.5 - A framework for the digital workplace 12
Figure 3.6 - Layers of the digital workplace 12
Figure 3.7 - Designs for the Digital Workplace (DWP) and characteristic Use Cases 13
Figure 5.1 – Process flow of the Methodology of the thesis 19
Figure 6.1 - Number of enterprises by business size in 2018 25
Figure 6.2 - Information technology (IT) spending on enterprise software worldwide 26
Figure 6.3 - Porter's Five Forces Model applied to 'Business Management Software' market 27
Figure 7.1 - Business model of DigitalFocus 34
Figure 7.2 - *DigitalFocus* components 36
Figure 7.3 - Organizational structure in year 0 40
Figure 7.4 - Organizational structure in 5th year of activity 41
Figure 7.5 - Business timeline for 5 years 43
Figure 11.1 - DIKIW Hierarchy 57
Figure 11.2 – Porter's 5 Forces Framework 57
Figure 11.3 – Marketing-Mix 58

1. Executive Summary

The present thesis was articulated as a business plan for a digital workplace solution – the '*DigitalFocus*', which seeks to improve the current organizations' way of working online, and consequently increase their business performance and employee engagement with the firm.

The trends of digital transformation, employee engagement, security, and mobility have been growing in the business management market. Firms desire to achieve a competitive advantage in their industry with the help of technology and optimized human resources performance, and, therefore, to have efficient, secure and flexible processes, which aim to improve the overall productivity of the business.

In such a way, *DigitalFocus* is meant to be a desktop application, which helps small to large firms with business management and employee engagement, within just one single tool, with a more secure and autonomous data management, and with flexible access through the mobile application version of the digital solution.

The solution's go-to-market strategy is through organic and paid promotions in digital distribution channels. The organic channels will focus on content curation to reach the target users and buyers, within a blog, an e-learning, social media, and e-mail newsletters. Allied to those strategies, an affiliate-marketing program will help to bring potential buyers to get to know and use the product.

For the operational side of the business, the team will grow into an organizational matrix structure, to maintain the agility and communication within different teams and activities of the firm, and accordingly establish a flexible and dynamic culture in the organization. Beside human resources, the business will need, as it grows, a physical space, office supplies and digital equipment, for further development and optimization of the product, in addition to business improvement.

The initial investment, of almost 90 thousand euros, will be shared within the business partners. The financial analysis showed that the business has a payback period of approximately 7 months, and it is financially viable and profitable, with a VAL of nearly 9 million euros for five years of business activity.

2. Description of the promoter and the proposed business

2.1. Promoter

Olena Lisova, a master student working as a business analyst at a fintech organization, developed this thesis to plan and study the viability of a new digital product. She believes that technology helps to make work more efficient, but also values good work policies to guarantee employees' well-being.

The student has a purpose to build tools that will bring a positive impact on the society, starting with the project planned in this thesis, which seeks to improve work life for people – one happy employee at a time.

2.2. Proposed business

The present thesis was developed in the format of a business plan to study the viability for a new business. The proposed business is a digital workplace solution, named '*DigitalFocus*', which can be used by small to large enterprises of any industry.

Firstly, with the latest digital transformation trends, organizations started to digitalize all of their business activities, including the workplace itself. In such a way, the market presents a big variety of digital tools to satisfy firms' needs for each activity or task that they may require.

However, the lack of centralized information, as tools are from different suppliers, brings to the job difficulty to be efficient, and rise problems of duplicate information or time waste changing from one application to another.

Secondly, in recent years, the concern of employee satisfaction and engagement with the firm has been increasing. Organizations believe that an engaging employee performs better at the job, and consequently brings better results to the business.

Therefore, with the need to have a single place to manage the business and to have a way to improve the employee experience in the firm, the '*DigitalFocus*' was conceptualized. The solution has the goal to provide organizations with an all-in-one tool for centralized business management and to improve employee engagement.

Lastly, in terms of technical abilities, firms have been worried about security issues and access flexibility of their data. Thus, this solution will be a desktop software, so that firms can manage their data and security autonomously, without distressing about other entities having access to their confidential information, and the solution will have a mobile application so that employees can easily access to their platform without the computer at hand.

3. Literature Review

In recent years, digital innovations have been changing the way we live and work, bringing a digital transformation in almost every area of the society. The same has happened with our workplaces, more and more we see the digital technologies having an essential role to play in our activities.

For organizations, it has been important to achieve a competitive advantage in the market they operate. Some of the trends following the competitive advantage has been achieving it through digital innovations or employee engagement, as it has shown to have a vital role in organization productivity, revenue generation and operational costs decrease.

The literature review of this thesis focused on the perspective of a digital workplace solution, not specified to any business or industry. In this context, this chapter includes studies on the broad concept of digital workplace solutions, as well as its outcomes, and the design and implementation processes.

3.1. Defining the Digital Workplace

Based on Williams and Schubert (2018) research, the first use of the term *Digital Workplace* is credited to Jeffreym Bier in the late-1990s, however the term was used in prior researches with topics on work-oriented technology design, and design of groupware and virtual workplaces. The term has gained renewed attention in the recent years as a part of wider concerns surrounding the future of work and organizations.

Williams and Schubert (2018) analyzed emerging definitions on digital workplace (DW) and identified three main categories of characterization: i) *organizational (DW) strategy and design*, ii) *people and work*, and iii) *technology platform*. These three categories were grouped based on characteristics found as a result of content analysis of published definitions (table 3.1).

Thematic category	Characteristics
Organizational strategy and design	Provides a coordinated strategy for DWP Designs are planned and managed Designs specific to corporate culture needs Strategy is agile, evolving and future-oriented Compliant with e.g. workplace and information laws
People and work	Supports information and knowledge work Contains all tools required for employees to be productive Supports employee engagement, collaboration & information sharing Predictive and intelligent support of work practices
Technology platform	Internally integrated platform: holistic set of tools Externally integrated platform: integrated with other business systems Coherent and usable Supports consumer-oriented styles and technologies Adaptive and tailorable to user's needs Location independent

Table 3.1 Characteristics of the digital workplace (Source: Williams & Schubert, 2018)

As per Haddud and McAllen (2018), "the digital workplace encompasses all the technologies people use to get work done in today's workplace ... It ranges from your HR applications and core

business applications to e-mail, instant messaging and enterprise social media tools and virtual meeting tools". The authors also noted several characteristics of a digital workplace:

1) work is not a destination;
2) the work environment is digital, not physical; and
3) performance is measured by output, not presence

Hamburg (2019) defends that the digital transformation of a company, to improve business processes, is driven by digital technologies and customer expectations, but it is also a change affecting a broad variety of different aspects in our society.

3.2. Outcomes of a Digital Workplace

This section explored the current thinking on outcomes of a digital workplace, from a positive and negative impact on the organization and an individual.

3.2.1. Benefits of a Digital Workplace

As stated by Attaran et al. (2019), digital workplaces address existing challenges and provide measurable business value, and if effectively planned, communicated, and implemented, they will reduce costs and waste in the organization, enabling the employees to work more efficiently and effectively. The top work time wasters, found by the author that are costing in average about $29,000 annually per employee, are ineffective meetings ($9,000), managing email ($8,000), searching for people and information ($7,000), and re-creating work ($5,000).

Attaran et al. (2019) and Haddud and McAllen (2018) through several studies present in academic and consultancy researches cited numerous *benefits of digital workplaces*, which can be summarized as follows:

- *Increased employee engagement*

Attaran et al. (2019) found that a digital workplace improves employees experience and boosts engagement levels. Haddud and McAllen (2018) stated that a digital workplace leads to better employee engagement levels due to use of digital applications such as internal social media. The authors noticed in some studies that employees with more motivation and satisfaction within their job have 16% better performance than other employees, and that a digital workplace may lead to increased worker engagement by 53%.

- *Reduced employee absenteeism*

Attaran et al. (2019) identified in a study that digital workplaces allied to flexible work reduced employee absenteeism, and employees presented less minor health issues, less signs of depression, less problems with sleep, and decreased stress levels.

- *Improved collaboration*

Digital workplaces improve collaboration and communication interfaces, increasing the success levels in projects outcomes by using cross-functional teams (Attaran et al., 2019). It supports an overall better

and closer collaboration with coworkers, customers and partners, providing more efficiency and productivity at work (Hamburg, 2019 & Attaran et al., 2019).

- *Increased productivity*

Digital workplaces provide more effective forms of work, resulting in an improved workforce productivity (Attaran et al., 2019). They can lead to increased worker productivity by 67%, explained by the engaged, mobile and agile workforce (Haddud & McAllen, 2018).

- *Increased business agility*

According to Attaran et al. (2019), a digital workplace enables agility and helps employees to work faster, communicate better, have greater flexibility and efficient and secure access to information from anywhere at any time. It also prevents overload of information and waste of time in recreating existing information, bringing the opportunity to speed up go-to market released of new products and services.

- *Increased employee attraction/retention*

Digital workplaces improve talent attraction and decrease staff turnover, strengthening employee retention levels (Haddud & McAllen, 2018 and Attaran et al., 2019). Employee engagement increase supports as well employee retention increase by up to 87% (Haddud & McAllen, 2018).

- *Increased innovation*

A digital workplace drives to faster decision-making and innovation (Attaran et al., 2019). According to Haddud and McAllen (2018), work flexibility, a diverse and inclusive workforce, work life balance, and an increased integration between business and IT innovation are what drive organizations to a culture of innovation.

- *Improved customer experience*

A digital workplace helps achieve a better customer experience since it exploits consumer-oriented systems (Attaran et al., 2019). The customer service becomes more responsive, as employees are able to quickly find the information and serve the customers better, and with the use of advanced digital technologies, employees provide better products and services based on consumer demand.

- *Reduced costs*

According to Haddud and McAllen (2018), a digital workplace has positive impact on costs saving. This savings are a result of a decrease in operating costs, related to office supplies and labor, as organizations can hire workers with the right skills from other geographical points at a more competitive prices.

3.2.2. Downside of a Digital Workplace

In the academic research, it is difficult to understand the downside of a digital workplace, however Köffer (2015) conducted an intensive research on scholars' recommendations to practitioners and identified the negative outcomes as being *stress and overload* from technology use.

The practitioner-oriented studies presented examples of stress, misuse and addiction to technology, overload of collaboration, and difficulty to find work-life balance since technology made disappear the line that divided both spaces (Köffer, 2015).

3.3. Designing the Digital Workplace

The design process compromises of different dimensions, and in such a way, the following studies present an understanding about the workforce, the technologies, and the information flow, a proposed framework and use cases, based on designs with different objectives, for a digital workplace.

3.3.1. People: the digital workforce

The figure 3.1 presents an organizational structure that represents a managerial pyramid, in which the hierarchy of decision-making and authority flows top down from the strategic management to operational management employees (Stair & Reynolds, 2017). Such structure indicates that the information needed for top levels employees and for down levels employees of the hierarchy are different (Karaman & Ghaffarzadeh, 2014).

The strategic levels have more decision authority, more impact on corporate goals, and more unique problems to solve (Stair & Reynolds, 2017). Thus the information the top levels need is also more undefined, external, summarized, future-oriented, infrequent and less accurate, in comparison to the operational levels, that access to a more defined, detailed, past-oriented, frequent, very accurate and internal information (Karaman & Ghaffarzadeh, 2014).

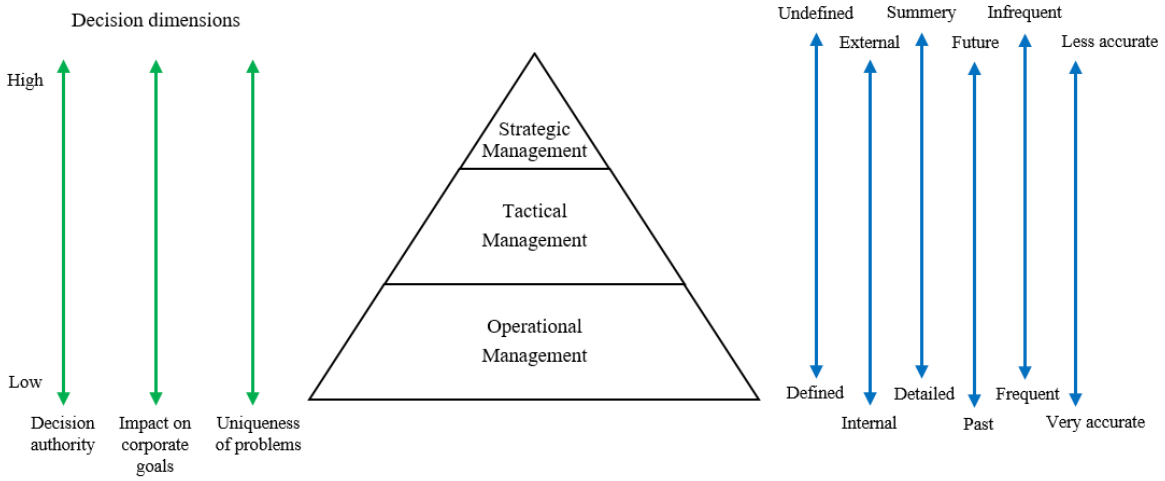

Figure 3.1 Information and decision-making hierarchy structure
(adapted from Stair & Reynolds, 2017 and Karaman & Ghaffarzadeh, 2014)

3.3.2. Technology: the digital toolbox

The digital workplace, as the name suggests, is enabled by digital technologies. Organizations generally already have a digital workplace, as they use different tools and technologies that vary depending on the industry and job functions. In other words, each organization has its own 'toolbox', and it is important to adopt the right tools for their workplace (Haddud & McAllen, 2018).

According to Haddud and McAllen (2018), the digital technologies such as social applications, mobile, big data analytics, cloud computing and Internet of Things (IoT) are enabling the digital workplace, providing great opportunities for businesses:

- *Social applications* are being used within organizations to empower communication, collaboration and knowledge sharing between employees. Such technologies include blogs, wikis, and social networks, for example.
- *Mobile* technology, such as software tools and digital devices (smartphones, tables and laptops), help the organizations work easier and in a more productive way.
- *Big data analytics* is an important strategic tool for businesses to gain insights from data for better decision-making.
- *Cloud computing* requires only an access to the Internet and provides the needed agility to share information and knowledge within the organization.
- *Internet of Things (IoT)* have been useful for organizations, for example, to schedule tasks knowing the location of employees or run an application connected to a remote server to do a task remotely.

One solution for organizations to get technologies work together into one system is to implement *enterprise applications*, which are "systems that span functional areas, focus on executing business processes across the business firm, and include all levels of management" (Laudon & Laudon, 2014). The author cited four main enterprise applications such as enterprise systems, supply chain management systems, customer relationship management systems, and knowledge management systems.

Apart from enterprise applications, Laudon and Laudon (2014) presents two more alternatives that are less costly and easier to implement: intranets and extranets. *Intranets* are simple internal company web sites that are available only for their employees and *extranets* are likewise company websites but can be also accessed by authorized partners like vendors and suppliers.

3.3.3. Information: the digital content for decision-making

After understanding the workforce structure and the technologies used in the business environment, it is introduced the information flow in the organization. The digital workplace is present in the information systems literature, which is also relevant to assess, in order to understand how it is used for business management and decision-making.

One of the essential and broadly recognized models in the information and knowledge literatures is the *data–information–knowledge–wisdom (DIKW) hierarchy*, also referred as the 'Knowledge Hierarchy', the 'Information Hierarchy' and the 'Knowledge Pyramid'. Its definitional role sets it as a central model of information management, information systems and knowledge management (Rowley, 2007).

Russell Ackoff's '*From data to wisdom*' article from 1989 is often cited as a source for the hierarchy, where he classified the content of the human mind into 5 levels and presented it as a hierarchy with wisdom at the top and data at the bottom. From top to bottom, the higher category includes the categories that are below it, thus implying that "*data can be used to create information; information can be used to create knowledge, and knowledge can be used to create wisdom*" (Rowley, 2007).

Russell Ackoff included understanding as a separate level in the hierarchy, between knowledge and wisdom (Rowley, 2007) while Bellinger et al. (2011) dispute understanding as a support of the transitions from data, to information, to knowledge, and lastly to wisdom, as presented in the figure 3.2. Rowley (2007) considers that the omission of the understanding level from the hierarchy in other sources suggests that authors are articulating a shared view that understanding should not be considered as a separate level.

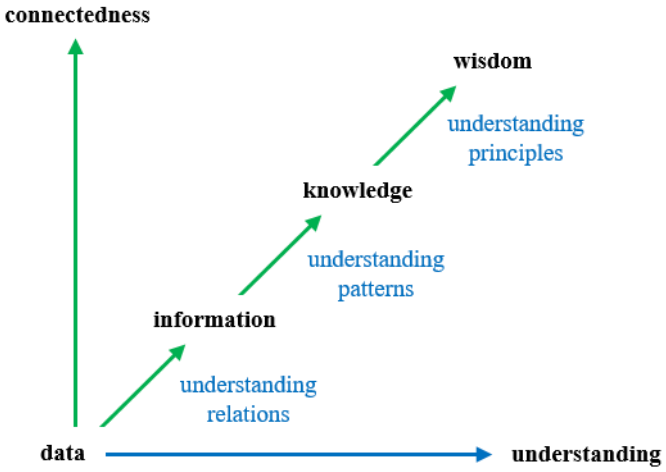

Figure 3.2 - DIKW according to Bellinger et al. (2011)

Liew (2013) proposed a revised model (DIKIW) with 'Intelligence' between knowledge and wisdom (Annex A), since intelligence has inseparable relationships with knowledge and wisdom. For the author, the wisdom itself is the biggest goal and journey of human development.

3.3.3.1. Information systems

An information system (IS) is "*a set of interrelated components that collect, manipulate, store, and disseminate data and information and provide a feedback mechanism to meet an objective*" (Stair & Reynolds, 2017). According to Laudon and Laudon (2014), an IS can be defined as "*a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making and control in an organization. In addition (…) information systems may also help managers and workers analyze problems, visualize complex subjects, and create new products*". The figure 3.3 illustrates the components of an information system.

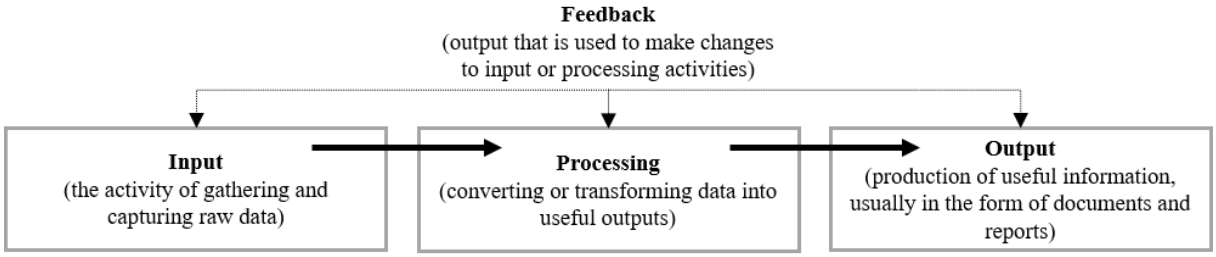

Figure 3.3 - Components of an Information System (adapted from Stair & Reynolds, 2017)

The information systems required by different levels of organizational hierarchy should be different, as different data and information is suitable for decision-making in each level. Each system has a specific effect on each step of in the process of solving problems. In the other hand, each information system is also not able to satisfy full information needs for each level. (Karaman & Ghaffarzadeh, 2014)

However, different information systems integrated in different levels can fulfill the information needs of one level and satisfy part of information needs in other levels (Karaman & Ghaffarzadeh, 2014). As per Laudon and Laudon (2014), organizations have information systems to support different levels, and these systems include transaction processing systems (TPS), management information systems (MIS), decision-support systems (DSS), and systems for business intelligence. The different roles of information systems are shown in figure 3.4.

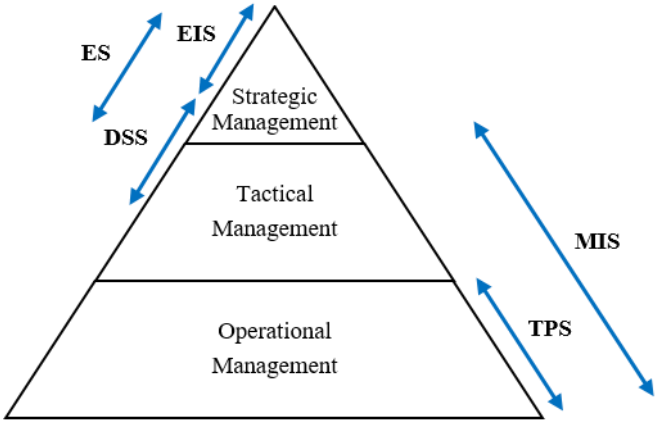

Figure 3.4 - Organization and Information System (Karaman & Ghaffarzadeh, 2014)

Transaction processing systems (TPS) keep track of elementary tasks and transactions within the organization, like sales, receipts, cash deposits, payroll, and the flow of materials in a factory, and are used mainly by operational managers. For middle managers, *management information systems* (MIS) help to monitor, control, make decisions, and help in administrative activities. (Laudon & Laudon, 2014)

The *decision-support systems* (DSS), contrary to MIS, assist in more non-routine decisions that focus on solving unique and fast changing problems, and in a similar way, *executive support systems* (ESS) are systems that assist senior managers on non-routine decision-making that requires judgement, evaluation, and insight. (Laudon & Laudon, 2014)

All of the referred information systems, are systems for *Business Intelligence*, which is a term for "data and software tools for organizing, analyzing, and providing access to data", to help not only middle-managers but all levels of the firm (Laudon & Laudon, 2014).

3.3.4. Framework for the Digital Workplace

Attaran et al. (2019) cited, from a study by Infocentric Research, a *framework for the digital workplace* with three building blocks: personal performance, team performance, and organizational performance as detailed in figure 3.5. These building blocks blend into each other based on all personal and team or

project tasks and they do not exist in isolation from each other, serving as a logical framework for creating the strategy and design concept of a digital workplace.

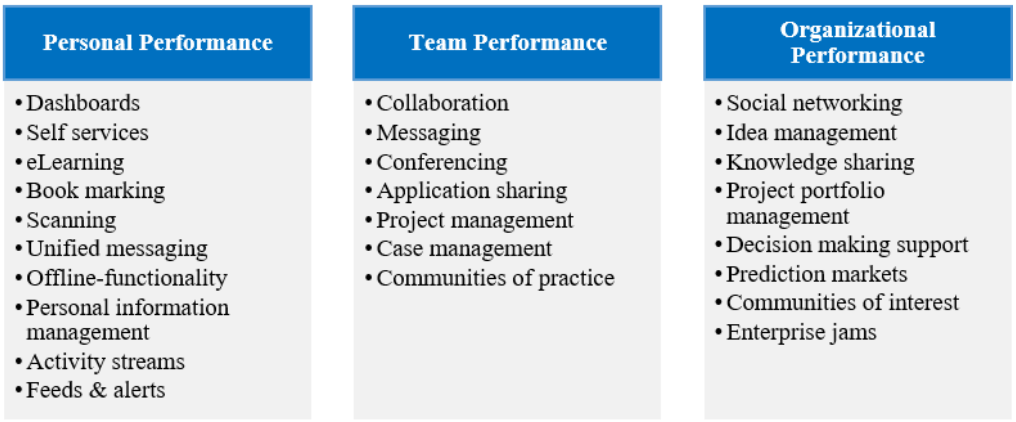

Figure 3.5 - A framework for the digital workplace (Attaran et al., 2019)

Attaran et al. (2019) defend that the digital workplace should be built on a consistent and flexible infrastructure, across multiple devices and channels, to make the knowledge worker life easier in terms of secure information access and sharing, as well as collaboration. Hence, the authors present different layers of the digital workplace framework (figure 3.6) as described above.

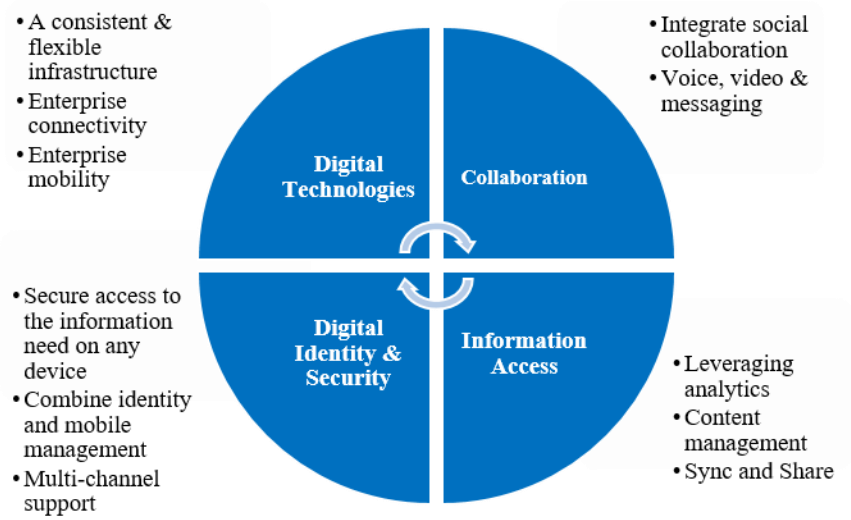

Figure 3.6 - Layers of the digital workplace (Attaran et al., 2019)

3.3.5. Use Cases

Williams and Schubert (2018) identified two groups of specific use cases of digital workplaces – *people-focused and process-focused workplace activities* – with three different workplace designs in each of these two groups, assigned to three different levels: basic, extended and advanced. The six designs are shown in figure 3.7.

The designs of people-focused support mostly 'Information and Knowledge Management' with focus on 'Content and Communication', while the process-focused designs lean more towards 'Business Process Support' with emphasis on 'Processes and Coordination'. The designs in both groups are assigned to three levels, but those do not represent a sequential development, they represent different

forms of use of enterprise collaboration systems, which might be purposefully chosen by a company to achieve its own desired goals. (Williams & Schubert, 2018)

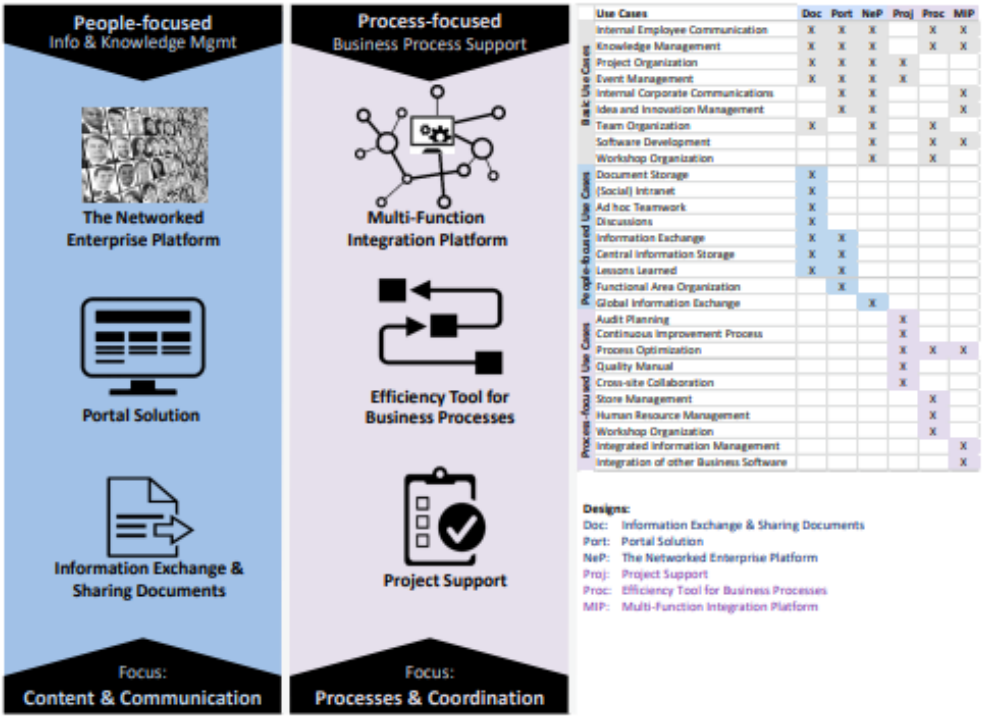

Figure 3.7 - Designs for the Digital Workplace (DWP) and characteristic Use Cases
(Williams & Schubert, 2018)

Williams and Schubert (2018), characterize the workplace designs on the *bottom level* by a basic use of the collaboration system. In the *middle level* the focus is on business improvement, as designs show an extended use of the platform, which is characterized by a higher degree of integration of information in people-focused designs (employees can receive information and actively add content), and the use for operational business processes in process-focused designs (companies support internal and external business activities).

And lastly, the designs on the *top level* are characterized by an advanced use of the ECS (Enterprise Collaboration Systems) and represent the paradigms of "networking" for people-focused (globally distributed employees connect and share information) and "integration" for process-focused (employees access to functionality and information from other business software). (Williams & Schubert, 2018)

3.4. Enabling the Digital Workplace

To enable a successful digital workplace in any organization, it is important to understand why, how and what makes organizations to implement such solutions in their workspaces. The next discussed topics focused on comprehending the business drivers, challenges to implementation and best practices to implementation and management of digital workplace solutions.

3.4.1. Drivers to a Digital Workplace implementation

The expansion of information and communication technology, as well as the varying needs of a multi-generational workforce changed the ways employees connect, collaborate, and communicate. These changes in organizations occur in many ways, based on the different needs that managers and employees have. (Hamburg, 2019)

In organizations, *managers* want their employees to use digital technologies to minimize costs, and to improve business processes, managers also want employees to work together more effectively to boost productivity, and to provide better customer service. Managers wanting to remain relevant in the face of technology advances, and be better than their competitors can also explain the use of digital transformation. (Hamburg, 2019)

In the other hand, *employees* would like to work with a digital tools in accordance to their tasks, experience, and working style, to be helped to meet market expectations, as well as to have workspaces making possible to collaborate more effectively within their jobs due to demands of productivity increase and costs cuts. (Hamburg, 2019)

3.4.2. Challenges to a Digital Workplace implementation

Even though the digital workplace solutions present a variety of advantages and drivers for its implementation in the organization, there are still some challenges that companies face for their effective design, implementation, and usage. Haddud and McAllen (2018) and Attaran et al. (2019) provided in their papers some challenges that different studies found to be prominent:

- *Security concerns.* Businesses worry with security problems such as service traffic hijacking (phishing), buffer overflow attacks, and loss of passwords.
- *Lack of effective employee use.* Some studies identified that employees struggle to log onto multiple apps, are unable to access data and apps inside and outside of the office, and require help to access data. Problems related with ineffective employee use of digital workplaces are due to the lack of internal resources and lack of training/expertise.
- *Lack of efficient governing structures.* Some reported problems related to governance and control are lack of a clear distinction between tools and business needs, difficulty of managing costs, lack of time for new initiatives, business leaders with lack of needed skills to effectively design and manage the digital workplace environment, and inability to correctly assess the performance of workers. In such a way, developing appropriate governing structures to effectively control the digital workplace is a need to boost the personal performance of employees.
- *Managing expectations.* There has been reported a growing expectation tendency for employees to always be ‘on’. This affects the business culture and the way workers do their tasks, and thus is essential to develop a new kind of ‘digital etiquette’ to manage expectations for employees.

- *Compliance.* Ensure that the information flow and the use of digital workplace solutions complies with the overall company policies and industry regulations**.**

Attaran et al. (2019), suggest that an effective digital workplace cannot be solely a combination of existing tools, as there is an urgency for a specific plan with clear objectives onto how the solution should operate in the organization, and how it could, ideally, improve the business workflow.

3.4.3. Best practices to Implementation and Management

According to Hamburg (2019), many organizations acknowledge the importance of a digital workplace and invest money to support digital workplace strategies, but while some organizations develop a digital transformation strategy and understand the benefits, others are still in the early stages of developing a plan without the needed knowledge to define their digital transformation goals.

Haddud and McAllen (2018) discussed in their paper a number of aspects related onto how best transform the digital workplace, and presented some key steps and best practices in order to ensure an effective implementation and management of digital workplaces:

- Evaluate internal and external business environments, as well as business functions and areas to identify current levels of technological adoption.
- Assess potential digital technology application that will suit best each identified business function and area, determine the most suitable suppliers of the needed technologies, and decide whether to own or outsource them.
- Acquire the selected technologies and install them following a robust transition plan, providing the necessary training on how to work effectively on these new digital technologies for employees, tackling any emerging challenges, and ensuring that the acquired technologies work effectively and that they are all aligned to contribute to the overall strategic business goals and objectives,
- Integrate all the adopted technologies in a one system to form one digital workplace that allows all parties within the business to share and retain the information they need, and conduct periodical reviews and feedback processes to make continuous improvements based on the collected feedback.

Hamburg (2019) states that often workplace strategies are developed by external specialist workplace consultants to achieve a successful implementation, as they have workers with knowledge expertise acquired from different backgrounds (business management, interior design and architecture, building surveying, real estate and facility management, human resources, and building research).

4. Reference Table

The present table 4.1 summarizes the literature review, presenting the key points and its relevance to the business plan.

Table 4.1 - Literature Review's reference table

Topic	Key-outcomes from the Literature Review	Relevance for the Business Plan
Defining the Digital Workplace	Per different definitions that the academic authors present, they all agree that it translates into a workplace with people using digital technologies to perform their tasks.	Understand how the concept is being perceived by the academia.
Outcomes of the Digital Workplace		
Benefits of a Digital Workplace	The main benefits cited on different studies are: ▪ Increased employee engagement ▪ Reduced employee absenteeism ▪ Improved collaboration ▪ Increased productivity ▪ Increased business agility ▪ Increased employee attraction/retention ▪ Increased innovation ▪ Improved customer experience ▪ Reduced costs	This knowledge is useful to list the positive and negative results that buyers can get from a digital workplace. It provides help to the marketing and sales processes, and helps responding better to users' needs.
Downside of a Digital Workplace	The downside of a digital workplace translates into: ▪ Stress and overload	
Designing the Digital Workplace		
People: the digital workforce	The management in an organization has a hierarchy of decision-making that flows from strategic management to tactical management, and down to operational management.	Helps to identify the decision-making characteristics in each different level.
Technology: the digital 'toolbox'	**Digital technologies** that enable the digital workplace: social applications, mobile technology, big data analytics, cloud computing, and Internet of Things (IoT). **Enterprise applications** include enterprise systems, supply chain management systems, customer relationship management systems, and knowledge management systems. Alternatives to enterprise applications: intranet and extranet.	Understand which digital technologies are being used for digital workplace transformation.
Information: the digital content for decision-making	The decision-making in organizations is done with the help of flow of data and information. The DIKW hierarchy explains that the digital content in the workplace flows from data to information to knowledge, until it transforms in wisdom. Different information systems help different decision-making processes, in different organizational levels. These systems include transaction processing systems (TPS), management information systems (MIS), decision-support systems (DSS), and systems for business intelligence.	Identifies what content and systems help the decision-making process, and how the content flows in the organizational structure.
Framework for the Digital Workplace	A digital workplace can be designed with three building blocks: personal, team, and organizational performance. It should be built on a flexible infrastructure, with multiple and secure information access, and help the firm in terms of collaboration.	Understand the design structure of a digital workplace.
Use Cases	Digital workplace solutions are being used for people-focused and process-focused workplace activities.	Identify how other firms use this type of solution.

Enabling the Digital Workplace		
Drivers to a Digital Workplace implementation	Managers want better performance and lower costs, while employees want tools that are compatible with their style of working and help them perform their tasks more efficiently.	Identifies users' needs, which are helpful for marketing and sales purposes.
Challenges to a Digital Workplace Implementation	Main challenges to implement a digital workplace include: ▪ Security concerns ▪ Lack of effective employee use ▪ Lack of efficient governing structures ▪ Managing expectations ▪ Compliance	Helps to understand what difficulties firms have in the implementation of the digital solution.
Best practices to Implementation and Management	Best practices to implementation and management of a digital workplace include: ▪ Internal and external business assessment ▪ Potential digital technologies identification ▪ Transition planning ▪ Integration of all technologies in one system	To understand how to help the buyers to implement the solution in their organization.

5. Objectives and Methodology

The main objective of this thesis is to develop a business around the proposed digital workplace solution. In such a way, the development of a business plan has as well its own objectives:

- Assess the internal and external factors impacting the business to understand its competitive position in the market;
- Define the strategic guidelines to which the business will follow to implement, manage and control the solutions;
- Evaluate the financial viability and sustainability of the solution.

Based on these objectives, the figure 5.1 presents the process flow of the methodology, that explains the whole process of the methodology for this thesis. This thesis followed a methodology based on the 'Guide to Business Planning' by Friend and Zehle (2004).

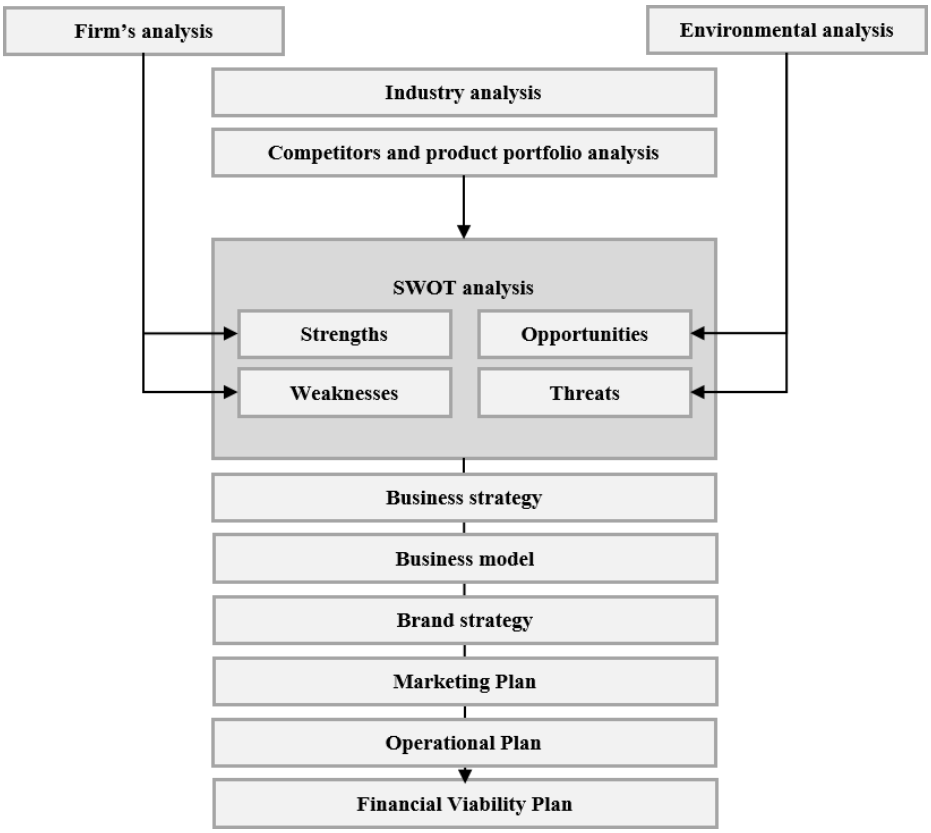

Figure 5.1 – Process flow of the Methodology of the thesis (Author)

It employs the practices of both quantitative and qualitative methods of secondary research data, based on the assumption that secondary data will bring a more overall view for the whole industry than the primary study of a small population, and collecting the two type of data provides a more complete understanding and analysis than either quantitative or qualitative data alone. Both forms of data were collected roughly at the same time and the obtained information was integrated in the interpretation of the overall results.

At the first stage, a *situational analysis* of the business was developed, in order to assess the competitive position of the solution in the market, as described in the objectives.

- *Environmental analysis*

It is relevant to determine which external factors may have an impact on the business currently or in the future (Friend and Zehle, 2004). The methodology used to study the macro environment surrounding the business was the *PEST framework analysis*, which corresponds to the study of the political, economic, social, and technological factors of the environment. Each business is different and different environmental factors should be considered.

The analysis started with the determination of which external factors influence the business performance, and based on the data collected from reports and newspapers, each factor was evaluated regarding the impact and uncertainty degrees of its influence. The impact identifies how significantly a factor affects the business performance, while the uncertainty identifies how easy it is to anticipate the future conduct of a factor.

- *Industry analysis*

To generate a competitive strategy, after an environmental analysis, it is essential to evaluate the attractiveness of an industry, to understand its size and major trends, as well as the main competitive forces that act upon the industry (Friend and Zehle, 2004). In such a way, the methodologies used to understand the structure of the 'digital workplace solutions' industry were different analysis frameworks:

  - *Industry overview* – through data collection of market size and market value;
  - *Industry structural analysis* – with the help of the *Porter's 5 forces framework* (Annex B), an analysis was undergone of the main competitive forces: rivalry among competitors, bargaining power of buyers, bargaining power of suppliers, threat of new entrants, and threat of substitutes.

- *Competitors and product portfolio analysis*

For this analysis, the selected competitors were chosen upon the criteria of having the most proximity to the solution of this thesis, a good digital presence, and market recommendations. The analysis then focused on the study of the marketing-mix of each competitor, such as product features, pricing plans, market promotions and channels of distribution.

- *Firm's analysis*

The methodology used to evaluate the firm's state, was through a resource audit to operations, human, organizational and financial resources. Friend and Zehle (2004) stated that the resource audit might incorporate some of the following asset analysis: level of investment, utilization, efficiency, quality, lowering costs, flexibility, and market adaptability.

- *Competitive analysis*

After the assessment of internal strengths and weaknesses, and external opportunities and threats, the competitive analysis was executed with the help of the SWOT framework, which permitted to generate strategic guidelines based on a cross-analysis of all factors.

After understanding the competitive position in the market, the thesis followed a *strategic business planning* for the proposed solution.

- *Business strategy*

Horwath (2005) states the importance of a clear mission and vision in an organization. The mission statement represents the current purpose for an organization's existence today, while the vision statement is the future purpose, working as a mental aspirational picture of the direction that an organization is working towards. Allied to these statements, Horwath (2005) mentioned values as the ideals and principals that guide organizations' behavior and shape its culture.

After the elaboration of a mission and vision statement, and organization's values, the short and long-term strategies were listed, based on clear and measurable orientations.

- *Business model*

To understand the business model, a business canvas for this solution was illustrated as a summary of the whole components of the business. These components are explained in more detail in the overall business plan.

- *Brand strategy*

The visual identity and expression of the business was elaborated with a perspective to identify the brand, with a design of the logo and color palette choices.

- *Marketing planning*

In accordance to Friend and Zehle (2004), the marketing plan followed four steps of development:

  - Step 1 – Market segmentation;
  - Step 2 – Targeting;
  - Step 3 – Positioning;
  - Step 4 – Optimal Marketing-mix development (Annex C), with a clear definition of the solution features, pricing plans, distribution channels, and promotion strategies.

To summarize the whole marketing plan, a sales funnel for the project was designed.

- *Operational planning*

To explain how the business will carry out its activity, the operational planning is essential. This plan helps to allocate resources to deliver the marketing plan and contributes to defining the organizational structure, investment needs, and implementation strategy.

Lastly, once the business planning process was complete, a *financial analysis* was undergone to evaluate the viability for this project.

6. Situational Analysis

In order to develop a strategic plan with more accurate strategies and processes for the business idea explained in detail in the previous section, it is essential to study the environment with a 360º approach, from outside and from within the organization. This study will permit to identify risks and limitations that the company faces under external factors or due to internal constraints along with potential competitive advantages that may come from market circumstances or internal assets.

Accordingly, this chapter focuses on understanding the complete environment around the business solution, starting with the analysis of external environment at macro and micro levels, to list opportunities and threats for the business, followed by an internal analysis of organizations' capabilities and resources, to list its strengths and weaknesses. At the end, it was possible to map the current competitive situation of the business solution.

6.1. Environmental analysis

The business is influenced in a macro level by the external environment in which it operates and, as explained in the methodology, the analysis of the factors that may influence the business performance was done with the help of the PEST framework. The analysis of this framework was executed for the '*business management software'* industry.

6.1.1. PEST Framework analysis

For this framework, the scope of analysis was done upon political, economic, social, and technological factors that may affect the industry.

- *Political factors*

The business registration will be in Portugal, so it is important to have in consideration the corporate taxation of the country. Portuguese VAT rate is of 23%, and to the total amount of taxable income is applied a rate of 21% (PwC, 2020).

The digital technologies have been opening new opportunities, such as in international trading. According to OECD (2017), one in five SMEs (less than 250 employees) with a digital presence reported trading internationally, as well as two in three SMEs with exporting activity reported that more than 50% of their international sales depend on online tools.

On the other hand, the continuous innovations in technology have been a challenge to market regulations. The greatest challenge to regulating technologies is the pace of technological development. New technologies are emerging almost daily and regulation takes much longer time cycles. A software has an average life span of four to six years, while smaller applications last less than half of that (Ennis et al, 2019).

For technology use, it is important that the population have a proper education and expertise training. The OECD countries, in 2019, registered 41.03% of 25-64 years-old people with the upper-secondary education, and 38.01% with tertiary education (OECD, 2020a). The upper-secondary

education percentage has been decreasing with the time, while tertiary education has been increasing, meaning that population has been getting higher degrees of education. Meanwhile, firms offering formal training in 2019 was at 32.71% of firms (World Bank, 2020b).

The evaluation of the political factors is present in the Annex D.

- *Economic factors*

The countries of interest to understand the economic development are the developed ones. However, with the recent events of Covid-19, the market became very unstable and the risk of an existing crisis and recession is high. In 2018, the unemployment rate was at 5.48% of the labor force for the OECD countries and at 8.20% for the Euro area (OECD, 2020h). With the actual situation, it is expected to increase.

The total annual growth of the inflation rate, in 2019, was at 2.07% for OECD countries, and at 1.20% for Euro area. It is expected to grow 1.30% to 1.70% at the end of 2021 (OECD, 2020f). In, 2018, the long-term interest rates in the Euro area was at 1.27% per annum and it is expected to fall to 0.2% at the end of 2021 (OECD, 2020e).

The evaluation of the economic factors is present in the Annex E.

- *Social factors*

The population has been growing; however, world's annual population growth has been decreasing. In 2019, it was at 1.08% (World Bank, 2020d) and the rate showed to be lower in developed countries. World's urban population has been steadily increasing, registering 55.71% of total population (World Bank, 2020e), due to rural to urban migration.

The age dependency ratio was the lowest in 2015, with 54.00% of working-age population, and has been slightly increasing, registering 54.48% in 2019 (World Bank, 2020a). The pattern showed that developed countries were around or below world's average. In OECD countries, in 2019, 68.7% of population were of working age (OECD, 2020b).

In the recent years existed some social and cultural shifts such as more environmental-conscious purchases and entrepreneurial source of work. In 2019, the percentage of population involved in business start-ups was 12.9% for Portugal, 9.3% for United Kingdom and Russia, and 6.2% for Spain. (Statista, 2020a).

The evaluation of the social factors is present in the Annex F.

- *Technological factors*

The rate of adoption of new technology has been increasing. In 2016, the share of the population using the Internet was at 45.79% in the whole world and 72.00% in Europe and Central Asia, and in 2017, the mobile phone subscription in the world was at 104.49 per 100 people (Ritchie & Roser, 2017).

At the same time, while the technology use has been increasing, the security has not been able to accompany the rhythm of technology innovation. The number of secure Internet servers per one million people, in 2017, was at 3,511 for the whole world, and at 30,282 for the United States (Ritchie & Roser, 2017).

It is possible to consider that the fast expanding technology has been creating new markets in the last years. According to OECD's (2017) report on entrepreneurship, micro-enterprises can enter into foreign markets because of the development of affordable digital tools, which previously seemed impossible. Also, according to World Bank (2020c), in 2019, 14.70% of world's firms spent on R&D, and it is known that in 2018, the gross domestic spending on R&D by the OECD countries was at 2.379% of total GDP (OECD, 2020g).

The evaluation of the technological factors is present in the Annex G.

To summarize the whole analysis based on the PEST framework, the political, economic and technological factors have a high impact on the industry and an increased level of uncertainty. The social factors have some impact and low level of uncertainty.

6.2. Industry analysis

The 'business management software' industry was analyzed in its corporate demand, in terms of market size, as well as in terms of industry attractiveness, with the help of Porter's 5 forces framework.

6.2.1. Market overview

As the buyers of the digital tools are corporate entities, the market size was defined through number of registered businesses. The figure 6.1 illustrates the number of enterprises by business size in some countries, collected by OECD (2020c) database. Based on the numbers it can be understood that a big amount of firms, in almost all shown countries, are small businesses. Moreover, in the vast majority, these businesses may be from the hospitality industry in touristic spots.

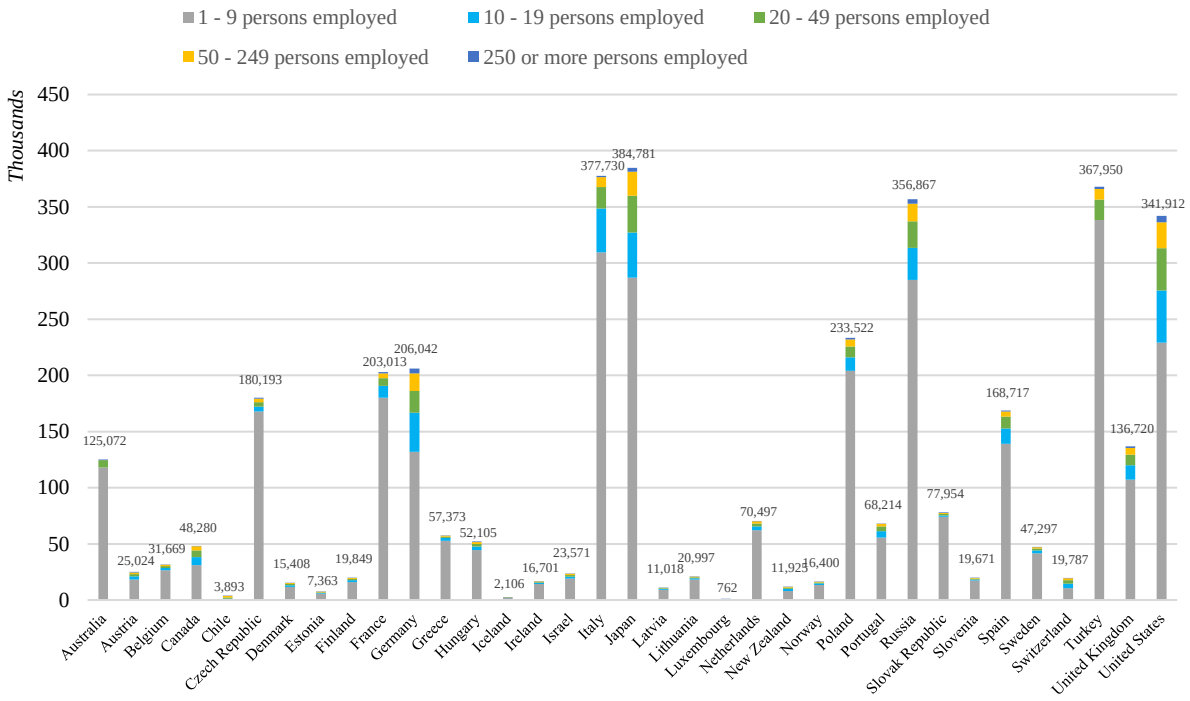

Figure 6.1 - Number of enterprises by business size in 2018 (OECD, 2020c)

In terms of market size value, a report from an industry insider, Grand View Research (2019), cited that the market is valued at 388.98 billion in USD dollars in 2020. Statista (2020b), as illustrated in the figure 6.2, presents the worldwide IT spending on enterprise software, projecting an increase up to 492 billion in USD dollars at the end of 2021.

The forecast for market size value of this industry is that the revenue will hit 650.12 billion in USD dollars by 2025, with a CAGR of 10.7% from 2019 to 2025 (Grand View Research, 2019). Other report, by Market Research Future (2020), estimates that the industry is expected to grow to 634 billion in USD dollars by 2023, with a CAGR of 8% from 2017 to 2023. However, another market analysis report, projected an even higher growth for the market to reach 917.13 billion in USD dollars by 2026, with a CAGR growth of 11.07% from 2019 to 2026 (Verified Market Research, 2020).

The major trends driving the growth of the business software market are big data analytics, analytics, cloud computing, and the increasing demand for business intelligence and adoption of database management systems (Market Research Future, 2020).

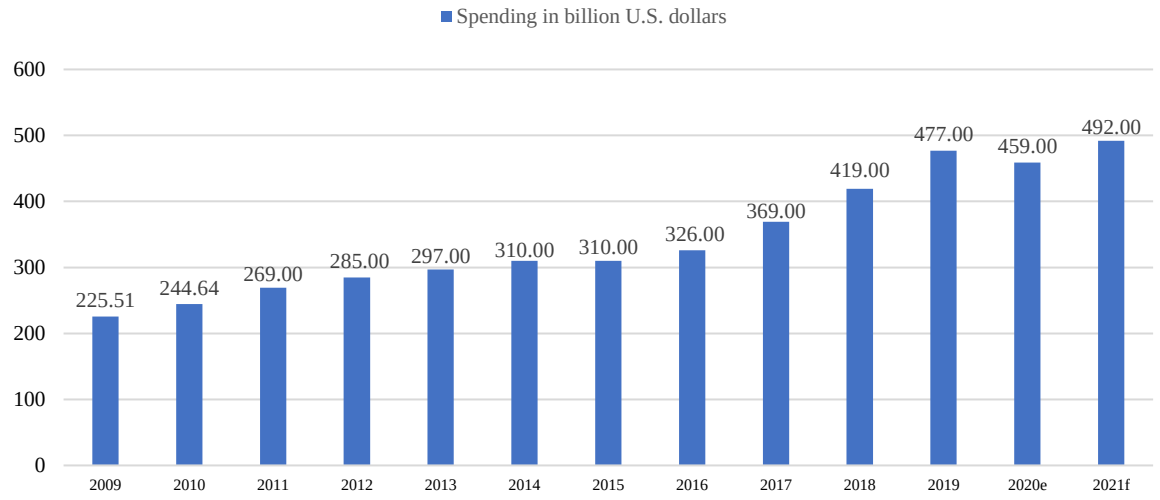

Figure 6.2 - Information technology (IT) spending on enterprise software worldwide (Statista, 2020b)

6.2.2. Porter's 5 forces Framework analysis

Porter's industry analysis helps to understand all the industry players that influence the business, such as competitors, substitutes, new entrants, buyers, and suppliers, and helps define the opportunities and threats that may be relevant for the strategy formulation.

- *Rivalry among existing competitors*

The 'business management software' industry is fragmented and new competitors are entering the market. Even though the market is intensely competitive, the industry is still growing as the demand is increasing throughout the years, as more companies are focusing on acquiring a digital workplace solution.

The industry is composed of competitors that are providing solutions to very specific needs and of competitors with more general solutions, even though most of them still do not provide solutions for the whole organization's needs.

- *Threat of substitute products or services*

For the needs that this industry tries to answer, other cheaper alternatives can substitute the products and services of a digital workplace platform. For example, Microsoft Excel can substitute the project management or finance and accounting tools, or email solutions, social media, and web conferencing, which can substitute the collaborative tools. Even though there is a threat of substitutes, the tools are disintegrated from each other and it damages the efficiency and productivity of employees.

- *Bargaining power of suppliers*

There is a low amount of suppliers for this industry and they are mainly hosting services providers and, eventually, marketing management tools. The options for such suppliers are extensive so the bargaining power of suppliers is low for the 'business management software' industry.

- *Bargaining power of buyers*

In terms of buyers, they have many options to choose from in terms of price and differentiation, and they tend to use tools from many different suppliers, so it may seem that their bargaining power is strong. However, a remote solution such as a software is remote and can target a bigger customer base.

- *Threat of new entrants*

While there is an increase in offering similar solutions, the cost of development is medium-low and there is a growing attention from governments in the regulation of the digital solutions.

To summarize the whole analysis based on the Porter's 5 forces framework, the evaluation of all forces can be seen in the figure 6.3. The industry is attractive in terms of investment and market penetration, as even though it is growing in competitiveness based on existing competitors and new entrants, and it has other substitute alternatives, it is still possible to enter and compete in the market with product or price differentiation as the demand is growing.

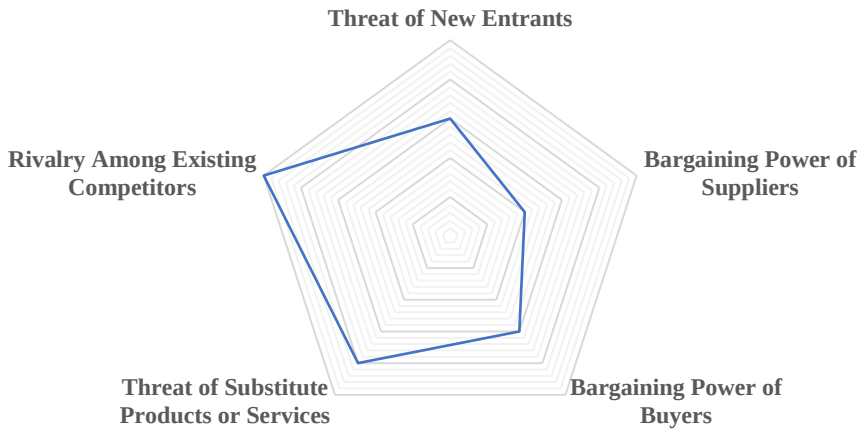

Figure 6.3 - Porter's Five Forces Model applied to 'Business Management Software' market (Author)

6.3. Competitors and Product portfolio analysis

As explained before, as the demand is getting bigger, the rivalry among the competitors has been growing in the last years. It is relevant to understand the market offer, and who provides the offer. In such a way, the competitors' analysis and the product portfolio analysis is presented in Table 6.1.

6.3.1. Competitors analysis

For this analysis, the main competitors to be compared are *Atlassian, Zoho One, Oracle NetSuite, Bitrix24,* and *Scoro*, as they have the 'all-in-one digital workplace' approach.

Table 6.1 - Competitors analysis (Author)

	Product portfolio	Pricing	Marketing distribution
Atlassian	Atlassian has 17 products for every team size, from startups to large enterprises, and for diverse team departments. Their products provide solutions such as: ▪ **Planning, tracking and support:** Jira Software, Jira Align, Jira Core, Jira Service Desk, Statuspage, Opsgenie, Halp, and Insight; ▪ **Collaborate:** Confluence and Trello ▪ **Coding, building and shipping:** Bitbucket, Sourcetree, Bamboo, Fisheye, and Crucible; ▪ **Identity and security:** Atlassian Access and Crowd The hosting of their products can be via cloud, firm's data center or server. The company also offers dedicated support.	For most of the products, payments can be done monthly or annually within a requested quotation. They also provide a 7-day free trial. For their **Trello** product, a team collaboration tool, they offer: ▪ a free version with limited options; ▪ **Business Class:** their first paid package costs $9,99 per user per month if paid annually, and if paid monthly it will cost $12,50; ▪ **Enterprise:** their paid package is for teams starting with 20 users, and up to 250 users the costs will be $17.50 per user per month, and will get lower if the firm has more users.	Atlassian has different platforms that help the brand to interact with the users: ▪ **Atlassian University:** free and paid training of use of their products ▪ **Atlassian Community:** the brand provides a global place for their users to interact with other users and share issues, answers, support and inspiration with each other ▪ **Work Life blog:** from where the brand shares stories on culture, tech, teams and provides tips ▪ **Marketplace:** a place with free and paid apps to integrate with their products ▪ **Atlassian Developer:** developers have the opportunity to build an app and sell in the marketplace to integrate with Atlassian's products The firm also has a great digital presence on social media.
Scoro	Considered an all-in-one business management software, it helps businesses with: ▪ **Project management** ▪ **Work management** ▪ **Sales & CRM** ▪ **Finances** ▪ **Reporting & Dashboards** ▪ **Integrations** with other tools that are not a part of Scoro's offer	For a minimum of 5 user, Scoro offers four pricing plans: ▪ **Essential:** a plan for small teams that costs €19 per user per month, billed annually, and €22 if billed monthly; ▪ **Work Hub:** a plan for teams focused on collaboration, and time, resources and project management, which costs €29 per user per month, billed annually, and €33 if billed monthly; ▪ **Sales Hub:** a plan for teams focused on customers, finances, forecasts and reports, which costs €29 per user per month, billed annually, and €33 if billed monthly; ▪ **Ultimate:** this plan is for teams who want all their departments aligned with all the features Scoro has to offer, but the pricing is provided with a demo request	Scoro provides for the audience and their users: ▪ **Blog:** with news, tips and best practices; ▪ **Case studies:** proof of how their product has helped teams; ▪ **Webinars & Events** ▪ **Help center:** help articles and videos ▪ **Social media presence**

	Product portfolio	Pricing	Marketing distribution
Zoho One	An operating system for business, mobile-friendly, and with more than 40 different product solutions to offer. The main benefits of Zoho, are the bundles they offer: ▪ **CRM Plus:** an unified customer experience platform; ▪ **Finance Plus:** an unified finance platform; ▪ **People Plus:** an unified HR platform (includes employee engagement focus); ▪ **Workplace:** integrated collaboration platform; ▪ **IT Management:** help desk management; ▪ **Creator Plus:** custom application development platform for digital transformation and automation; ▪ **Zoho One:** all-in-one suite that encompasses all the apps in Zoho. The hosting of their products is via cloud. The company also offers dedicated support.	The pricing for Zoho One is provided in two different packs: ▪ **All employee pricing:** licenses for all employees on payroll, with a cost of €30 per employee per month, billed annually, and €35 if billed monthly; ▪ **Flexible user pricing:** license for any number of users, with €75 per user per month, billed annually, and €90 if billed monthly. Zoho provides affordable pricing for their bundles, starting with: ▪ **People Plus:** €8 per user per month, billed annually, and €10 if billed monthly; And, for Workplace bundle: ▪ **Standard:** with 30Gb of mail storage per user, and 5Gb of WorkDrive storage per user, it costs €2,70 per user per month, billed annually, and €3,60 if billed monthly; ▪ **Professional:** with more features, 100Gb of mail storage per user, and 100Gb of WorkDrive storage per user, it costs €5,40 per user per month, billed annually, and €6,30 if billed monthly;	Zoho also presents a diverse variety of platforms to interact with the users: ▪ **Zoho Developer:** a free cloud platform for developers to create applications for Zoho platform; ▪ **Marketplace:** tools for firms to integrate with Zoho applications; ▪ **Zoho Affiliate program:** 15% of the 12-month revenue from a sale done by an affiliate member; ▪ **Zoho Community:** a place for Zoho users to engage, share and learn from each other; ▪ **Zoho Blog:** share tips related to problems their solutions solve; ▪ **Zoho Academy:** guides firms to better business practices; The firm also has a great digital presence.
Oracle NetSuite	It presents itself as one unified business management suite in cloud for every type of business, and with more than 22,000 customers. The products it offers include: ▪ **Enterprise Resource Planning (ERP):** a solution to help with all back-office operations and financial business processes; ▪ **Accounting Software;** ▪ **Global Business Management (OneWorld):** Provides multiple currencies, taxation rules and reporting requirements across business' multinational and multi-subsidiary operations; ▪ **Customer Relationship Management (CRM)** ▪ **Human Capital Management (SuitePeople):** unified cloud suite for human resources management; ▪ **Professional Services Automation (PSA):** complete web-based PSA; ▪ **OpenAir:** supports organization with real-time visibility and anytime; ▪ **Omnichannel Commerce:** unified ecommerce, marketing and POS; ▪ **Email Marketing;** ▪ **Analytics;** ▪ **Business Intelligence;** ▪ **SuiteSuccess:** transformative customer engagement.	Oracle NetSuite does not present its pricing on the website, a product demo and a quotation should be done for customers based on their specific needs.	Oracle NetSuite has a marketing distribution within: ▪ **Blog:** for general business news and tips; ▪ **Podcast:** same as the blog but in an audio format; ▪ **Developers platform:** for developers to build apps on their NetSuite; ▪ **Referral Partner Program:** partners receive a referral fee of 10% of the first year's license; ▪ **Social media presence.**

	Product portfolio	Pricing	Marketing distribution
Bitrix 24	Bitrix24 states that they helped more than 7 million organizations with: ▪ **Communications:** chat and video, calendars, social intranet, email, document management, user groups, and HR system; ▪ **Tasks:** Gantt charts, workload management, Kanban, time tracking, dependencies, task templates, project workgroups, and external users; ▪ **CRM:** pipeline management, lead management, quotes and invoices, sales automation, email marketing, customer support, product catalog, and online payments; ▪ **Contact center:** social networks, telephony, live chat, email, messengers, and contact forms; ▪ **Websites:** free hosting, visual editor, website templates, landing pages, online stores, own free domain name, and responsive websites; ▪ **Mobile app:** for full control of work processes away from office	The pricing structure of cloud services are variable and can be paid monthly, for 3 months without discounts, or for 1 or 2 years upfront, with 21% and 30% off their monthly prices respectively. The plans for monthly payments, billed monthly are: ▪ **Free:** starter business tool for unlimited users but with only 5Gb of online storage Special plans: ▪ **Start +:** for 2 users and 10Gb of online storage, at a price of $24 per user; ▪ **CRM+:** for 6 users and 50Gb of online storage, at a price of $69 per user; ▪ **Project+:** for 24 users and 50Gb of online storage, at a price of $69 per user; Business Plans: ▪ **Standard:** for 50 users and 100Gb of online storage, at a price of $99 per user; ▪ **Professional:** for unlimited users and 1,024Gb of online storage, at a price of $199 per user.	Bitrix24's marketing distribution strategies include: ▪ **Bitrix Partner Program:** an affiliate marketing program for affiliates to earn 50% from each sale and 100% from value-added services; ▪ **Marketplace:** for new features to add to the Bitrix24 account; ▪ **Reviews & Testimonials** ▪ **Blog:** for tips and best practices that teams can follow for their businesses ▪ **Digital presence** on social media

6.4. Firm's analysis

Identifying firm's strengths and weaknesses is important to understand its competitive position in the market. For the firm's analysis, a resource audit was done in the scope of a value chain. A business that has a good use of its operational, human, organizational, and financial resources, may achieve a competitive advantage (Friend and Zehle, 2004).

- *Operations resources* – The business has a lack of tangible and intangible assets, as a capital funding is needed for the investment. The operations of this business are simple, as its relevant components are the marketing/sales, customer service, and IT activities.
- *Human resources* – The staff size at the beginning is small, because it is composed by the development and business team members, and there is a need to recruit skilled personal for the sales and customer services. Nonetheless, the culture is based on continuous learning and innovation.
- *Organizational resources* – Due to the small team, the structure of the firm is plain and non-hierarchical at the development and product launch stages. A small team will permit the agility and efficiency needed in the firm. The business side of the team is responsibility of the author of this thesis, which will also be the CEO for the firm, and the development is responsibility of the partners skilled in the IT area.
- *Financial resources* – The lack of capital funding is the firm's weakness; however, the business partners of the firm will develop the solution.

6.5. Competitive analysis

After performing the external and internal analysis, it was possible to identify the strengths and weaknesses of the firm, as well as the opportunities and threats of the industry. In such a way, next is presented the SWOT framework with the relevant strengths, weaknesses, opportunities and threats, and the respective strategic guidelines identification from the SWOT analysis.

6.5.1. SWOT Framework analysis

Table 6.2 - SWOT Framework (Author)

Strengths	Weaknesses
▪ Agile team ▪ Continuous learning and innovation culture ▪ Remote desktop application	▪ Lack of capital funding ▪ Small team
Opportunities	**Threats**
▪ Education level in population is improving ▪ Estimated decrease in long-term interest rates ▪ Environmental-friendly consciousness increasing ▪ Growth in entrepreneurship ▪ Increasing rate of adoption of new technology ▪ Market size value expected to increase (increased demand) ▪ Low entry regulation barriers	▪ Low average life span of software tools ▪ Fast changing market ▪ Unstable regulation of the market ▪ Uncertain economic situation (Covid-19) ▪ Estimated increase in inflation rate ▪ High level of substitute products ▪ High level of new entrants in the market

With the help of the SWOT framework, present in Table 6.2, it was possible to cross the strengths and weaknesses of the firm with the opportunities and threats of the industry to define strategic guidelines for the business plan:

- *Internationalization* – the remote desktop application permits to focus easily not only on one country, but to provide the service for any country of the world;
- *Bank loans* –with the expected decrease in long-term interest rates, it is possible to assess this option for capital funding;
- *Continuous application improvement* – with the fast changing market and the low average life span of software tools, the innovative culture and agile team should focus on continuous improvement of the platform;
- *Brand differentiation* – to position in the market, it is important to differentiate from the existing competitors

7. Business Plan

After the external and internal analysis to understand the competitive position of the solution, it was possible to develop a strategic business plan to assess as a guide for the development, implementation and management of the *DigitalFocus* solution. Thus, it was defined the business strategy, business model and brand strategy for the solution, followed by the marketing and operational planning.

7.1. Business strategy

At first, an organization needs a strategic direction to clarify the purpose of the business, so the business strategy was executed. It starts with the definition of the mission, vision, and values of the organization and, in addition, for the practical terms of the strategic direction, the short-term and long-term objectives were defined for the 5 years of the business plan.

7.1.1. Mission, Vision and Values

From a strategic perspective, establishing a purpose for your business, either current or future, supports decision-making and coordinates actions for an optimal use of resources. The purpose can be current (mission) or future (vision), reinforced by values.

- *Mission:* To provide organizations with digital solutions, that improve quality of work for employees and performance for employers.
- *Vision:* A happy employee, in every digital workplace.
- *Values:* Integrity, Happiness, People and Security
    - *Integrity* – We provide transparency and ethics in the work we do
    - *Quality* – We provide value and best performance in every product and service we make
    - *Simplicity* – We provide user-friendly products and services to facilitate people's work
    - *People* – We provide a digital environment with people's needs in mind
    - *Security* – We provide the a secure experience for our users

7.1.2. Strategic objectives

To develop a business plan, it is important to define the strategic objectives for a short and a long-term. The short-term strategic objectives are for the pre-launch year and for the first year of activity and the long-term goals are planned for the rest of the years following the first year. The strategic objectives for this business are listed in the table 7.1.

Table 7.1 - Strategic objectives (Author)

	Year	Strategic objectives	KPIs
Short-term objectives	Year 0	▪ Launch the application's alpha English version in 6 months from the start of product development	Due date
		▪ Launch the application's beta English version to the public in 3 months after the previous version	Due date
		▪ Pre-launch marketing campaign	Email subscribers Social media followers

	Year	Strategic objectives	KPIs
	Year 1	▪ Achieve 1,000 active users in the application for the first 12 months of activity	1,000 active users
		▪ Build 100 partnerships to grow the affiliate marketing program	100 partnerships
		▪ Launch the DigitalFocus CRM application in 6 months	6 months development
		▪ Launch the DigitalFocus People application in 6 months	6 months development
Long-term objectives	Year 2	▪ First physical office in the beginning of the 2nd year	Due date
		▪ Achieve 2,500 active users in the application for the next 12 months of activity	2,500 active users
		▪ Build 200 more partnerships to grow the affiliate marketing program	+200 partnerships
		▪ Launch the DigitalFocus Finance application in 6 months	6 months development
		▪ Launch the Spanish version of the product at the end of the year	3 months development
	Year 3	▪ Achieve 5,000 active users in the application for the next 12 months of activity	5,000 active users
		▪ Build 500 more partnerships to grow the affiliate marketing program	+500 partnerships
		▪ Launch the Portuguese version of the product at the beginning of the year	3 months development
		▪ Launch the Russian version of the product at the end of the year	3 months development
	Year 4	▪ Achieve 7,500 active users in the application for the next 12 months of activity	7,500 active users
		▪ Build 1,000 more partnerships to grow the affiliate marketing program	+1,000 partnerships
	Year 5	▪ Achieve 10,000 active users in the application for the next 12 months of activity	10,000 active users

7.2. Business model

In the figure 7.1 is illustrated the business model canvas of the solution.

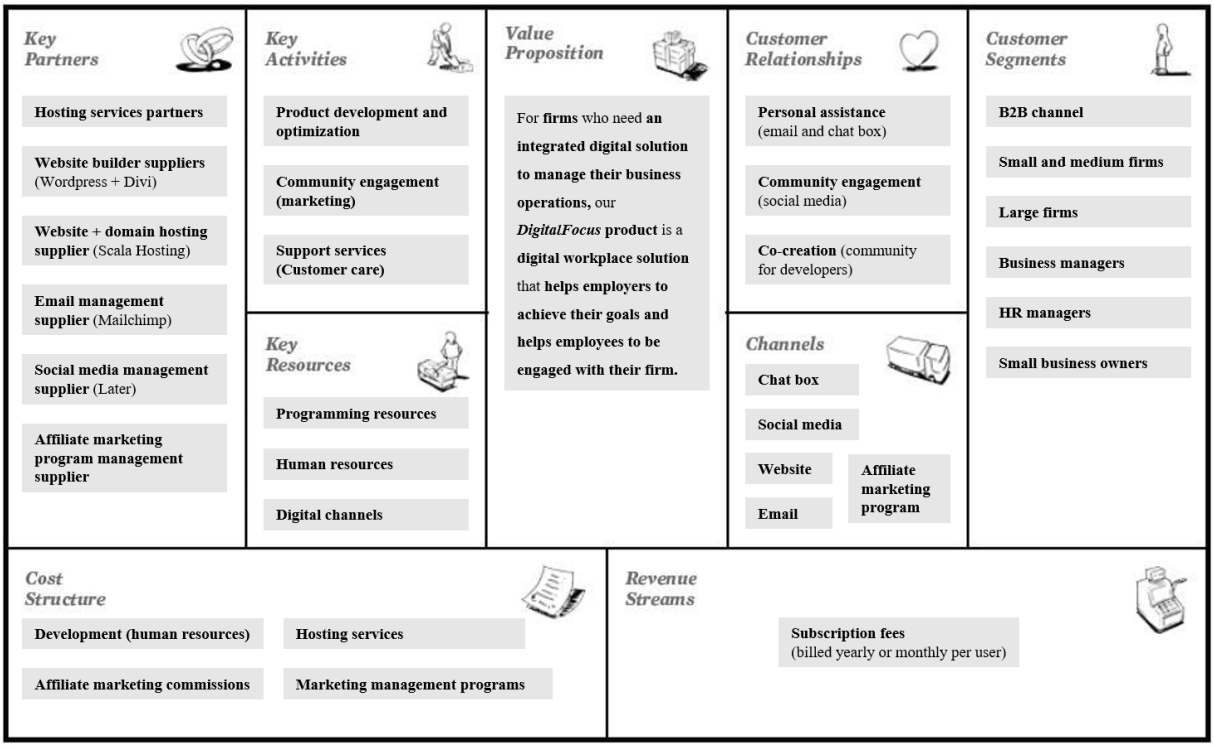

Figure 7.1 - Business model of DigitalFocus (Author)

7.3. Brand strategy

Nowadays, a brand is a valuable asset in every company, and it is usually recognizable based on its visual symbols. In such a way, brand visual guidelines (table 7.2) were built for the company in order to position itself in the solutions market, in a consistent way and differentiate from other existing brands.

Table 7.2 – Brand symbols (Author)

Brand Symbols	Visual symbols	Symbols meaning
Logo	DigitalFocus	The logo is simple and friendly, with an icon that briefly shows the context of the solution.
Color Pallette		By the different meanings of color psychology, the colors present in the brands are: ▪ **Black** – Power, strength, sophistication, simplicity ▪ **Blue** – Confidence, security, intelligence, communication ▪ **Grey** – Balance, stability, authority, maturity

7.4. Marketing plan

For the development of the marketing plan, it started with the market segmentation, targeting and positioning. Afterwards, an optimal marketing-mix was defined for the solution, considering the product features, the pricing, distribution channels (place), and promotion.

7.4.1. Segmentation, Targeting and Positioning

The market *segmentation* is on the B2B channel, since the solution is for business management purposes. The market can be segmented by demographics, such as language since the solution may be available in any language. It is planned for the solution to be available in English, Spanish, Portuguese, and Russian in the first three years, based on a selection from the most spoken languages online (Annex H), as well as them being the fluent languages spoken by the team. Based on firmographics, the segmentation can be delivered by enterprise size in small, medium and large enterprises.

The *target user* is the corporate employees, while the *target buyer* can be HR managers, business managers, business owners, or IT managers, with a high hierarchical level, which gives to the target buyer the power to choose which solution to buy, based on their needs. Thus, the positioning in the market will be as an ‘all-in-one’ desktop and mobile solution for business management.

7.4.2. Marketing-Mix

The marketing mix for the defined target audience is elaborated below into product, price, place and promotion as explained in the methodology chapter.

7.4.2.1. Product

The platform is composed of the central main application '*DigitalFocus*' that is mainly a collaborative tool with a people-focused approach. This main application has available the integration of other tools, that can be chosen within the needs for each individual employee and for each team. The illustrative 'all-in-one platform' bundle is in figure 7.2:

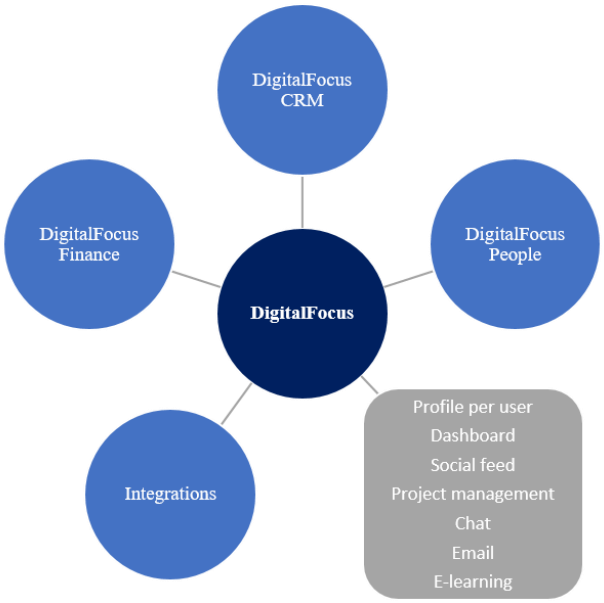

Figure 7.2 - *DigitalFocus* components (Author)

In terms of features, the basis of the platform '*DigitalFocus*' has:

- *User profile* – a page specific for the employee with main information and contact, as well as areas of expertise and projects participation;
- *Dashboard* – a feature that makes possible an overview on the status of work of the user and of the organization as a whole;
- *Social feed* – an essential feature for employees engagement with colleagues and the organization, based on shared news, announcements, etc.;
- *Project and team management* – the feature allows teams to collaborate and communicate effectively for projects;
- *Chat* – to enable an easy and fast communication between employees;
- *E-mail* – for a centralized formal communication with mainly external partners;
- *E-learning* – a page for employees development with trainings produced by the firm or external courses;
- *Document storage* – a place to save and share documents within teams and organization.

The solution will be developed into a desktop and mobile application. The choice of having a desktop application is based on the needs of organizations and the development implications, as desktop applications include:

- *More security* – a web application is less secure, because it has a direct connection to the browser, uses browser services and other websites may access information of the web application. Thus, while in web applications is harder in terms of code to protect the application, the desktop it is easier to do, control, and is less vulnerable to external attacks;
- *Less hosting costs* – in desktop applications there is less hosting costs, as web applications need hosting to keep the application online;
- *Access in offline mode* – a lot of actions can be done without the internet access, and if the firm manages their own storage, in the physical workplace, everything can be done offline;
- *Better performance* – compared to web applications, desktop applications aren't just more secure, they also are faster at completing tasks, and the range of features is bigger as the user doesn't need to worry with loading pages, neither with the application being really heavy;
- *Scalability* – it is easier to manage the number of users, as desktop applications are prepared to handle more users and more services.

The solution also comes with a support service that can be accessed via e-mail or chat box on the website.

7.4.2.2. Price

The price list for this solution is divided in four plans, as described in table 7.3. All plans have access to the whole features of the product, and their differences are mainly in online storage space availability.

Table 7.3 - Price plans for DigitalFocus (Author)

Freemium	Business Standard	Business Plus	Enterprise
€ 0	**€ 29,90 per user** Per month, billed annually	**€ 49,90 per user** Per month, billed annually	**Personalized price** Demo request
	€ 39,90 per user Per month, billed monthly	**€ 59,90 per user** Per month, billed monthly	
Limited offer for a team of 5 users and 5Gb of online storage space	Offer with the essentials for a small team, limited only to the desktop application	Offer with all the tools, but with our storage space, limited to 20Gb	A personalized offer to large organizations with 'pay as you spend' approach in terms of storage availability

The pricing for the Business Standard has in consideration that the firm is only paying for users' licenses, and uses its own hosting services or its hosting services of choice. For the Freemium, Business Plus or Enterprise plans, the company chooses to have the desktop app as well as manage its hosting with our hosting providers.

The storage space refers not only to the document storage, but also to features related to document sharing, email contacts storage, email sharing, etc.

7.4.2.3. Place

The place of marketing distribution for this business is solely digital:

- *Website: 'DigitalFocus'* – The website is an essential place of distribution to the business, as it is where all the conditions of the product are listed and where the whole process of purchase and payment is done.
- *Platform 'DigitalFocus'* – The digital workplace platform was designed to be used on the website, mobile or desktop. This platform is the product itself.
- *Support platform* – The support platform in a form of a chat and an email support service;
- *Blog* – The blog's objective is mainly to bring traffic to the website and present the product for the audience;
- *E-Learning* – Platform with free learning resources for firms;
- *Social Media channels* – Based on the target and our content strategy, explained next, the main social media channels used for distribution are Facebook, Instagram, YouTube, and LinkedIn.

7.4.2.4. Promotion

The promotion for this business is focused on five specific marketing strategies that include affiliate marketing, content marketing, email marketing, social media marketing, public relations, and paid advertising.

- *Affiliate marketing*

One of the main sources of customers for this business shall be from affiliate marketing. This type of marketing permits that one piece of content generates sales in a long-term and contributes to brand awareness.

The affiliate program will consist on sales-based rewards from the collaboration with review sites, coupon sites, and the industry influencers and bloggers that write to the target buyer. The affiliates will bring traffic through reviews or recommendations of the solution published in their website, that include affiliate links which will track and reward the affiliates with a commission of 30% of each sold plan.

- *Content marketing (with SEO)*

One of the main organic marketing strategies for this business, allied to social media marketing, is the content marketing. The customer that seeks for this kind of solutions is also seeking for information to better manage the business and the employees. For this purpose, to support organic traffic of people to the website there will be a blog and an e-learning platform providing valuable free content.

The blog will focus mainly on brief informative content mostly searched by the target about business issues in form of insights, articles, reports and case studies. To complement the blog, the e-learning platform will offer free resources and courses, based on specific business management knowledge the target user seeks to achieve.

The traffic to the website, blog and e-learning platform will be coming from paid advertising or organic sources like email, social media channels, backlinks from external sites, and from SEO. The

SEO (search engine optimization) of a website focuses on content with optimized keywords that are more probable to rank high in search engines.

- *Email Marketing*

As email continues to be one of the most used platforms by people in their personal and professional lives, owning a contact list is a powerful marketing strategy. The promotion can reach the right people, in a form of personalized content and even feedback collection.

The purpose is to build a great email list with the help of free content from the blog and the e-learning platform. An example of a call to action is illustrated bellow:
image example

- *Social media marketing*

Nowadays, social media channels are a great way to connect and build relationships with people, as well as with potential customers. In such a way, the social media marketing will bring organic traffic and sales to the business if managed with the purpose to communicate with the audience and bring valuable information.

- *Public relations*

With a leveraged public relations marketing, the firm can gain additional revenue through brand awareness and promotion of products and services. In addition, it will help to build a good foundation of backlinks that generates organic traffic to the website.

- *Paid advertising*

Along with organic marketing, paid advertising may help to leverage and accelerate the other organic marketing strategies, as well as bring more sales. For this type of strategy, the focus is to direction the ads to the right audience.

7.4.3. Sales funnel

In order to give a more practical view into the marketing strategies described above, a sales funnel was designed with the communication and content distribution purposes in mind, as detailed in table 7.4.

Table 7. 4 - Sales funnel (Author)

Buyer journey	Content distribution	Channels	Purpose
Problem recognition	Short-format posts with content that illustrates difficulties or problems that the audience may be facing	▪ Instagram ▪ Facebook ▪ YouTube ▪ LinkedIn	Clarify the audience with the problems they have in their business, and that they are not yet aware of
	Long-format informational posts or videos that focus on issues that managers face in their workplace	▪ YouTube ▪ LinkedIn	
Information search	Long-format posts that teach the audience on best practices in the workplace, as well as tips for specific issues	▪ Instagram ▪ Facebook ▪ YouTube ▪ Blog (SEO) ▪ e-learning ▪ LinkedIn	Help the audience to understand how to solve their problems and build trust

Buyer journey	Content distribution	Channels	Purpose
	Behind-the-scenes, product and company information to build proof and trust with the audience	▪ Instagram ▪ Facebook ▪ YouTube ▪ LinkedIn	
	External content with backlinks to our website	▪ Press ▪ Affiliate marketing	
	Paid advertising for brand awareness (solution that can solve their issues)	▪ Google search engine ▪ Instagram ▪ Facebook ▪ YouTube ▪ LinkedIn	
Evolution	Free resources in exchange of email contact for future communications	▪ Blog (SEO) ▪ e-learning ▪ YouTube ▪ LinkedIn	Transform audience visitors into leads
	Long-format posts that provides valuable information and builds trust in the brand	▪ YouTube ▪ LinkedIn	
	Paid advertising with free resources in exchange of email contact for future communications	▪ Google search engine ▪ Instagram ▪ Facebook ▪ YouTube ▪ LinkedIn	
Decision	Provide a clear and descriptive landing page with the relevant information about the product, pricing plans and value-added features	▪ Website ▪ Email ▪ Payment solution	Convert leads into customers
Post-purchase behavior	Community of people that engage with each other to solve problems in the product, as well as help each other with best practices of the product	▪ Community platform ▪ Website	Support customers to obtain their loyalty to the product
	Support service that helps efficiently the customers' issues	▪ Website ▪ Help desk	

7.5. Operational plan

After defining the strategy to enter the market, it was essential to define the operational plan, to understand how the organization will be structured, what resources would be needed and how to implement and control these strategies.

7.5.1. Organizational structure

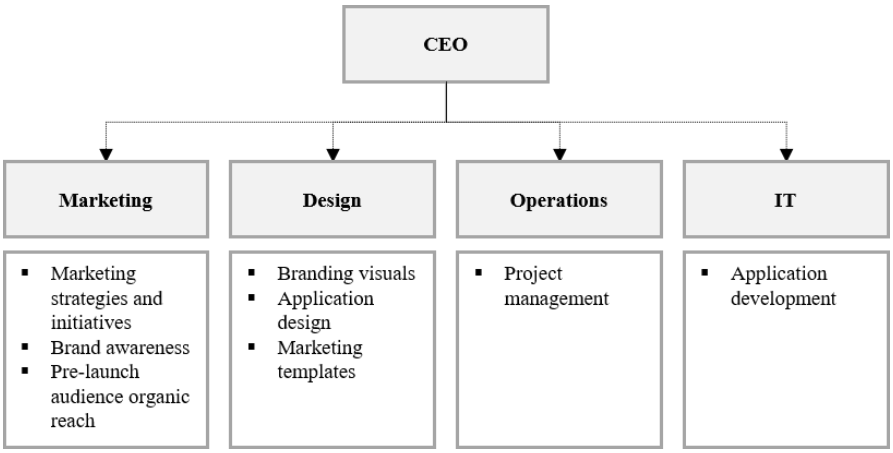

Figure 7.3 - Organizational structure in year 0 (Author)

The organization for the beginning will have a simple functional structure since the focus is on the application development and marketing initiatives. The figure 7.3, illustrates the structure for year 0 with the roles and responsibilities of each team member. For the beginning, the responsibilities of Marketing, Design and Operations are directly of the CEO, and the development team will be responsible for the IT functions.

On the other hand, the figure 7.4 shows the structure representation for organization's 5th year of activity, since the launch, which helps to understand and plan the direction of recruitment and human resource management. The firm will follow a matrix structure to enable better communication and efficiency in everyday operations.

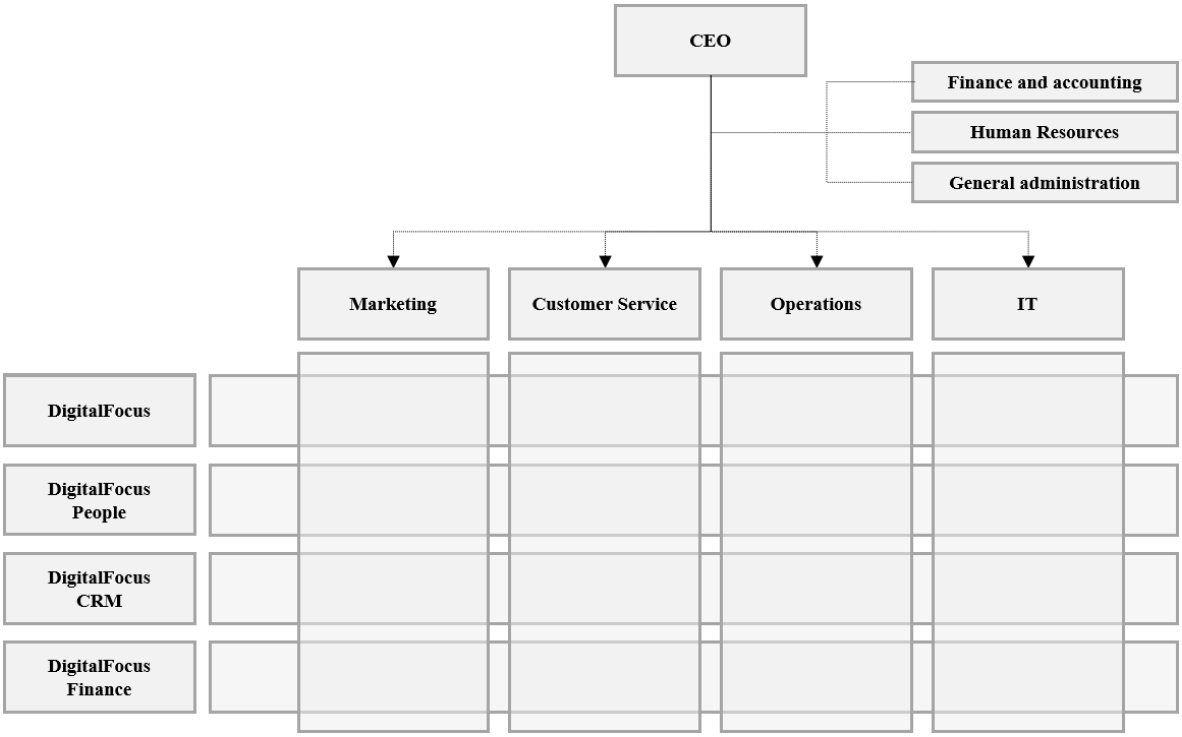

Figure 7.4 - Organizational structure in 5th year of activity (Author)

For the 5th year, the organization will ideally have 11 departments, 3 for support activities (Finance and accounting, Human resources, and General administration), 4 for functional operations (Marketing, Customer Service, Operations, and IT), and 4 divisional departments focused on products (DigitalFocus, DigitalFocus People, DigitalFocus CRM, DigitalFocus Finance).

- *Finance and accounting* – team responsible for the bookkeeping and daily accounting of the business, as well as for the cash flow management and financial strategic decisions;
- *Human Resources* – responsible for the recruitment, training and onboarding of new members, and for the management of employee satisfaction and engagement with the firm;
- *General administration* – provide general support and project management for the firm;
- *Marketing* – team responsible for the marketing, sales and design processes;
- *Customer Service* – team responsible to support customers' needs and keep them satisfied with the service;

- *Operations* – team responsible for efficiency in the business systems and work performance;
- *IT* – team responsible for the development and optimization of the business management software;
- *Product Teams* – teams responsible for each components of the solution, to optimize its features and go-to-market initiatives.

7.5.2. Human resources management

Based on the values of the organization, the human resource management will have a very important role in the business operations. The organization will have HR initiatives which purpose is to develop employees' abilities and increase their work satisfaction and engagement, in order to achieve business goals more efficiently. These initiatives influence talent recruitment, remuneration, promotions, work conditions, and training:

- *Talent recruitment* – the recruitment will be developed in the first stages by the CEO of the organization, and the recruitment process will focus on candidates' capabilities as well as compatibility with the team culture.
- *Remuneration* – the remuneration for the employees includes the basic legal benefits, however employees should expect promotions, as explained next.
- *Promotions* – the promotions are expected to be yearly for the first five years, to achieve a competitive remuneration in the market and to attract more talented and skilled people.
- *Work conditions* – the team has a flexible work environment, with the importance of employees wellness and work-life balance.
- *Training* – the organization will provide internal training to new members in order to align work expectations.

7.5.3. Operational and technical resources

The main operational and technical resources needed for the organization can be divided into resources needed for investment, and resources needed for operations, which are listed as follows:

- *Resources needed for investment* – In terms of legal issues there are registration of the firm for activity, registration of the brand, licensing and certifications. In terms of product development the needed resources include the development team (human resources), the website platform, and the hosting services.
- *Resources needed for operations* – A physical office with internet, office supplies, and computers. Apart from the business activities, accountant and legal services are needed in order to maintain a well-managed business by law.

7.5.4. Implementation and control strategy

The implementation of this project will follow the timeline illustrated in the figure 7.5, in accordance with the strategies described in the business, marketing and operational plans. The control of business implementation and management will be assessed with the help of the Balanced Scorecard.

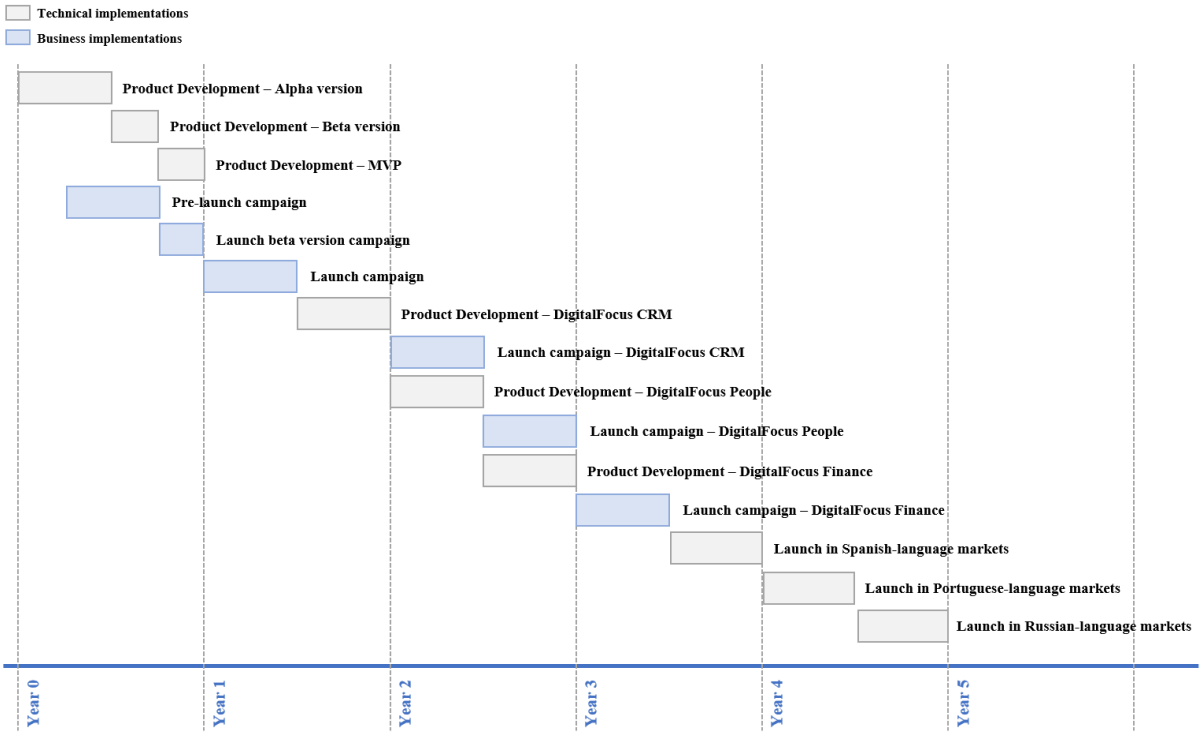

Figure 7.5 - Business timeline for 5 years (Author)

8. Financial Viability Plan

As the business plan is established, the financial analysis of the project was executed to understand if the business is viable, in terms of profitability and liquidity for 5 years of business activity. In this chapter are presented the estimations for the investments, revenue, expenses, and financial statements of this project, followed by a sensibility analysis to three possible scenarios.

8.1. Assumptions

In the table 8.1 are shown the project assumptions that were used to develop the financial analysis for this project. The assumptions are referred to payment terms and to rates, such as taxes or interests.

Table 8.1 – Project assumptions (Author)

Project assumptions	
Average term of payment	30 days
Average term of payment collection	30 days
Average term of Social Security payment days	30 days
Average term of VAT payment days	45 days
VAT rate – sales revenue	23%
VAT rate – operating expenses	23%
VAT rate – investments	23%
Social Security rate (entity)	23,75%
Social Security rate (employees)	11%
Corporate tax rate	21%
Short-term interest rate	0%
Long-term interest rate	0%
Perpetuity cash flow growth rate	0%
Discount rate	10%

8.2. Financial projections

To start, the financial projections should focus on the investment needed for the year ‘zero’ (2021) and for the first five years of activity (2022-2026) of this project. As such, the Table 8.2 has a detailed list of investments per year.

In the development phase, the needed investment is for the team of developers and for the brand and business registration purposes. From the year 2023, the investments are for the physical office, expected to have basic office equipment such as desks, chairs, meeting tables, and others, and technological equipment such as computers, servers, etc. As the team will grow, the need for more equipment is also anticipated.

Table 8.2 – Investments (Author)

Investment per year	2021	2022	2023	2024	2025	2026	Accumulated
Tangible fixed assets							
Land and Natural Resources	0	0	0	0	0	0	0
Buildings and other constructions	0	0	0	0	0	0	0
Basic office equipment	0	0	20,000	5,000	5,000	5,000	35,000
Transport Equipment	0	0	0	0	0	0	0
Technological equipment	0	0	30,000	10,000	10,000	10,000	60,000
Other tangible fixed assets	0	0	0	0	0	0	0
Total Tangible fixed assets	**0**	**0**	**50,000**	**15,000**	**15,000**	**15,000**	**95,000**
Intangible assets							
Development project	80,000	0	0	0	0	0	80,000
Business and brand registration	900	0	0	0	0	0	900
Other intangible assets	0	0	0	0	0	0	0
Total Intangible assets	**80,900**	**0**	**0**	**0**	**0**	**0**	**80,900**
Total Investments	**80,900**	**0**	**50,000**	**15,000**	**15,000**	**15,000**	**175,900**

As explained in the Marketing Plan, there are four plans to sell, being the first a freemium plan. For the other three paid plans, the monthly pricing, if billed annually, for the '*Business Standard*' plan is EUR 29.90, for the '*Business Plus*' plan is EUR 49.90, and for the '*Enterprise*' plan is EUR 99.90.

For the sales projections it was considered the sold quantities (license per user) of 1,000 (1st year), 2,500 (2nd year), 5,000 (3rd year), 7,500 (4th year), and 10,000 (5th year), as shown in annex I. The sold quantities of plans were divided with a proportion of 70% for the 'Business Standard' plan, 25% for the 'Business Plus' plan, and 5% for the 'Enterprise' plan.

The monthly and yearly churn were considered for the financial planning, the number of sold software licenses is a strategic objective to of active users in the platform, and not acquired users. The table 8.3 illustrates the sales projection for the first five years of activity.

Table 8.3 – Sales projections (Author)

Sales revenue	2022	2023	2024	2025	2026
Business Standard plan	251,160	627,900	1,255,800	1,883,700	2,511,600
Business Plus plan	149,700	374,250	748,500	1,122,750	1,497,000
Enterprise plan	59,940.00	149,850.00	299,700.00	449,550.00	599,400.00
Total revenue	**460,800**	**1,152,000**	**2,304,000**	**3,456,000**	**4,608,000**
VAT (23%)	105,984	264,960	529,920	794,880	1,059,840

After understanding the turnover that the business will generate, the overall operating costs were identified, starting with the operating expenses in Table 8.4. These expenses were estimated based on monthly costs of services that are present in annex J. The commissions' payment from the affiliate program will be the biggest recurrent cost, but it will be only paid after the clients payments.

Table 8.4 – Operating costs (Author)

Annual operating costs	2022	2023	2024	2025	2026
Hosting services	2,400.00	6,000.00	9,000.00	12,000.00	24,000.00
Accounting services	2,400.00	2,400.00	2,400.00	2,400.00	2,400.00
Legal services	2,400.00	2,400.00	2,400.00	2,400.00	2,400.00
Communication services (includes Internet)	600.00	600.00	600.00	600.00	600.00
Rent	0.00	12,000.00	12,000.00	12,000.00	12,000.00
Electricity services	0.00	1,200.00	1,440.00	1,680.00	1,920.00
Water services	0.00	360.00	420.00	480.00	540.00
Gas services	0.00	0.00	0.00	0.00	0.00
Office supplies	0.00	1,200.00	1,800.00	2,400.00	3,000.00
Commissions (affiliate marketing)	82,944.00	207,360.00	414,720.00	622,080.00	829,440.00
Advertising	0.00	6,000.00	12,000.00	24,000.00	36,000.00
Insurance	0.00	1,200.00	1,200.00	1,200.00	1,200.00
Marketing softwares	3,000.00	12,000.00	24,000.00	24,000.00	24,000.00
Other services	0.00	0.00	0.00	0.00	0.00
Total Operating Costs	93,744.00	252,720.00	481,980.00	705,240.00	937,500.00
Deductible VAT	21,561	58,064	110,784	162,124	215,533

In addition to the operating expenses, it is also appraised the staff expenses for the project. The estimations are present in the Table 8.5, and the costs are based on the number of employees (Annex K) and their probable gross salaries (Annex L). The calculations for the number of employees were centered on the strategic objectives defined for the business, such as planned product launches and the wanted number of annual active users.

Table 8.5 – Staff expenses (Author)

Staff Expenses	-	2022	2023	2024	2025	2026
Annual remuneration basis (gross)						
Administration / Directors		7,000	107,100	291,312	623,990	818,319
Development / IT		50,400	79,968	116,525	133,712	151,541
Sales / Marketing		0	19,992	69,915	133,712	151,541
Customer Service		14,000	47,124	87,394	135,198	212,157
Operations		0	0	23,305	53,485	121,232
Product managers		0	59,976	93,220	106,970	121,232
Total annual remuneration (gross)		**71,400**	**314,160**	**681,670**	**1,187,067**	**1,576,021**
Other expenses						
Social Security	34.75%					
Administration	34.75%	2,433	37,217	101,231	216,837	284,366
Personal	34.75%	22,379	71,953	135,649	195,669	263,302
Insurance - work accidents	1%	714	3,142	6,817	11,871	15,760
Food allowance Euros / day	4.27	5,167	16,864	27,404	36,890	42,160
Total other expenses		**30,692**	**129,176**	**271,101**	**461,267**	**605,588**
Total staff expenses		**102,092**	**443,336**	**952,771**	**1,648,334**	**2,181,609**

For the purpose of studying the capability of business liquidity, the Working Capital needs were calculated, as shown in Table 8.6. The positive values mean that the business activity needs to have cash to pay for existing suppliers in advance.

Table 8.6 – Working Capital Needs (Author)

Working Capital Needs	2021	2022	2023	2024	2025
Reserve Cash and Banks	23,040	57,600	115,200	172,800	230,400
+ Customers credit	37,874	94,685	189,370	284,055	378,740
+ Average Duration of Materials in Warehouse	0	0	0	0	0
- Suppliers credit	7,705	20,772	39,615	57,965	77,055
- State Public Sector	22,805	59,988	119,983	189,076	252,348
Working Capital Needs	**30,404**	**71,525**	**144,972**	**209,814**	**279,737**
Investment in Yearly Working Capital Needs	**30,404**	**41,121**	**103,851**	**105,962**	**173,774**

Evaluating the income statement that is projected for this business, in Table 8.7, it can be concluded that the biggest operating costs are with staff expenses. Nonetheless, with the desired number of application licenses sold, the results are positive even for the first year of activity, with a net income of more than 188 thousand of euros.

Table 8.7 – Income provisional statement (Author)

Income statement	2022	2023	2024	2025	2026
Revenue (sales)	**460,800**	**1,152,000**	**2,304,000**	**3,456,000**	**4,608,000**
Costs					
Cost of good sold	**0**	**0**	**0**	**0**	**0**
Operating expenses	**93,744**	**252,720**	**481,980**	**705,240**	**937,500**
Staff expenses	**102,092**	**443,336**	**952,771**	**1,648,334**	**2,181,609**
Sub-total Operating costs	**195,836**	**696,056**	**1,434,751**	**2,353,574**	**3,119,109**
EBITDA	**264,964**	**455,944**	**869,249**	**1,102,426**	**1,488,891**
Amortizations for the year	26,966	26,966	38,466	15,000	18,500
Total Operating costs	**222,803**	**723,023**	**1,473,218**	**2,368,574**	**3,137,609**
EBIT (Earnings before interest and taxes)	**237,997**	**428,977**	**830,782**	**1,087,426**	**1,470,391**
Interest expenses	0	0	0	0	0
EBT (Earnings before taxes)	**237,997**	**428,977**	**830,782**	**1,087,426**	**1,470,391**
Taxes (21%)	49,979	90,085	174,464	228,359	308,782
Net income	**188,018**	**338,892**	**656,318**	**859,066**	**1,161,609**

After the income statement calculations, it was possible to identify the annual and accumulated cash flows of this project, as presented in Table 8.8. It is expected to achieve an accumulated cash flow of more than one million euros in 2025, in the 4th year of business activity. These results show the profitability in a long-term of the project.

Table 8.8 – Project's Cash Flow (Author)

Project's Cash-Flow	2021	2022	2023	2024	2025	2026	
Operational Cash-flow		**236,288**	**387,162**	**725,173**	**885,916**	**1,194,724**	***11,947,238***
Investment in Fixed Assets	80,900	0	50,000	15,000	15,000	15,000	*-30,899*
Investment in Working Capital	30,404	41,121	103,851	105,962	173,774	173,774	*-628,887*
Total Investments	**111,304**	**41,121**	**153,851**	**120,962**	**188,774**	**188,774**	**597,988**
Total Cash-Flow	**-111,304**	**195,167**	**233,310**	**604,210**	**697,142**	**1,005,950**	**12,545,226**
Accumulated Cash-Flow	*-111,304*	*83,863*	***317,173***	*921,384*	*1,618,526*	*2,624,475*	*15,169,702*

With the goal of managing the firm's liquidity and financial risk, the treasury balance in Table 8.9 shows that the firm will be able to meet its financial obligations with the staff salaries and suppliers due payments.

Table 8.9 – Treasury Balance (Author)

Treasury	2021	2022	2023	2024	2025	2026
Funds Origins	**111,304**	**236,288**	**387,162**	**725,173**	**885,916**	**1,194,724**
Operational Cash-flow	0	236,288	387,162	725,173	885,916	1,194,724
Capital Share and partner supplies	0	0	0	0	0	0
Obtained loans	111,304	0	0	0	0	0
Disinvestments in Working Capital	0	0	0	0	0	0
Funds Applications	**111,304**	**202,405**	**243,937**	**295,427**	**417,134**	**497,556**
Fixed Capital Investment	80,900	0	50,000	15,000	15,000	15,000
Investment in Working Capital	30,404	41,121	103,851	105,962	173,774	173,774
Profit Tax	0	49,979	90,085	174,464	228,359	308,782
Loans Repayment	0	111,304	0	0	0	0
Financial charges	0	0	0	0	0	0
Annual Treasury Balance	**0**	**33,883**	**143,225**	**429,746**	**468,783**	**697,167**
Accumulated Treasury Balance	**0**	**33,883**	**177,108**	**606,855**	**1,075,637**	**1,772,805**

8.3. Financial viability analysis

After a thorough financial analysis, it is possible to conclude that this business is financially viable. In a realistic financial scenario, as shown in Table 8.10, the Net Present Value (NPV) of the project is more than 8 million euros, with an Internal Rate of Return (IRR) of more than 235%. It is estimated that the project investment will be paid in the first 7 months of activity.

For the pessimistic scenario, the sales revenue was reduced by 20%, and the operating and staff costs were increased by 20%. In the optimistic scenario, it was the other way around, an increase of 20% in the revenue, while all the operating costs were decreased by 20%. This analysis helped to understand the potential of the business if it will reach the optimistic values and the low risk of the business if the business had results in a pessimistic scenario.

Table 8.10 – Sensibility analysis (Author)

	Pessimistic scenario	Realistic scenario	Optimistic scenario
NPV	EUR 1,036,266	**EUR 8,895,117**	EUR 17,143,920
IRR	95.4%	**235.9%**	320.7%
Payback period	< 11 months	**< 7 months**	~ 5 months

9. Conclusion

The present thesis successfully accomplished the requirement to build a business plan for a new proposed business, a digital workplace solution, and answered to all questions and to the initially defined objectives for the analysis and planning chapters.

Through the competitive position assessment of the '*DigitalFocus*', the study of the internal and external factors affecting the business, it was possible to understand what positively contributes to the success of the product addition in the market and what may negatively contribute as a risk and a threat to the business.

The product has an increasing demand in the market for this type of product. '*DigitalFocus*' tries to differentiate itself in the market with the 'desktop application' and the employee engagement attributes, and likewise needs to differentiate with a brand that resonates with the users. On the other hand, the business should have into account the fast pacing changes in the industry and new probable regulations for the 'business management software' industry.

The definition of the strategy and the planning of marketing and operational processes helped to create a clear and measurable roadmap for the team to implement the product in the market and to reach the potential buyers. The marketing strategies will focus on digital distribution channels and affiliate marketing partners.

It is intended for the business to achieve at least 10,000 users by the 5th year, and for the team to grow with the evolving business needs. At the end, the financial analysis settled that the project plan for the '*DigitalFocus*' product is financially viable and profitable in a long-term perspective.

10. References

Attaran, M., Attaran, S., & Kirkland, D. (2019). The Need for Digital Workplace: Increasing Workforce Productivity in the Information Age. **International Journal of Enterprise Information Systems**, 15(1), 1–23.

Bellinger, G., Castro, D., & Mills, A. (2011). Data, Information, Knowledge, and Wisdom. **Systems Thinking.**

Ennis, H., Estevez, A., Mariani, J., Moran, J., & Pauloski, J. (2019). National security and technology regulation: Government regulations for emerging technology. **Deloitte Insights.** https://www2.deloitte.com/us/en/insights/industry/public-sector/national-security-technology-regulation.html, accessed in 25th of October of 2020.

Friend, G., & Zehle, S. (2004). Guide to Business Planning. **The Economist in association with Profile Books.**

Grand View Research. (2019). Business Software & Services Market Size: Industry Report, 2019-2025. https://www.grandviewresearch.com/industry-analysis/business-software-services-market, accessed in 24th of October of 2020

Haddud, A., & McAllen, D. (2018). Digital Workplace Management: Exploring Aspects Related to Culture, Innovation, and Leadership.

Hamburg, I. (2019). Implementation of a Digital Workplace Strategy to Drive Behavior Change and Improve Competencies. **Strategy and Behaviors in the Digital Economy.**

Horwath, R. (2005). Discovering Purpose: Developing Mission, Vision & Values. **Strategic Thinking Institute.**

Internet World Stats. (2020). Top Ten Internet Languages in The World - Internet Statistics. **Miniwatts Marketing Group**. https://www.internetworldstats.com/stats7.htm, accessed in 20th of August of 2020.

Karaman, E., & Ghaffarzadeh, M. (2014). Decision Making based on Management Information System and Decision Support System. **Bulletin of Environment, Pharmacology and Life Sciences**, 3(2), 126–135.

Köffer, S. (2015). Designing the digital workplace of the future - what scholars recommend to practitioners. **ICIS.**

Laudon, K. C., & Laudon, J. P. (2014). Management Information Systems: Managing in the Digital Firm (13th ed.). **Pearson.**

Liew, A. (2013). DIKIW: Data, Information, Knowledge, Intelligence, Wisdom and their Interrelationships. **Business Management Dynamics.**

Market Research Future. (2020). Global Enterprise Software Market Research Report - Forecast 2023. https://www.marketresearchfuture.com/reports/enterprise-software-market-2442, accessed in 24th of October of 2020.

OECD. (2017). Entrepreneurship at a Glance 2017. **OECD Publishing.** https://www.oecd-ilibrary.org/employment/entrepreneurship-at-a-glance-2017_entrepreneur_aag-2017-en, accessed in 25th of October of 2020.

OECD. (2020a). Education attainment - Adult education level. **OECD Data.** https://data.oecd.org/eduatt/adult-education-level.htm, accessed in 25th of October of 2020.

OECD. (2020b). Employment - Employment rate. **OECD Data.** https://data.oecd.org/emp/employment-rate.htm, accessed in 26th of October of 2020.

OECD. (2020c). Entrepreneurship - Enterprises by business size. **OECD Data.** https://data.oecd.org/entrepreneur/enterprises-by-business-size.htm#indicator-chart, accessed in 24th of October of 2020.

OECD. (2020d). General government spending. **OECD Data.** https://data.oecd.org/gga/general-government-spending.htm, accessed in 25th of October of 2020.

OECD. (2020e). Interest rates - Long-term interest rates. **OECD Data.** https://data.oecd.org/interest/long-term-interest-rates.htm, accessed in 26th of October of 2020.

OECD. (2020f). Prices - Inflation (CPI). **OECD Data.** https://data.oecd.org/price/inflation-cpi.htm#indicator-chart, accessed in 26th of October of 2020.

OECD. (2020g). Research and development (R&D) - Gross domestic spending on R&D. **OECD Data.** https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm, accessed in 27th of October of 2020.

OECD. (2020h). Unemployment - Unemployment rate. **OECD Data.** https://data.oecd.org/unemp/unemployment-rate.htm#indicator-chart, accessed in 26th of October of 2020.

PwC. (2020). Portugal - Corporate - Taxes on corporate income. **PwC Worldwide Tax Summaries.** https://taxsummaries.pwc.com/portugal/corporate/taxes-on-corporate-income, accessed in 25th of October of 2020.

Ritchie, H., & Roser, M. (2017). Technology Adoption. **Our World in Data.** https://ourworldindata.org/technology-adoption, accessed in 27th of October of 2020.

Rowley, J. (2007). The wisdom hierarchy: representations of the DIKW hierarchy. **Journal of Information Science**, 33(2), 163–180.

Stair, R., & Reynolds, G. (2017). Principles of Information Systems (13th ed.). **Cengage Learning.**

Statista. (2020a). Early-stage entrepreneurial activity rate in Europe, by country 2019. https://www.statista.com/statistics/315502/percentage-of-population-involved-in-business-start-ups-in-europe/, accessed in 26th of October of 2020.

Statista. (2020b). Worldwide IT enterprise software spending 2009-2021. https://www.statista.com/statistics/203428/total-enterprise-software-revenue-forecast/, accessed in 24th of October of 2020.

Verified Market Research. (2020). Business Software and Services Market Size, Opportunities & Forecast. https://www.verifiedmarketresearch.com/product/business-software-and-service-market/ accessed in 24th of October of 2020

Williams, S. P., & Schubert, P. (2018). Designs for the Digital Workplace. **Procedia Computer Science,** 138, 478–485.

World Bank. (2020a). Age dependency ratio (% of working-age population). **The World Bank Data.** https://data.worldbank.org/indicator/SP.POP.DPND?name_desc=false, accessed in 26th of October of 2020.

World Bank. (2020b). Firms offering formal training (% of firms). **The World Bank Data.** https://data.worldbank.org/indicator/IC.FRM.TRNG.ZS?end=2020&start=2002&view=chart, accessed in 25th of October of 2020.

World Bank. (2020c). Firms that spend on R&D (% of firms). **The World Bank Data.** https://data.worldbank.org/indicator/IC.FRM.RSDV.ZS?end=2019&start=2019&view=bar, accessed in 27th of October of 2020.

World Bank. (2020d). Population growth (annual %). **The World Bank Data.** https://data.worldbank.org/indicator/SP.POP.GROW?name_desc=false, accessed in 26th of October of 2020.

World Bank. (2020e). Urban population (% of total population). **The World Bank Data.** https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS, accessed in 26th of October of 2020.

11. Annexes

Annex A – DIKIW Hierarchy

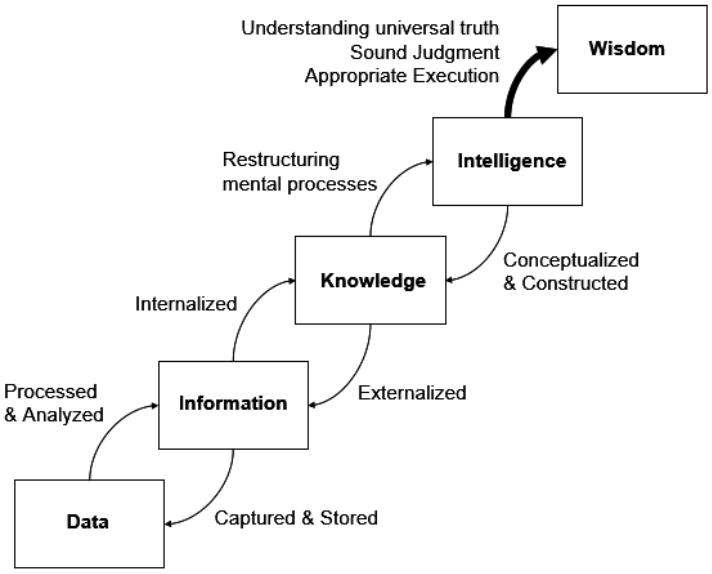

Figure 11.1 - DIKIW Hierarchy according to Liew (2013)

Annex B – Porter's 5 Forces Framework

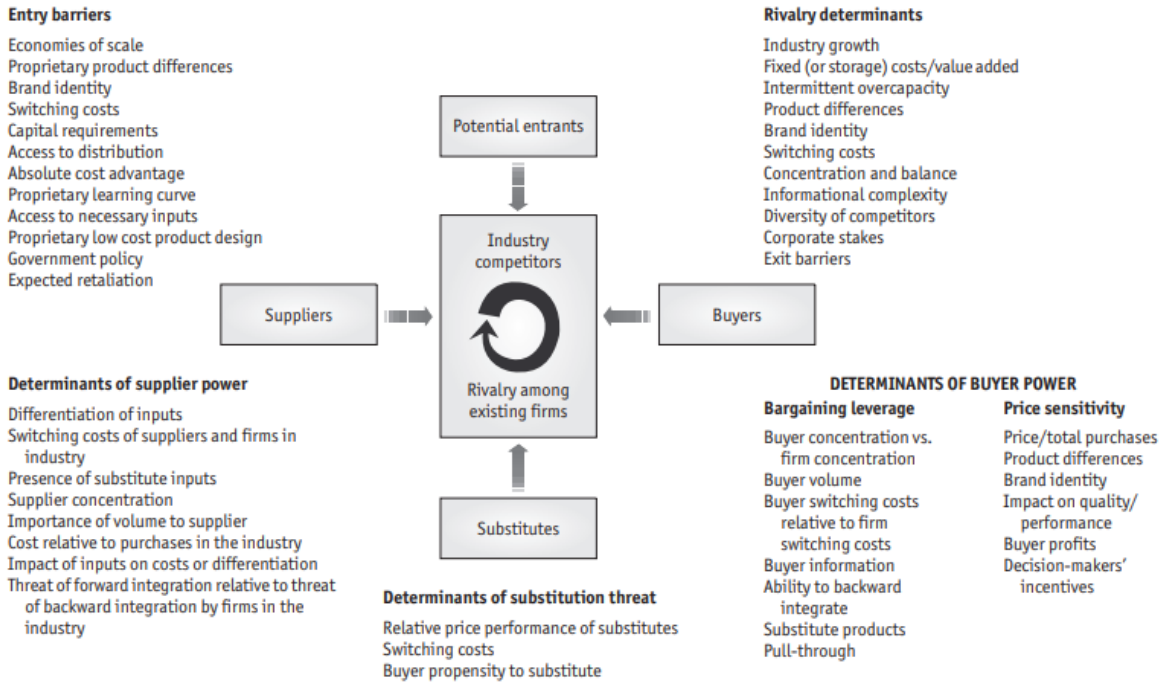

Figure 11.2 – Porter's 5 Forces Framework (Friend & Zehle, 2004)

Annex C – Marketing-Mix

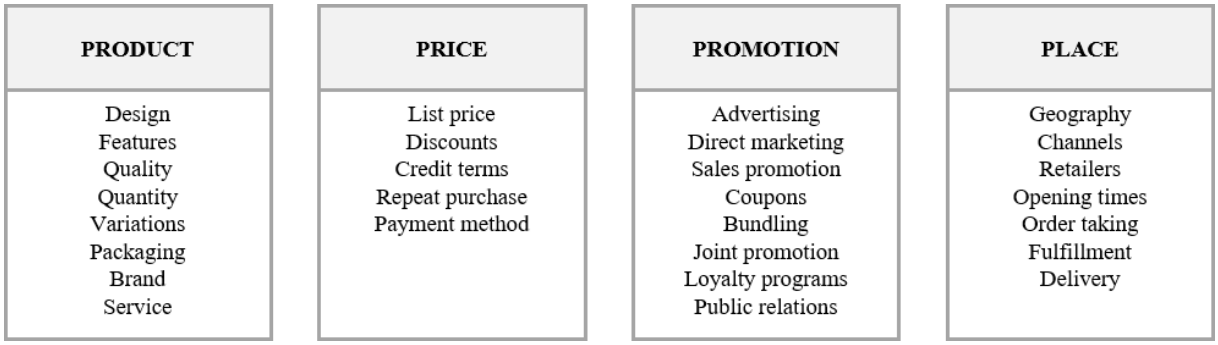

Figure 11.3 – Marketing-Mix (Friend & Zehle, 2004)

Annex D – Political factors analysis

Table 11.1 - Political factors analysis (Author)

Political factors		Impact				Uncertainty			
		--	-	+	++	--	-	+	++
Direct and indirect taxes	Portuguese VAT rate is of 23% (PwC, 2020)				x		x		
Corporate taxation	In Portugal, to the total amount of taxable income is applied a rate of 21%. (PwC, 2020)				x		x		
Public spending	In OECD countries, the general government spending was, in 2018, of 19,275 thousand US dollars per capita. In the Euro are, in 2019, it was of 22,950 thousand US dollars per capita.(OECD, 2020d)		x					x	
Changes in international trade	According to OECD (2017), one in five SMEs (less than 250 employees) with a digital presence reported trading internationally, as well as two in three SMEs with exporting activity reported that more than 50% of their international sales depend on online tools.				x			x	
Regulation and deregulation	The greatest challenge to regulating technologies is the pace of technological development. New technologies are emerging almost daily and regulation takes much longer time cycles. A software has an average life span of four to six years, while smaller applications last less than half of that (Ennis *et al.*, 2019).				x				x
Education and training	The OECD countries, in 2019, registered 41.03% of 25-64 years-old people with the upper-secondary education, and 38.01% with tertiary education (OECD, 2020a) Firms offering formal training in 2019 was at 32.71% of firms (World Bank, 2020b).			x			x		

Annex E – Economic factors analysis

Table 11.2 - Economic factors analysis (Author)

Economic factors		Impact				Uncertainty			
		--	-	+	++	--	-	+	++
Business cycle	With the recent events of Covid-19 the market became very unstable and the risk of an existing crisis and recession high.				x				x
Employment levels	In 2018, the unemployment rate was at 5.48% of the labor force for the OECD countries and at 8.20% for the Euro area. (OECD, 2020h)				x			x	
Inflation	In 2019, the total annual growth of the inflation rate was at 2.07% for OECD countries, and at 1.20% for Euro area. It is expected to grow 1.30% to 1.70% at the end of 2021 for OECD countries. (OECD, 2020f)			x				x	
Interest and exchange rates	In, 2018, the long-term interest rates in the Euro area was at 1.27% per annum and it is expected to fall to 0.2% at the end of 2021 (OECD, 2020e).			x				x	
Economic development	The countries of interest are at first the developed ones.				x	x			

Annex F – Social factors analysis

Table 11.3 - Social factors analysis (Author)

Social factors		Impact				Uncertainty			
		--	-	+	++	--	-	+	++
Population growth	The population has been growing; however, world's annual population growth has been decreasing. In 2019, it was at 1.08% (World Bank, 2020d) and the rate showed to be lower in developed countries.		x				x		
Age structure	The age dependency ratio (% of working-age population) was the lowest at 2015 with 54.00% and has been slightly increasing, registering 54.48% in 2019 (World Bank, 2020a). The pattern showed that developed countries were around or below world's average. In OECD countries, in 2019, 68.7% of population were of working age (OECD, 2020b).			x			x		
Rural to urban migration	World's urban population has been steadily increasing, registering 55.71% of total population (World Bank, 2020e).		x				x		
Social and cultural shifts	In 2019, the percentage of population involved in business start-ups was 12.9% for Portugal, 9.3% for United Kingdom and Russia, and 6.2% for Spain. (Statista, 2020a)			x			x		

Annex G – Technological factors analysis

Table 11.4 - Technological factors analysis (Author)

Technological factors		Impact				Uncertainty			
		--	-	+	++	--	-	+	++
Level of expenditure on R&D	According to World Bank (2020c), in 2019, 14.70% of world's firms spend on R&D. Also, it is known that in 2018, the gross domestic spending on R&D by the OECD countries is 2.379% of total GDP (OECD, 2020g).			x			x		
New markets	It is possible to consider that the fast expanding technology has been creating new markets in the last years.			x				x	
Production methods	According to OECD's report on entrepreneurship (OECD, 2017), micro-enterprises can enter into foreign markets because of the development of affordable digital tools, what previously was seemed impossible.				x			x	
Rate of adoption of new technology	In 2017, the mobile phone subscription in the world was at 104.49 per 100 people. In 2016, the share of the population using the Internet was at 45.79% in the whole world and 72.00% in Europe and Central Asia. The number of secure Internet servers per one million people, in 2017, was at 3,511 for the whole world, and at 30,282 for the United States. (Our World in Data, 2017)				x		x		

Annex H – Internet usage by language

Table 11.5 - Internet Usage by Language – 2020 Q1 (Source: Internet World Stats, 2020)

Top 10 languages in the internet	World population for this language	Internet users by language
English	1,531,179,460	1,186,451,052
Chinese	1,477,137,209	888,453,068
Spanish	516,655,099	363,684,593
Arabic	447,572,891	237,418,349
Portuguese	290,939,425	171,750,818
Indonesian / Malaysian	306,327,093	198,029,815
French	431,503,032	151,733,611
Japanese	126,476,461	118,626,672
Russian	145,934,462	116,353,942
German	98,654,451	92,525,427
Top 10 languages	**5,273,725,132**	**3,525,027,347**
Rest of the languages	**2,522,890,578**	**1,060,551,371**
World Total	**7,796,615,710**	**4,585,578,718**

Annex I – Sales quantities (user licenses)

Table 11.6 – Quantity projections (Author)

Sales (active users)	2022	2023	2024	2025	2026
Business Standard plan	700	1,750	3,500	5,250	7,000
Business Plus plan	250	625	1,250	1,875	2,500
Enterprise plan	50	125	250	375	500
Total	1,000	2,500	5,000	7,500	10,000

Annex J – Monthly operating costs

Table 11.7 – Monthly operating costs (Author)

Monthly operating costs	2022	2023	2024	2025	2026
Hosting services	200.00	500.00	750.00	1,000.00	2,000.00
Accounting services	200.00	200.00	200.00	200.00	200.00
Legal services	200.00	200.00	200.00	200.00	200.00
Communication services (includes Internet)	50.00	50.00	50.00	50.00	50.00
Rent	0.00	1,000.00	1,000.00	1,000.00	1,000.00
Electricity services	0.00	100.00	120.00	140.00	160.00
Water services	0.00	30.00	35.00	40.00	45.00
Gas services	0.00	0.00	0.00	0.00	0.00
Office supplies	0.00	100.00	150.00	200.00	250.00
Commissions (affiliate marketing)	6,912.00	17,280.00	34,560.00	51,840.00	69,120.00
Advertising	0.00	500.00	1,000.00	2,000.00	3,000.00
Insurance	0.00	100.00	100.00	100.00	100.00
Marketing softwares	250.00	1,000.00	2,000.00	2,000.00	2,000.00
Other services	0.00	0.00	0.00	0.00	0.00
Total Operating Costs	**7,812.00**	**21,060.00**	**40,165.00**	**58,770.00**	**78,125.00**

Annex K – Staff number

Table 11.8 – Annual staff number (Author)

Staff (number)	2022	2023	2024	2025	2026
Annual staff number					
Administration / Directors	1	5	8	12	12
Development / IT	3	4	5	5	5
Sales / Marketing	0	1	3	5	5
Customer Service	1	3	5	7	10
Operations	0	0	1	2	4
Product managers	0	3	4	4	4
Total staff number	**5**	**16**	**26**	**35**	**40**

Annex L – Monthly staff gross remuneration

Table 11.9 – Monthly staff expenses (Author)

Staff expenses	2022	2023	2024	2025	2026
Monthly remuneration basis (gross)					
Administration / Directors	500	1,500	2,500	3,500	4,500
Development / IT	1,200	1,400	1,600	1,800	2,000
Sales / Marketing	1,200	1,400	1,600	1,800	2,000
Customer Service	1,000	1,100	1,200	1,300	1,400
Operations	1,200	1,400	1,600	1,800	2,000
Product managers	1,200	1,400	1,600	1,800	2,000
Total monthly remuneration (gross)	**500**	**1,500**	**2,500**	**3,500**	**4,500**