

**BUSINESS PLAN FOR AN INNOVATIVE JOB SEARCH
PLATFORM**

Pedro Ferreira

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Supervisor:
Prof. Isabel Soromenho Sequeira, Assistant Professor, ISCTE Business School,
Departamento de Marketing, Operações e Gestão Geral

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Abstract

One of the major difficulties faced by young people nowadays is reaching their first job. This situation occurs not only in Portugal and but also in other European countries and it happens due to different reasons, without existing solutions that are easy to implement or that can decrease the severity of this issue in its entirety.

In the digital age where we are currently at, where technological devices are present in most of our daily habits, there are new approaches and tools that allow reaching different results when it comes to social issues, and youth unemployment is not an exception. Over the last few years, there have emerged new platforms and tactics that have helped young people achieving their employment goals. Nevertheless, this unemployment scenario is still a severe reality and new solutions should be explored.

The proposed project in this Business Plan is based on an idea that appeared by observing market trends both related to adopted practices by employers and respective talent acquisition teams and to technological trends such as the growth of the mobile games' segment and the use of gaming elements in other contexts (*gamification*).

In order to understand the possible way to achieve and implement this business idea, this project presents the analysis of the context that surrounds it and there are proposed strategies for this innovative platform to achieve the objectives of the key players in the employment's process: the unemployed individuals and employers.

Keywords: Business Plan; Unemployment; Mobile Games; Recruitment.

JEL Classification System: M130 New Firms; Startups; M310 Marketing.

Resumo

Uma das maiores dificuldades enfrentadas pelos jovens nos dias de hoje é a de alcançar o seu primeiro emprego. Esta situação ocorre não só em Portugal como noutros países Europeus e deve-se a diferentes motivos, não existindo soluções que sejam fáceis de implementar ou que consigam diminuir a gravidade do problema na sua totalidade.

Na era digital em que nos encontramos, em que os dispositivos tecnológicos estão presentes em grande parte dos nossos hábitos diários, surgem novas abordagens e ferramentas que permitem alcançar diferentes resultados no que toca a questões sociais, não sendo o desemprego jovem uma exceção. Têm surgido ao longo dos últimos anos novas plataformas e táticas que têm ajudado os jovens a alcançar os seus objetivos de empregabilidade. Ainda assim, este cenário de desemprego ainda é uma realidade severa e novas soluções devem ser exploradas.

O projeto proposto neste Plano de Negócios tem por base uma ideia que surgiu pela observação de tendências do mercado, quer relacionadas com práticas adotadas pelos empregadores e respetivas equipas de aquisição de talento, quer relacionadas com tendências tecnológicas como o crescimento do segmento dos jogos em dispositivos móveis e a utilização de elementos de jogos em outros contextos (*gamification*).

De forma a compreender a possível concretização e implementação desta ideia de negócio, este projeto apresenta a análise do contexto que a rodeia e são propostas estratégias para que esta plataforma inovadora consiga alcançar os objetivos dos principais intervenientes no processo de emprego: os desempregados e os empregadores.

Palavras-chave: Plano de Negócios; Desemprego; Jogos para Dispositivos Móveis; Recrutamento.

Sistema de Classificação JEL: M130 New Firms; Startups; M310 Marketing.

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1. Executive Summary

The proposed project is an innovative job search platform that explores a distinct approach to job portals: allowing job seekers to find job opportunities by playing a mobile game and increase those opportunities' awareness by sharing them among their peers.

This business opportunity is supported by many different reasons: (1) youth unemployment rates is a severe social issue and new solutions should be found in order to decrease it; (2) the current job platforms validate the existence of a valuable market but those players are not working towards avoiding some of the youth unemployment's causes, such as the lack of experience or motivation when seeking for a job; (3) some current hiring trends as taking advantage of social connections and online networks; and (4) new business concepts and tactics that are proven to be efficient ways to disrupt more traditional industries, such as implementing gamification in a business or project.

By analyzing all the previous insights, the business idea was achieved: using mobile games to create a more engaging and enthusiastic way for job seekers to find a new job and having features that allow talent acquisition managers (employers) to meet their recruitment and hiring objectives, offering them an exclusive and differentiated channel.

To understand how can this business idea be successfully achieved, the current project presents 2 main parts: the contextual analysis and the business planning itself. The first part consists on the analysis of the environment that surrounds this project, its industry and respective market and also the existing competition. The gathered insights were summarized in an internal and external analysis (through the SWOT framework), that helps understanding possible positive and negative outcomes for the project. The second part corresponds to the whole planning of the business implementation. This was based on the Business Model Canvas that highlight the business' key requirements and strategies to implement in order for the business to be successful.

Even though this project presents some risks, as the possibility of players not finding the game as exciting as it could be or the barriers for having employers adopting a new channel, the financial evaluation revealed a potential Net Present Value of 290.045,26 euros, which supports that investing in this project is economically viable and profitable over time. The investment may be recovered during 2019 if the project is initiated in January 2017, taking into account that this project was design based on the first 5 years of its activity (from 2017 to 2021).

2. Literature Review

2.1. Marketing and Entrepreneurship

According to the most recently approved definition by the American Marketing Association (AMA) Board of Directors, “*Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large*” (July 2013). Being this project about a platform’s creation towards one major social issue (unemployment), the previous definition tends to show this project’s validation regarding being developed within a Marketing context. We may also acknowledge that, according to Robert Hisrich, “*Marketing is one business function that must be used appropriately by the entrepreneur to launch and develop the new venture successfully*” (Hisrich, 1992), which similarly supports that Marketing can be relevant when it comes to a new project development. The same author defends that “*Marketing goes beyond sales to include all the controllable activities - product, price, distribution and promotion*” (Hisrich, 1992), which endorses that having a Marketing background is pertinent towards a new company’s overall management. This seems to be an encouraging factor for me towards the possibility to materialize this essay and develop a real start-up in the future.

In order to start working towards the platform’s creation, a solid plan should be built in first place. According to Robert Hisrich (1992), “*the entrepreneurial process framework proposes four stages: (1) identify idea; (2) develop business plan; (3) identify and fill any resource gaps; and (4) manage the enterprise*”. The first mentioned subject will be elucidated throughout this literature review and the second topic matches this business plan, that is, the current Master's Thesis. Both consecutive stages may be developed in the future if this plan emerges itself as a business reality, which can happen through the execution of the further discussed strategies and tactics. Nevertheless, the initially outlined business plan may only be a draft for the final developed product or service: “*Most often, what ultimately works is not the Plan A that was so persuasively articulated in the original plan. Instead, it’s the unexpected surprise that we call Plan B*” (Mullins and Komisar, 2010).

An additional matter that should be considered within this context is that ideas and opportunities are notoriously different concepts. There is a study which “*proves that potential entrepreneurs distinguish between ideas and opportunities and, importantly,*

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develop opportunities through the formulation of a detailed business plan” (Botha and Robertson, 2014), which happens to be the present scenario. Furthermore, some authors stated that *“opportunities represent unnoticed market positions that are sources of sustainable profit potential”* and that *“the availability of opportunities tends to correlate with rates of environmental change, indicating a need for marketers to engage in heightened levels of both active search and discovery”* (Morris, Minet Schindehutte and LaForge, 2002). Given the social issue inherent to this business idea, it seems relevant to engage in an active search and analysis towards the unemployment context.

2.2. Unemployment

According to Eurostat and the International Labour Organisation (ILO)'s definitions of employment and unemployment (1982), *“a person's labour force status falls into one of three categories: employed, unemployed or economically inactive”*. As a result, the unemployment rate corresponds to *“the number of those unemployed divided by the total number of people in the labour market (employed plus unemployed)”* (Eurostat, 2015).

Unemployment has been considered a major social issue due to the unemployment rate's continuous increase and its potential impact on the economy. The Portuguese unemployment rate was floating between 3% and 9% in the past decades while this rate has been fluctuating between 10% and 18% in the past 5 years¹.

These statistics may explain why all the concern about this social factor and there are also evidences supporting that it will continue increasing in the future, not only in the Portuguese context but at a global scale. Some authors have stated that *“although business activity increases, unemployment also rises, and this trend is expected to continue in the coming years, and predicts that by 2018, 215 million people around the world will be without a job”* (Vukovic, Đokovic and Roncevic, 2015). This situation may not only be due to its origins but also due to the absence of a broad and easy to implement resolution, given all the peculiarities and characteristics of people in the labour market. It has been mentioned that *“it is a well-established fact that there is no “one size fits all” policy or “silver bullet” to quickly reintegrate the unemployed into the labour market* (Constant, Kahanec, Rinne and Zimmermann, 2011). For that reason, an effective approach could be executing different strategies which could reach the largest groups of people most affected by this phenomenon. One example may be the younger generations,

¹ Consult the annex 12.9.1. Portugal's Unemployment Rate.

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as some authors defend that it is “*essential that policies for young people regarding schooling and integration into the labour market should be implemented within a coherent framework of sustainable economic, institutional and social development*” (Perugini and Signorelli, 2010). In order to understand how pertinent may the youth unemployment be in this context, a more in-depth analysis is presented below.

2.3. Youth Unemployment

Similarly, according to Eurostat and the International Labour Organisation (ILO)'s, “*the main indicator of youth unemployment is the youth unemployment rate for the age group 15-24*” (Eurostat, 2015), which resorts to the same definitions as the unemployment rate for the population of working age.

This specific age group seems to be severely affected by this issue and its consequences may also have an impact on other generations. This subject has been under study by many different perspectives and it has been observed that “*youth unemployment is a growing problem with long-term consequences for individuals, communities, economy and society. In the last decade the transition of young people from school to work has become longer, more complex and more turbulent. Young people are faced with problems of high unemployment, increased inactivity and job insecurity*” (Vukovic, Đokovic and Roncevic, 2015).

The existing statistical data not only confirms its growth on the mentioned age group (comparing the most recent years' rates with the previous decades) but also shows how severe it is when compared with the overall unemployment rate (considering all the suitable age groups). By analysing the Portuguese scenario, we can see the youth unemployment rate floating between 27% and 41% during the past 5 years, while the overall unemployment rate never exceeded 18% during the same period². This generation not only seems to be facing a less appealing scenario but also tends to have a tougher challenge when trying to escape from it, that is, when trying to reach employment. Their job searching process has proven to be more demanding as “*they are three times less likely to find employment than adults*” (Vukovic, Đokovic and Roncevic, 2015).

In order to better understand the reasons about why it is such a challenge for young people to get employed, it is necessary to analyse the youth unemployment rate's main causes. In January 2013, it was released a study about the youth unemployment in Europe and

² Consult the annex 12.9.2. Portugal's Youth Unemployment Rate.

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the World where it was stated that *“there are a number of causes of youth unemployment on many of which there is a fair amount of consensus. The most significant is poor macroeconomic performance. Lack of growth affects everyone in the economy and some groups are particularly hard-hit. In fact, youth are more affected because youth unemployment tends to be super-cyclical”* (Görlich, Stepanok and Al-Hussami, 2013). The same authors additionally observed that *“the factors contributing to this higher cyclical volatility are several: young workers usually have lower job protection. In addition, they are most likely to have gained less job-specific experience; the companies have invested less in training them and therefore lose less when laying them off relative to an adult experienced worker”* (Görlich, Stepanok and Al-Hussami, 2013). It is possible to acknowledge that employers also play a decisive role in this situation and, for that reason, further research about them will be conducted on the present analysis. However, the previous authors also revealed additional difficulties faced by the unemployed youth, which will be analysed below.

2.3.1. Lack of Experience

It is mentioned on the same article that *“youth also face higher barriers to entry into the labour market due to their lack of experience”* (Görlich, Stepanok and Al-Hussami, 2013). By not having accomplished any professional experience before they really enter the labour market, this unemployed youth may be missing the knowledge and know-how that can be acquired throughout those activities. This might result in a worst job performance and harder integration with the employer practices, habits and goals when compared with the ones who had fulfilled at least one professional experience (who, for that reason, can be recognized by the employers as more valuable or more talented future employees).

Lacking the necessary experience for their employment objectives may also have a negative impact in further perspectives. Missing an appropriate set of skills (which can be obtained through professional activities) not only may reveal itself as a barrier in the job searching process but it can also result in less effort invested on that process. It was found that *“individuals that are more highly skilled and still fairly young, have a higher job search intensity”* (Bachmann and Baumgarten, 2013), which may lead these individuals into engaging with job opportunities sooner than the rest. Nevertheless, having the needed skills for the job search process was not proved to be mandatory in order to reach the desired opportunities, as some studies suggest that *“many graduates*

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find employment based more on perseverance, developing the needed job search skills as they go, rather than having good career management skills in place before they enter the job market” (McKeown and Lindorff, 2011).

2.3.2. Skills Mismatch

Even if young people end up developing the needed job search skills throughout the process, their whole set of soft and hard skills may be relevant to what employers are looking for with their recruitment objectives. The same study cited before found that *“the mismatch between the demand and supply of skills possessed by young workers has been mentioned to contribute to higher youth unemployment rates” (Coenjaerts et al. 2009).* This divergence refers to the fact that *“certain number of reported needs for employment remains unfilled, because there are no persons with appropriate knowledge and skills, while on the other hand there are a large number of people with qualifications for which there is no need in the labour market” (Vukovic, Đokovic and Roncevic, 2015).* This situation seems to be a decisive factor when it comes to young unemployment in many different regions, as some authors support that *“besides the MENA region, skill mismatch also characterizes the youth labour markets in Latin America, Central and Eastern Europe, and in parts of Asia” (Görlich, Stepanok and Al-Hussami, 2013).* For that reason, the governmental entities of those geographical areas could embrace more skills’ development programs in order to diminish this gap. Some support that *“structural unemployment strategies that focus on job and skill creation programs (private, local, state, federal), as well as job creation through entrepreneurship initiatives, can help by providing retraining: developing new skills and knowledge for displaced workers that are in alignment with employers’ labour needs” (Shipps and Howard, 2013).*

It was also observed that this lack of match between acquired and needed skills not only affects the job searching process (which results in higher young unemployment rates) but it may also affect the employee’s satisfaction when he is already performing his achieved job. As some authors found, *“skill mismatches appear to reduce severely workers’ overall job satisfaction, satisfaction with the type of job and satisfaction with pay, which implies that skill mismatches are undesirable situations from the workers’ viewpoint since they reduce workers’ evaluation of total rewards” (Badillo-Amador and Vila, 2013).* In order to reach a social context where unemployment is not so severe and the employees’ satisfaction levels are not so negatively affected by this situation, more actions and solutions towards a better skills’ match should be investigated.

2.3.3. Awareness About Opportunities

Both previous topics can also be enhanced by a third cause: young people may not always be aware of the existence of many job opportunities that could match their experience (entry-level) and their skills' set, even though those opportunities do exist. This may happen not only from the candidates' perspective, who may be searching opportunities through channels which are not the most appropriated for their profile and seniority, but also due to employers that poorly promote and communicate those opportunities or that do it through the wrong informational channels.

The governmental entities should at least ensure that there are appropriate channels for unemployed people to find the majority of existing opportunities and that those channels are working and being promoted correctly. It seems that *“in several countries that have been particularly hard-hit by the global economic and financial crisis – among them Spain, Italy, Greece, and Ireland – search via informal channels clearly outweighs the use of the public employment services as a job search method”* (Bachmann and Baumgarten, 2013). This situation could mean two different opportunities: for the private sector, which can develop new informal channels through the creation of good job searching platforms (as the one I am proposing on the current project), and also for the public sector, which could analyse those informal channels and understand their advantages in order to optimize and enhance public employment services. Those organizations also have the duty of guaranteeing the existence of fair and unbiased services and opportunities, since some people can face more difficulties during the job searching process. As some authors stated, *“efforts should be made such that search becomes less costly and more worthwhile for women, particularly if they have many family responsibilities”* (Bachmann and Baumgarten, 2013). With the development of new tools and platforms that facilitate the access to information, education, training and career opportunities, the ones who struggle the most to get employed could find new and easier ways of reaching it.

2.3.4. Motivation

Not only finding a chance to initiate a professional activity may be hard, as observed before, but also facing failure multiple times can decrease one's motivation and lead to an even more negative situation. It seems to be a fact that *“repeated failure to find employment may generate lower expectations, which in turn reduce motivation and hinder actual efforts to search for work”* (Kulik, 2000). The unemployed ones may also

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become more unmotivated as time goes by (without finding an opportunity) since there is “*evidence of declining reemployment probabilities for all unemployed individuals as the unemployment duration increases*” (Sciulli, Menezes and Vieira, 2012). Confronting this unenthusiastic scenario, some young unemployed people start decreasing their determination and end up quitting their job search process, which leads to long term unemployment cases.

One possible approach for avoiding this scenario can be the creation of a solution which motivates youth to engage on the job searching process and keep working towards their objectives with enthusiasm. The element of entertainment can be seen by them as a stimulating factor, which not only does not let them give up of the process but also may even inspire them to dedicate more time to it.

If we think about different forms of entertainment and also youth, it seems evident that there is something which is common to both sides: games. Young people like to play games and can easily engage in gaming activities in order to enjoy some amusing and exciting moments. What if the motivational issue of the job searching process is not a threat but an opportunity instead? Through the balance between gaming and job searching, there seems to be an unexplored area of job search methods which can be differentiating. Under these circumstances, it seems reasonable to analyse the gamification process in more detail, which will be done further in this literature review.

2.3.5. Solutions

As stated earlier, there is no one-size fits all solution in order to diminish unemployment rates due to many different factors and reasons. Nevertheless, the analysis performed so far presented some valuable insights about possible ways of reducing this social issue effect. If we consider the previous topics (lack of experience, skills mismatch, awareness about opportunities and motivation), one conceivable idea in order to help young people finding and achieving a job opportunity could an online platform (such as a website or a mobile application) which could gather a high volume of opportunities (ensuring positive awareness about the vast majority of existing opportunities), appropriate to different levels of expertise and skills sets (ensuring that even those with less professional experience or with unfavourable skills could also find their suitable opportunity) and with some engaging and enjoyable elements and features (in order to stimulate more motivation towards the goal of succeeding in the job search process).

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Analysing the currently available platforms that are somehow similar to the previous description, we can find some very successful websites which are now gathering millions of unique visitors every month such as Indeed, Monster and GlassDoor. The success they have been achieving during the past few years validates the existence of a valuable opportunity when it comes to developing solutions that help matching job candidates with their ideal job opportunity. However, are those websites completely solving the main problematic under analysis, this is, are they entirely ending with youth unemployment all over the world? The preceding statistics already provided the answer: no, since the young unemployment rates have still been increasing in the past few years. If this scenario still exists (and keeps getting more evident), then we may conclude that there still is enough market within this business area for the creation of new and different solutions, as the one that will be designed throughout this project.

During this literature review, it will not be conducted an analysis about the possible reasons for those already existing projects being far from accomplishing a reduction on youth unemployment. Instead, in order to find clues and insights about possible features that could lead to a successful platform towards that vision, a crucial analysis yet needs to be made and detailed: the employers' perspective about job searching, recruitment and their hiring actions and strategies.

2.4. Employers

Being the main problematic currently under analysis the fact that youth is increasingly facing unemployment instead of becoming employed, it is also important to study the process of getting employed by the employers' perspective.

We may easily acknowledge that the company's objectives, as employers, is to hire new workers and to be successful with their recruitment activities. But what is, in fact, their true challenge? What are employers really looking for? How do they effectively measure which efforts are or not successful? With so many existing organizations and different approaches in the market, it may be hard to find a consensual answer, but some researchers have gathered some interesting findings. After surveyed more than 3.800 talent acquisition decision makers, a team of investigators from LinkedIn described in their Global Recruiting Trends 2016 report that "*quality of hire*" is seen as the most valuable performance indicator when it comes to recruitment.

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The same article also revealed other curious findings: when those decision makers were asked about which were the most important sources of their last year's quality hires, the main answers were "*social professional networks*" (such as LinkedIn itself), "*internet job boards*" (such as Indeed, which was also previously mentioned) and "*employee referral programs*". Not only those appear to be relevant in the current scenario as also some of them may continue playing a major role in the recruitment panorama for the future: when the same decision makers were questioned about which do they "*consider to be the three most essential and long-lasting trends in recruiting for professional roles*", the topics with the bigger volume of answers were in fact "*utilizing social and professional networks*", "*employer branding*", "*finding better ways to source passive candidates*" and "*employee referral programs*". Even though internet job boards were not so frequently chosen on the previous question, they may have a direct advantage from the fact of existing on that specific channel. According to some authors, "*the internet reduces the scope and consequences of asymmetric information problem by improving quality and depth of information each side acquires about the other prior to finalizing selection and signing a contract*" (Suvankulov, Lau And Chi, 2012).

The strategies and tactics related to sourcing passive candidates may not be so relevant to analyse within this context since this project's main focus is to contribute to active candidate's success in their job searching process, instead of the passive ones (since their status mean that they are not currently unemployed). However, it is interesting to see that social professional networks and employee referral programs are both seen as crucial factors not only during the previous year but also for the future, which support a further deeper understanding of their impact in hiring activities.

2.4.1. Social and Professional Networks

Our social and professional networks are constituted of the people we get to know in different contexts (either a personal perspective, such as our close friends, or a professional perspective, such as work team mates). Our connections can help getting us to know more job opportunities and easier ways of reaching those employers' needs, being the simplest example the case when a friend who works in a company which is trying to hire a person for a specific job opportunity. As some authors observed, "*the larger and more robust the social network is, the faster they find a job, and the better the job is*" (Constant, Kahanec, Rinne and Zimmermann, 2011). If our friend presents us a specific opportunity before the company promotes it externally on their official

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communication channels, it is easier for us to get to know that opportunity earlier than other possible job candidates.

Social networks, however, have been suffering impactful transformations throughout the years, mostly due to the recent growth of online social networks (i.e. social media). If we see it through the employers' perspective, *“social media is overwhelmingly perceived as an important tool for businesses in general, and specifically for start-ups and social enterprises”* (E. and Vanithamani, 2013). Not only there are billions of active users on social media everyday as also, due to the previous reason, millions of companies having an active presence on social networks at a worldwide level. It was inevitable that the job search process started taking advantage of those communities in order to create a more flexible and cheaper way to connect both parts (candidates and employers), as mentioned by the same authors: *“social media is facilitating access to customized information about jobs and employment opportunities”* (E. and Vanithamani, 2013).

This usage of social media for recruitment purposes is spread among many different online social and professional networks, but there are 3 of them which are more commonly used, as also observed by the same authors:

- LinkedIn (usually referred as a professional network) – *“This is a professional business related social networking site where employers and employees can stay in touch and network with each other. It also acts as an online CV and is a way to recruit and search for a job”* (E. and Vanithamani, 2013);

- Facebook (usually referred as a social network) – *“Extremely popular social networking site that was used mainly by individuals, however it has become increasingly used by businesses and organisations as a useful marketing tool, for networking, customer service and recruitment”* (E. and Vanithamani, 2013);

- Twitter (usually referred as a social network) – *“An online social networking and microblogging service that enables its users to send and read text-based posts of up to 140 characters, known as “tweets”. Very popular in the business and marketing world and commonly used as a real time news feed, networking, marketing and customer service tool”* (E. and Vanithamani, 2013).

The organizations that desire to have a strong online presence and to be able to have effective hiring and recruitment processes through social media need now to investment more of their resources into this area, which is leading to an increase of companies

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investing in digital marketing teams and employer branding management. In first place, there are many marketing teams working closely with the talent acquisition decision makers in order to develop a valuable online strategy focused on recruitment, through the selection of the most appropriate channels and tactics. On a second hand, when it comes to the content itself, we see an increase of the investment on employer branding (as also observed in the previously mentioned survey), which goal is to develop the way as the company is perceived and how it acts as an employer. This can be crucial in order to achieve more quality hires and to facilitate the hiring efforts, as some authors specified *“branding, transparency and data specificity as three mechanisms recruiters use to strengthen these ties when performing the attracting and screening functions”* (Ollington, Gibb and Harcourt, 2013).

The previous findings tend to support that the business idea defended on this thesis project may have a competitive advantage when compared with a traditional job listing website: while those websites present a big number of opportunities which may not be organized according to our networks, this new platform could be based on the social connections and the opportunities shared between connections. The idea here would not be acting as referring people to certain opportunities (in the sense that they would consider those other peers as good candidates) but only taking advantage of our networks and the easiness in sharing opportunities that could possibly fit the profile of someone that we know. Nevertheless, employee referral programs seem to be an effective hiring tactic, as observed on the previous survey, which should also be analysed within this context.

2.4.2. Employee Referral Programs

Hiring through referrals by taking advantage of social connections seems to be one of the most successful hiring strategies and also a long-lasting future trend regarding having quality hires, according to LinkedIn's investigation. There are other authors that also found its benefits to employers: *“it has been suggested that referral hiring occurs for several reasons. First, referral hiring may result in more certainty in the quality of a new hire. Second, in some cases referral hiring may be cheaper than more formal hiring practices. Third, employees may gain a preview of the work environment from the person who refers them and thus may be a better match for the firm”* (Tassier, 2008). As seen before, the mismatch between job candidates and employers have been one of the main youth unemployment causes, so this recruitment strategy can also bring valuable results in order to achieve its decrease.

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Some decision makers even reveal that this is the most crucial hiring strategy for their companies. Steve Klingensmith, who is a Recruiting Manager at Booking.com, added his opinion to LinkedIn's study by stating that *"employee referrals are the single most important thing we do in recruiting. It is the number one source of good, quality hires"*. This same professional also mentioned an interesting fact: *"Unfortunately, most companies treat their referral program like an HR program. If you really want to succeed with referrals, you need to treat it like a marketing program"*. There is now more evidence supporting that marketing and people operations teams should work more closely and develop more initiatives and efforts together, as it was previously found in this literature review.

2.5. Business Concepts

The previous analysis, which detailed both the youth unemployed and the employers' perspectives, revealed important insights regarding both sides that play the main roles in the job searching and hiring process. Nevertheless, the current literature review may also be enhanced with more information about current and future business concepts, which allow to find successful strategies and tactics that can be implemented or developed throughout this business plan and, hereafter, in the project's implementation.

2.5.1. Gamification

During the previous analysis regarding motivational factors, it was mentioned the possibility for this project to have a balance between gaming elements with the job searching process. This could be possible through the creation of a game which would enable a match between job opportunities and candidates as challenges. Using gaming characteristics with this kind of approach is a known concept being used in the business areas named gamification – *"the use of game-related mechanisms to stimulate interest in a particular website"* (Woźniak, 2015). This concept is occasionally applied by companies in specific recruitment campaigns, such as programming or web development challenges for computer science graduates. In fact, there are many possible tactics to apply this concept, as the same author defends on his article about "gamification and its uses in recruitment": *"the alternative to using entertainment-type games to stimulate interest in a website is developing blogs for communication purposes, and organizing events (such as concerts) in the real world (though the one does not exclude the other)"* (Woźniak, 2015).

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Despite the fact that some organizations are already applying elements of this strategy, there is no known job opportunities' platform that use it to more effectively engage its users to the existing job listings. This fact may represent a gap in this market, in which the current proposed platform can succeed: through the combination of social networks with gamification by a system of job versus candidates matching (which is similar to referring a user to a job opportunity but doing it through a challenge or game), it can result in a unique and pioneer job searching platform. Woźniak also supported the possible advantages of a solution such as this: *“the obvious benefits of using higher level e-tools (such as users' referrals obtained through crowdsourcing) are: lower costs, quicker access to applications, and being able to reach a broader group of less typical candidates”* (Woźniak, 2015).

Other fact that may support that games are a good way of reaching people's attention is that games are frequently used by people during their spare time during the day, which can happen multiple times each day such as the time spent on public transports or waiting lines in stores or public services. There was actually a study called “I played games as there was nothing else to do”, where the motivations for people using mobile content sharing games were analysed. Its findings suggest that the *“motivations for seeking content include awareness, task performance, exploratory play, killing time, and socialising. Those for creating include altruism, task performance, competitive play, killing time, reminder of experiences, self-presentation, and socialising. Additionally, games served as a motivator for mobile content sharing systems, forming a mutually beneficial ecology with content sharing”* (Dion Hoe-Lian Goh, Chei And Low, 2012). This evidence support that there is the possibility of engaging job searchers through challenging games, which they can play not only for entertainment purposes but also, at the same time, help themselves and many others in the process of reaching a job opportunity by sharing the game content (in this case, sharing job opportunities among their connections).

2.5.2. Mobile Games

The possibility of creating a game may be materialized by many different forms, such as cardboard games, console games or mobile apps. In the last years, however, mobile games have been clearly increasing its presence and even reaching higher revenue volumes than other games platforms. There was a study by Deloitte, one of the world's most notorious consultancy company, analysing this topic where it is predicted that *“in 2016 mobile*

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devices (smartphone and tablet) will become the leading games platform by software revenue, generating \$35 billion in revenue up 20 percent from 2015. This compares to \$32 billion for PC games and \$28 billion for console games, up only five and six percent respectively from the previous year". This fact supports the existence of a good opportunity for developing new games in mobile platforms, as it may be undertaken in the current project.

There are other authors which have analysed the mobile opportunity, not only in terms of revenue. On an article about "why do people play mobile social games?", it is revealed that "*individual gratifications play the most important roles in why people join mobile social games*" and also that "*network externalities influence the willingness to join social mobile games indirectly via individual gratifications*" (Pei-Shan and Hsi-Peng, 2014). This social pressure may be one of the key factors that can make the game grow its user base and lead to higher engagement levels when compared with other gaming channels, due to the importance of the social networking elements in order to the job matching process be successful.

The increasing presence of mobile devices in under developing countries may also represent another opportunity for this project. It is a fact that the price of a smartphone is lower when compared to the price of a desktop or a laptop. For that reason, in the countries with under developed economies, the number of mobile phones is greatly increasing and it represents a great opportunity for the rise of mobile apps (particularly for a platform such this one that fosters successful employment and economic development). As an example, there is an article regarding "Mobile Phones and Economic Development in Africa" that supports that "*mobile phone usage in sub-Saharan Africa has grown significantly over the past decade and now covers 60 percent of the population. Empirical evidence shows that mobile phones have the potential to benefit consumer and producer welfare, and perhaps broader economic development*" (Aker and Mbiti, 2010).

Due to the cultural, economic and political characteristics of those countries, creating a start up with a total focus on those markets may turn out as a harder challenge when compared with more stable markets, such as the Portuguese scenario. Nevertheless, they reveal to be potential good markets to explore in a long term strategy, considering that this platform may need an expansion plan in order to be a sustainable long term business.

2.5.3. Online Business Models

It was previously mentioned that mobile games represent a big opportunity when it comes to revenue. For this opportunity to become a reality for this project, it is important to analyse which revenue models can be applied.

Ken Leaver developed a presentation explaining how to “Choose Your Startup’s Revenue Model” where it is suggested to start up founders to “*match your revenue streams to the specific value you add to each customer segment you’re targeting*” (Leaver, 2014). The customer segments for the current project will be further detailed, but the previous analysis supported the existence of two major segments: job candidates (unemployed youth) and employers. Having those into account, the possible revenue models according to Leaver are:

- *Selling Goods* – focused on selling physical goods (such an ecommerce platform) or digital goods (access to exclusive digital content);
- *Media / Community Access* – referring to building communities and getting revenue through charging for its access;
- *Subscriptions* – through selling different plans, according to the desired features or usage of the service;
- *Advertising* – by placing sponsored content on the platform and getting revenue from the advertisers;
- *Commission for Service* – having a service to be used by other companies and getting commissions according to the others’ transactions;
- *Marketplace* – a community built for buyers and sellers to exchange items;
- *Affiliates* – earning revenue through promoting products from other companies;
- *Freemium* – subscription plans where there is the initial possibility for the users to use the service for free, in order to test it before paying for it.

The previous findings support that there are possible ways to reach sustainable revenue streams for each customer segment without negatively impacting those customer’s access to the platform. As examples, job candidates could have free and total access to the platform, without ever being charged, contributing to possible revenue through advertising inside the game. The employers, on the other hand, could have access through

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a freemium model where they could have initial access to all the features but having to pay for a subscription plan when more usage is desired (for instance: wanting to promote a bigger number of job opportunities). Both segments will be further detailed in this plan, but this review presented valuable insights about possible approaches to be applied.

3. Business Idea

The project to be developed consists on a business plan for an innovative job search platform. As outlined in the diagram below, the literature review supports the existence of a business opportunity to explore and some specific elements and strategies to apply in order to make it unique and innovative when compared with the already existing platforms and solutions.

3.1. The Problem

Starting from the initially detected social issue, there is evidence showing that youth unemployment is a major issue when compared with other demographic groups' unemployment rates and, for that reason, more solutions should be developed in order to decrease it. When its causes were detailed, some insights were revealed: youth's lack of experience and their skill mismatch with the desired skills by employers could be addressed with solutions having appropriate job opportunities for many different levels of experience and sets of skills. The lack of awareness about existing job opportunities could also be decreased if the existing platforms could concentrate a bigger number of opportunities in the same channels, so that the information is centralized and easy to access. Given the motivational factors about the job searching process, new solutions or platforms should also engage its users in an enthusiastic way so that they increase their efforts into achieving a job offer, instead of quitting this process.

The current websites and platforms which have some of the previous characteristics and elements show that those can be successful and that there is an established market offering similar services (made by online platforms such as Indeed or Glassdoor), which supports that there is also a business opportunity for new players in that market.

3.2. Trends and Innovation

Regarding the employers' perspective, their focus seems to be obtaining new hires with good quality according to their standards. In order to achieve it, they are investing in many different strategies and channels, being the social and professional networks and the

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employee referral programs some of the most successful ones. These trends reveal that taking advantage of the users' social connections in order to share content and opportunities among them could be a valuable element to a job opportunities platform.

Given the previously mentioned motivational aspects, taking advantage of the gamification process and the growth of mobile games could also lead to a more engaging experience when compared with the existing solutions which do not use those elements in their way to present job opportunities to its users.

The existing and trending online business models also show that there are different possibilities about establishing revenue streams for online platforms and websites, which support this project's validation as a business opportunity to explore.

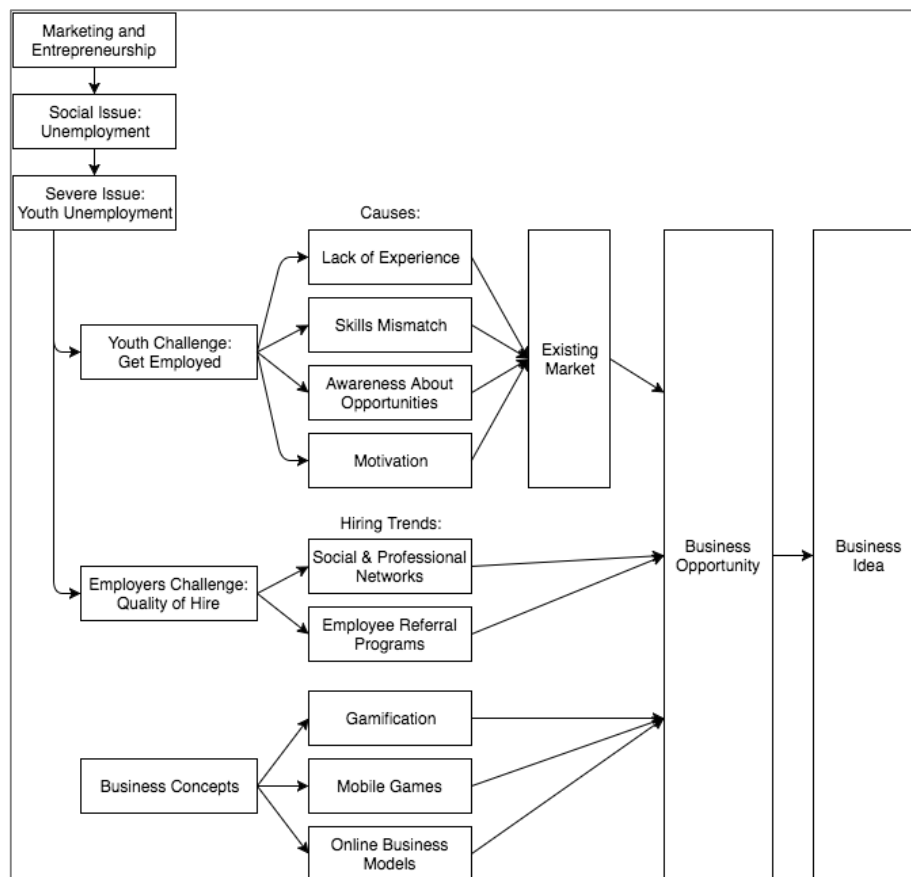


Figure 1 – Literature Review and main topics under analysis.
Source: Author (2016).

3.3. Idea

Given all the previous insights, the idea proposed in the current project is a mobile game for job opportunities' matching and sharing among user's social networks.

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Initially, a new user needs to login through one of his social media accounts so that the platform can obtain enough data about his connections and peers. After that, the challenge itself is having job opportunities being shown on the screen and the possibility for the user to assign himself or one of his connections to that specific opportunity. It may have a scoring system according to the users' earned points, where the user gets rewarded by creating a good match between the person he chooses and the respective job opportunity. Then that peer will receive a notification about the opportunity for where he was referred to, so that he can apply. This process is similar to referring someone to a job opportunity, but the difference to a standard referral process is that, in this project's case, the employer would not receive any notification or information about that specific potential candidate (only if that user later decided to apply).

One of the platform's main objectives is to obtain a great number of opportunities so that it can have appropriate offers to all the levels of experience and different skills set that young unemployed ones may have. There is a need of reaching employers from many different industries and with different hiring approaches, so that the platform can be diverse and with enough content to make it appealing to users in a long term perspective.

4. Methodology

The previous Literature Review supports the existence of a relevant business opportunity to explore and reveals insights that may be considered during the business planning.

In order for the proposed planning to take into account the current and future scenarios where the business will act, that scientific analysis should be complemented with the analysis of the current macro and micro environments. For that reason, a PESTEL analysis will be presented (which will reveal the actual political scenario, an economic overview, the current social situation, the relevant technological evolution, some impactful environmental factors and applicable legal elements) and the industry where this project will fit in will be explored.

Given the helpful and harmful issues (named as Opportunities and Threats) detected during these analyses and the possible positive and negative elements of the project (named as Strengths and Weaknesses), a SWOT analysis will be executed. This framework not only will summarize the previous topics as it will also lead to a dynamic comparison between those categories in order to detect possible strategies to apply and situations to avoid.

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Having those fundamental comprehensions, the business plan may be then outlined. The proposed project will be based on the methodology initially developed by Alexander Osterwalder (2008): The Business Model Canvas. This framework is used as a strategic management tool by many companies (both small and big enterprises) since it is a simplified and very intuitive template for business modelling. It consists in 9 major categories which gather all the main business elements and activities: (1) Customer Segments; (2) Value Propositions; (3) Customer Relationships; (4) Channels; (5) Key Activities; (6) Key Resources; (7) Key Partners; (8) Revenue Streams; and (9) Cost Structure. This model reveals itself as easier to analyse and to be understood by all the relevant stakeholders since it takes advantage of design thinking – it simplifies the whole business data and forms it through on a visual framework that integrates all the elements and highlights their outcomes. It also reveals itself as an easier model to edit, adapt or transform, which is fundamental for a technological project such as this that will need to adapt its strategy throughout its activity and depending on the users' feedback. As mentioned before, this plan will consist on the initial draft of the business plan and a real materialized start-up will need to constantly adjust its tactics according to its performance.

In order to forecast the possible financial outcomes from this project, a financial evaluation will also be presented. This will allow for potential investors and the business' management to analyse the appropriate financial indicators and to make supported short and long term decisions.

5. PESTEL Analysis

5.1. Political Analysis

In order to analyse the current governmental environment in Portugal and its possible impact with the proposed project, some major political topics will be further detailed.

5.1.1. Overall Situation

The current government, after the general elections on 24th November 2015, is being headed by the Socialist Party (being its leader the current Prime Minister) and supported by the Communist Party (PCP) and the Left Bloc (Bloco de Esquerda). While it may be seen as a left-wing coalition, those parties' different perspectives on political matters have originated episodes of discord and political insecurity during this year, but the current and future scenarios are not considered as political instability.

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Nevertheless, its financial situation is not in a very positive stage. Even though this government have been trying to implement some popular measures, it has little power to realize large reforms since it is under close scrutiny by the European entities (such as the European Commission) so it can fulfil the economic and fiscal targets set by those entities. Recent forecasts predict both positive and negative outcomes for these government's strategies so far, but it keeps showing a major concern with stimulating the economy and investment through helping the Portuguese businesses growing (with measures such as lowering corporate taxes).

5.1.2. Unemployment

As it was verified in the literature review, the Portuguese unemployment rate has been fluctuating between 10% and 18% during the past 5 years, which are much higher rates when compared with the previous decades.

The current government seems to be concerned with this issue and it has been revealing some measures for counteracting these values. One of the main programs revealed so far is called *Programa Qualifica*, which aims to qualify the Portuguese adult population with less educational experience. The program will result in the creation of more training centres and will aim to ensure better qualifications, which may lead to better job opportunities and salaries. Being this program entitled to people starting with 18 years old, the unemployed youth can also participate and increase their educational background, which may help them during their job searching process.

5.1.3. Start-ups

One of this government's main priorities is to support the start-up environment and it has a clear strategy on how to do it. A new programme called *Startup Portugal* was created and it will focus on three main areas of operation: ecosystem, funding and internalisation. According to this programme's official website, it "*aims to support those who are already entrepreneurs, ensuring the longevity of the companies created and increasing the impact they have on job creation and economic value*" (Startup Portugal, 2016). It is made of many different measures such as events, initiatives and incentives. One of them is named *Startup Voucher*, which is meant for university students (both with their graduation finished or almost graduating) so that they can develop their own projects while being financially supported. This seems to be a good incentive for those who are facing youth

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unemployment after they finish their studies, giving them a chance to start working and increasing their professional experience while developing their entrepreneurial skills.

When it comes to internalisation, other relevant topic of this programme is about supporting the Web Summit, one of the largest technological and entrepreneurial conferences in the world. While it happened in Dublin during the last 5 years, it will take place in Lisbon for 2016, 2017 and 2018. This programme will support this event and also other possible initiatives related to it, so that Lisbon's edition can be as successful as possible. Web Summit was also supported by the previous government, in 2015, which presented Lisbon during last year's event as a great choice for future editions, highlighting some of its main characteristics such as the good weather, good gastronomy, good technological conditions and needed infrastructures in the city for this event's dimension.

5.2. Economic Analysis

It is important to analyse some of the main economic indicators in order to clarify the current scenario and to understand the possible future of the Portuguese economy.

5.2.1 Economic Overview

Being the yearly Gross Domestic Product (GDP) a measure of the market value of all goods and services produced during that time period, it is a major economic indicator of the country's situation.

In 2008, Portugal's GDP reached its highest value ever since there are records (according to the World Bank Group), which was worth around 262.01 billion US dollars³. In the following year, 2009, the country's economy was hardly impacted by the economic and financial crisis and that led to a major decreasing tendency until the current year. In 2015, the GDP was worth around 198.93 billion US dollars in 2015, which represents 0.32 percent of the world economy (according to the same source). These statistics seem to support that the economy is still feeling the crisis impact and also the pressure applied by the international entities regarding financial and fiscal targets, which led to the Portuguese authorities to implement austerity measures and negatively impacting the country's economic outputs.

Nevertheless, some forecasts predict a more positive future for the following years. The previously mentioned sources defend that GDP can reach up to 208 billion US dollars in

³ Consult the annex 12.2.1. Portugal's Gross Domestic Product (GDP).

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the third quarter of 2017 and up to 242 billion US dollars in 2020. This positive evolution may become a possibility if the Portuguese companies and families positively react to all the austerity implemented so far and are able to recover their positive confidence about the country's situation and increase their productivity and happiness indicators.

Regarding the wealth that each inhabitant of the country generates, it is also relevant to analyse Portugal's GDP per capita evolution for the same time period. The attached graph⁴ represents a similar behaviour of this indicator, which shows the Portuguese people's wealth and life quality was greatly impacted by the economic crisis. While this indicator reached a value of 22,831.21 US dollars in 2008, the value recorded in 2015 was around 21,961.39 US dollars in 2015, also according to the same source's data.

In the future, this indicator seems to be also positively increasing, as some forecasts (from the same sources) report that it can reach up to 23,337 US dollars per capita in 2020.

Other relevant economic indicator to analyse is the country's balance of trade, which represents the balance between imports and exports recorded in a given period of time.

According to Statistics Portugal's most recent reports⁵, this balance's deficit in July 2016 was an approximately value of 557 million euros. This was due to 5044 million euros in imports such as "*machinery and transport equipment, chemicals, petroleum, textiles and agricultural products*" (Trading Economics, 2016) and to 4487 million euros in exports such as "*clothing and footwear, machinery, chemicals, cork and paper products, hides, tungsten and wine*" (Trading Economics, 2016).

The previous analysis shows that the Portuguese economy has a large dependence on other economies' inputs, particularly within the European Union, and this dependence is likely to increase. According to recent forecasts by the same source, the balance deficit can reach a value of 782 million euros in the last four months of the year and of 783 million euros in 2020.

5.2.2. Labour

Regarding labour, the main indicators to be further analysed are wages and labour costs.

⁴ Consult the annex 12.2.2. Portugal's GDP per Capita.

⁵ Consult the annex 12.2.3. Portugal's Balance of Trade.

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According to Gabinete de Estratégia e Planeamento, the Portuguese average monthly wage had been fluctuating between around 1110 and 1140 euros per month⁶, reaching a peak of 1142.59 euros per month in October 2011. Even though this value had some oscillations, its range appears to be small enough to be seen as a quite stable value.

If it is compared with the Euro Area average monthly wage, there is evidence showing that Portuguese labour force receives small salaries in general. According to Eurostat, the Euro Area average had been floating between around 1620 (in 2011) and 1680 euros per month (in 2014), which represents a difference of approximately 500 euros when compared with the Portuguese averages.

This dissimilarity to other European countries is due to many factors, being one of the main ones the minimum monthly wage. From 2011 to 2014, the Portuguese minimum monthly wage was static on 565.83 euros per month. However, in 2016 this amount is now reaching 618.33 euros per month and the governmental parties have been publicly discussing possible gradual increases for the next years.

The main indicator in order to evaluate labour costs is the labour costs index and it is based on labour expenses and number of hours worked, which measures the cost pressure resulting from the labour factor.

The labour costs in Portugal have been ranging from around 92 points to 107 points between 2011 and 2016, being those values below the 100 points mark for the last 2 years⁷. Even though the index values for the Euro Area seem quite similar, they have been higher than the Portuguese ones for the most recent years. This may support the existence of a good opportunity for international companies to invest in Portugal and to settle their infrastructures in the country as the labour force not only presents lower costs when compared with other European countries as it also has a good educational background, as it will be further detailed.

5.3. Social Analysis

In order to analyse the social environment currently lived in the country and its impact in the population's lifestyle, some social and demographic indicators need to be explored.

⁶ Consult the annex 12.2.4. Portugal's Average Nominal Monthly Wage.

⁷ Consult the annex 12.2.5. Portugal and Euro Area Labour Costs.

5.3.1. Unemployment Overview

As previously mentioned, the Portuguese unemployment rate has been ranging between 10% and 18% during the past 5 years, being 10.8% the most recent recorded rate (second quarter of 2016) by the Statistics Portugal. According to the same source, the number of unemployed persons (individuals who do not have a job and who are actively seeking to work) was approximately 550,900 people in August 2016. This number had reach a maximum record of approximately 927,700 people in January 2013, which was mainly due to the economic crisis and the impact of the austerity measures in the Portuguese companies' organizational structures.

While the second quarter of 2016 registered a 10.8% unemployment rate, the previous quarter had a 12.4% rate and this change may be due to many decreasing factors. According to the same source, it *“came mostly from (...) people aged 35 to 44 (-18.8%) and aged 25 to 34 (-15.8%); having completed, at most, the first or second stages of basic education (-11.5%); looking for a new job (-12.7%), having been formerly in the services sector (-10.5%); and seeking a job for less than 12 months (-23.1%)”* (Statistics Portugal, 2016). Some of these topics will be further detailed and analysed.

5.3.2. Unemployment by Age Groups

According to the found data showing how unemployment is distributed among the different age groups⁸, it is clear that the age group where there are more unemployed individuals is from 25 to 54 years old, corresponding to an amount of 426.6 thousand individuals out of the 646.5 thousand in total, in 2015. Nevertheless, young people from 18 to 25 years also represent a significant amount of unemployed individuals, reaching a number of 118.1 thousand individuals in 2015. Even though this is not the main age group being affected by this social issue, it was already evidenced during the literature's review how severe this issue may be for country's youth, future generations and also the economy. These individuals also face different challenges when trying entering the labour market, as previously explored, since the majority is looking for its first job.

⁸ Consult the annex 12.2.6. Unemployment in Portugal (total and by age group).

5.3.3. Unemployment by Type

Similar to the previous insights, unemployment shows higher values when it refers to individuals who already started working and, for that reason, are looking for a new job, being this amount of up to 566.2 thousand individuals out of 646.5 thousand in total, in 2015⁹. However, 80.3 thousand individuals were, in the same year, unemployed and looking for their first job, which once more supports the necessity for new solutions and ways to more easily and successfully integrate this people into the labour market.

5.3.4. Unemployment by Education Levels

One of the main topics frequently under discussion regarding decreasing youth unemployment rates is about improving the educational system and invest more in these individuals' personal development and qualifications. It is then relevant to understand how unemployment is dispersed among different educational levels.

From the attached graph¹⁰, it can easily be concluded that the highest percentage of unemployed individuals are those who have only concluded the compulsory schooling. Even though its value has been decreasing since 2013, it still represented a significant amount of 334.4 thousand individuals out of 646.5 thousand in total, in 2015.

On one hand, this data seems to reveal that higher investments should be made in order to guarantee higher educational levels for the younger generations so that they can be better prepared for the job market. On the other hand, the data also reveals that the disparity between those who have only completed compulsory schooling and the following higher educational levels is getting smaller, as more individuals with more senior educational experience have been facing unemployment in the most recent years.

In 2006, for instance, there were 47 thousand unemployed individuals who have completed higher education (being this the uppermost category possible to reach), while in 2015 there were 115.4 thousand unemployed individuals with that same level of schooling. This situation is one of the main causes of a phenome named as brain drain, which refers to the country's young people with high qualifications who are leaving the country in order to find job opportunities and better living conditions in more developed

⁹ Consult the annex 12.2.7. Unemployment in Portugal (total and by type).

¹⁰ Consult the annex 12.2.8. Unemployment in Portugal (total and by education levels).

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countries. According to Vieira da Silva, Portuguese Minister of Labour, *“high levels of unemployment combined with instability in the labour market and the deterioration of the advantages associated with the extension of education have pushed thousands of young skilled workers to the search for better opportunities outside of Portugal”* (Vieira da Silva, 2016).

5.3.5. Ageing Overview

According to the found data¹¹, the 3 major age groups have been suffering some significant changes during the past decades. While the number of individuals from 15 to 64+ years old and with more than 65 years old have been increasing since 1970 until 2011 (date of the latest population census), the young group with people until 14 years old has been decreasing. In fact, in 1970 there were more than the double young individuals compared to the senior age group while in 2011 there were more senior individuals than young people, which shows that the country's demographics is has been increasingly aging and the existing structures have to adapt to this reality and provide the necessary services for this age group. Nevertheless, the young people still represent a meaningful portion of the resident population, which supports the investment in their development, education and good living conditions for their future.

Regarding these age groups and the labour market, it is also important to note that retirement age in Portugal is 66 years old (both for men and women), which means that the vast majority of active population belongs to the age group from 15 to 64 years old. Even though this is the larger age group, the increase of senior people may lead to a long term scenario where there is a lack of enough active people to support the elderly population.

5.4. Technological Analysis

The technological evolution over the past few decades have led to different consumer behaviours, to new available tools and platforms and for new strategies for companies to growth their businesses. In this analysis, some of the main technological topics related to the context of the proposed project will be explored.

¹¹ Consult the annex 12.2.9. Portuguese Population (total and by age groups).

5.4.1. Internet Usage

With the increase of the number of technological devices available to the population over the past decade, the online world wide web has greatly increased its presence in people's life. Google, one of the main technological companies at a global level, has developed a tool name Consumer Barometer which presents internet related statistics based on a survey called *The Connected Consumer Survey 2016*. According to the data shown on that tool, 71% of the Portuguese population did access to the internet in 2016. When the Portuguese youth (under 25 years old) was asked how often do they go online for personal internet usage, approximately 98% answered daily and only about 2% answered weekly. In fact, the number of respondents for monthly and for less than monthly was so small that the percentage is not even considered.

In order to understand their relationship with the internet and how digitally savvy are, the same kind of respondents (Portuguese population with less than 25 years old) were asked to show their agreement level with some statements. The main results found were that 84% of people agreed with *"when I need information, the first place I look is the internet"*, 71% agreed with *"Using the internet is fun to me"* and 64% agreed with *"If I have the opportunity to do a task digitally, I prefer doing it that way"*. Those findings seem to support the idea that an online solution towards decreasing youth unemployment can be an attractive way of reaching this population and help them towards their objectives.

5.4.2. Mobile Devices

Given their features and possibilities about many different daily tasks, mobile devices also greatly increased their presence in people's daily routines. It is now one of the main devices used to access to internet and in a near future it may easily became the main device used by the population to access the online world.

In the same consumer survey previously mentioned, youth Portuguese people were asked which devices do they currently use and the mobile dominance can be clearly observed. Of the total respondents, 97% of them use a smartphone, 97% use a television, 91% use a computer, 44% use a tablet and the following devices (such as MP3 players) had lower percentages. The lower costs of buying a smartphone when compared with other devices (such as computers), its easiness in usage and all the possible applications and features helped mobile devices grow their volume significantly throughout the globe.

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In order to better understand which were, in fact, the Portuguese youth's main drivers to use a smartphone, the Consumer Barometer Survey 2014/15 edition also included the question about *"For what daily life activities do people use their smartphone"*. There were many different answers, being the ones with higher response percentage the following: 77% answered "Tell time"; 76% answered "Set alarm clock"; 63% said "Take photos/videos"; 57% said "Listen to music"; and 49% answered "Play games".

5.4.3. Mobile Games

As just previously mentioned, playing games is one of the main activities performed by Portuguese youth with their smartphones. Given the context of the proposed project, it is important to detail this topic. According to the Statistics Portal (statista.com), *"Mobile Games are defined as gaming-applications for smart devices such as smartphones and tablets. Leading app stores like Google Play and Apple App Store offer paid app-downloads (single purchases) and freemium-games that are free to download, but normally allow in-app-purchases for various additional contents or access time. Physical games for mobile consoles/handhelds and free-to-play gaming-apps are not included."*

The same source also present relevant data and statistics about the mobile games market specifically about Portugal¹². It can be observed that Portugal's revenue in the Mobile Games segment not only amounts up to 27 million US dollars in 2016 as also it is forecasted to continue increasing up to 37 million US dollars in 2021, which evidences a possible significant growth for this market.

Regarding this market's user base, the same source also presents data and forecasts regarding users by age groups¹³. In an initial analysis, it is possible to see that the number of mobile games' users is growing, reaching up to 1.7 million users in 2016 and having a predicted user base of 2.2 million users in 2021, only in Portugal. It can also be seen on the attached graph that the age group composed by the users ranging from 16 to 24 years (which is very close to the age range considered as the youth unemployed people) are the second age group with a bigger user base, and it will keep growing in future years. This fact also supports that mobile games may be a viable solution in order to attract this age group to use the proposed platform.

¹² Consult the annex 12.2.10. Portugal's revenue in the "Mobile Games" segment.

¹³ Consult the annex 12.2.11. Portuguese users in the "Mobile Games" segment (by age groups).

5.4.4. Technology in Recruitment

With the evolution of technological devices and the digital world, new platforms and services became available for recruitment departments and human resources team to use in order to implement their hiring strategies and tactics and to achieve their goals.

In the current project's literature review, the social and professional online networks and the internet job boards were already listed as some of the channels being currently used by talent related decision makers.

Regarding other digital channels, the companies' institutional websites are also a very important channel where not only the employer brand and the employer value proposition can be exposed and promoted, as also there is room for those organizations to make the best out of analytic tools to better understand their job candidates' behaviours and develop their online tactics based on their target profiles. There are also some companies which align those tools with other systems, such as by using applicant tracking systems, where there is an integrated approach to managing job opportunities and job candidates, allowing to digitally and easily organize the hiring processes' information and keep track of its performance and outcomes. Having this approach can be more efficient since it simplifies the whole analysis of information and helps reducing the amount of wasted paper (such as in printed Curriculums). In fact, the majority of the application processes are now performed online, so most of the information is sent to employers via online.

5.5. Environmental Analysis

Every organization should also take into account possible environmental factors that maybe intervene in their industry and impact their context in general.

5.5.1. Weather and Seasonality

The weather in Portugal is characterized by having a hot and sunny summer, being one of the most desired travel destinies in Europe for summer holidays. Due to this fact, touristic activity is one of the main contributors to the country's economy and wealth.

Tourism revenues during the past 5 years confirm the seasonality effect about the summer, since every years' spikes during this season can easily be observed in the attached graph¹⁴. This major activity during that period of the year may have a significant

¹⁴ Consult the annex 12.2.12. Portugal's Tourism Revenues.

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impact in terms of employment in tourism and relative industries: it may lead to higher levels of employment, so that there is enough labour force for the demand. This may also mean a higher number of part-time employees, which can perform short-time jobs such as working in restaurants, bars or swimming pools, for example, during that demanding season.

Given the pleasant weather conditions, this time of the year also presents other specific employment opportunities: during the summer, there are many large-dimension events throughout the country that need the contribution from many working individuals, such as music festivals or summer fairs. Since many of those events are usually supported or sponsored by notorious brands, those companies may be interested in easy and efficient ways to find new people who can join those events' organization, which also support the current project's opportunity (more specifically about part-time jobs, in this case).

5.6. Legal Analysis

To conclude this analysis, it is important to explore the existing legislation that regulates the industry under study or situations which may impact that industry.

5.6.1. Unemployment Benefits

The current Portuguese legislation aims to protect those individuals who end up facing an unemployment situation by offering a set of cash benefits. According to the information made available by the European Commission on its official website, "*workers who are resident in Portugal and covered by the general social security scheme may claim unemployment benefits if:*

- *They had an employment contract and have become unemployed; or*
- *They have suspended their employment contract on the grounds of wage arrears;*
- *They have ceased work involuntarily (self-employed workers who are financially dependant);*
- *They are ex-recipients of invalidity pensions who are deemed capable of working following a work capability assessment"* (European Commission, 2016).

Regarding those benefits' daily amount, it is "*equal to 65% of the reference income, calculated on the basis of a 30-day month*" (European Commission, 2016). The same source also mentions that the amount is reduced by 10% after 180 consecutive days of receiving benefits, which may generate an additional pressure upon the unemployed

individuals and also contributing for a stronger commitment and effort when it comes to the job searching process, in order to be able to find a job and a proper financial stability.

5.6.2. Incentives for Employers

On the other hand, employers also have the opportunity to enjoy some benefits depending on who they hire and the characterization of that hiring process. One of the main incentives is named *Estímulo Emprego* (employment stimulus), which is a measure funded by the programme Portugal 2020. According to IEFP (Institute of Employment and Professional Training), there is “*financial support for employers who initiate employment contracts for a fixed term for a period not less than 6 months or permanent employment contracts, full time or part time, with unemployed individuals registered in the employment services, with the obligation to provide vocational training to hired workers*” (IEFP, 2016).

6. Industry Analysis

6.1. Definition of the Industry

The proposed project consists on a mobile game for job opportunities’ crowdsourced sharing. Even though this platform will be materialized as a mobile game, its main purpose is to successfully match those job opportunities with job candidates, being this activity referring to the labour market and recruitment and selection businesses. In Portugal, this industry’s activity is formally included in the category “*employment activities*” (CAE 78) and, more precisely, in “*activity of personnel selection and placement companies*” (CAE 78100), according to *Classificação Portuguesa das Atividades Económicas* (INE, 2007).

As may be observed on the table below, this industry has been positively growing, increasing its total turnover from 62.726.266 euros in 2013 to 71.743.557 euros in 2014. Even though the number of existing large companies is small, since it is only 6, this industry seems to be significantly concentrated on those large players which, in 2014, had a market share higher than 60%. Those large enterprises usually consist on major human resources companies (some of them being multinational players), which offer many different services such as specialized recruitment, human resources consultancy, outsourcing and professional training.

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Being the mentioned data referring to all the players included in the category of personnel selection and placement activities, it is important to specify the market where the proposed project will perform.

CAE 78100 - Activity of personnel selection and placement companies					
	2013 (by cluster of enterprises' dimension)				
	Micro	Small	Medium	Large	Total
Number of enterprises	134	16	8	6	164
Average turnover by enterprise (€)	56.963	358.553	2.130.170	5.385.836	382.477
Total turnover of the cluster (€)	7.633.042	5.736.848	17.041.360	32.315.016	62.726.266
Market share of the cluster (%)	12,17	9,15	27,17	51,52	100
	2014 (by cluster of enterprises' dimension)				
	Micro	Small	Medium	Large	Total
Number of enterprises	126	15	7	6	154
Average turnover by enterprise (€)	64.577	423.054	1.972.155	7.242.660	465.867
Total turnover of the cluster (€)	8.136.702	6.345.810	13.805.085	43.455.960	71.743.557
Market share of the cluster (%)	11,34	8,85	19,24	60,57	100

Table 1 – Market structure of personnel selection and placement companies' industry.
Source: Banco de Portugal (2016).

6.2. Definition of the Market

The previously highlighted industry can be very wide since it includes many varieties of activities related to personnel selection and placement, such as human resources consulting, temporary jobs companies, career advisors, labour conferences and many others. Having the proposed project in mind, it is possible to define a narrower market in which it will be materialized: the **job portals' market**. It refers to the spectrum which includes websites and online platforms that share and promote job opportunities (posted by the employers) and where job candidates can apply or find more information about those work positions. Even though the proposed project has a main innovative aspect regarding this market, which is having its structure as a mobile game, its main activity is similar enough to be considered within this category.

6.2.1. Market Players

In order to further analyse this market and to evaluate its attractiveness, it is important to clarify which players exist and their current roles.

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- **Buyers:** the main users of the platform will be, on one hand, job candidates looking for job opportunities and, on the other hand, the companies who are posting those opportunities. The value proposition and revenue model for both sides will be further detailed but both will be the main targets for this platform;
- **Competitors:** direct competition refers to other job portals which have a similar kind of offered services. Regarding the indirect competition, other career related websites and the social and professional online networks should be considered, since they present solutions which can be used for the same goal (job matching);
- **Substitute Products:** other businesses that can accomplish similar objectives but through a totally different approach such as recruitment companies, job centres, career fairs and labour-related press;
- **Potential Entrants:** new job portals with the same main purpose;
- **Suppliers:** the main suppliers for a technological project as this are the equipment suppliers (regarding software and office materials) and also labour, i.e., the development team itself which supplies needed resources and knowledge for the project's successful implementation.

6.2.2. Market Analysis

There is no evidence of publicly existing market data specifically about Portuguese job portals regarding their scenario and growth in terms of revenues. However, one of these job portals, Alerta Emprego, has been reporting the Portuguese job portals' scenario according to the available website statistics about their users' monthly visits and the volume of active job postings and opportunities.

Portuguese Job Portals' Ranking						
	Monthly Visitors (approx. number)			Active Postings (approx. number)		
	May 2015	September 2016	Growth	May 2015	September 2016	Growth
Net Empregos	3.400.000	3.500.000	2,94%	25.000	25.000	0,00%
Sapo Emprego	470.000	980.000	108,51%	18.000	24.100	33,89%
Alerta Emprego	350.000	665.000	90,00%	900	800	-11,11%
Expresso Emprego	200.000	330.000	65,00%	1.200	1.500	25,00%

Table 2 – Portuguese Job Portals' ranking for the websites with higher monthly visitors.
Source: SimilarWeb (found on blog.alertaemprego.pt)

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The previous table gathers the data for the 4 main players in this market, which are ranked according to their volume of monthly visitors. Even though these statistics do not reveal those businesses' profits, they may reveal some insights about the current scenario.

On the job candidates' side, who are the users that more frequently visit the websites in order to find an ideal job opportunity, it can be observed a significant increase of those user's monthly visits volume from May 2015 to September 2016 which represent a growth of 23,87% of the total volume for those 4 players. This may reveal an increasing interest in this type of platform in order to achieve the employment objective.

On the employers' side, it can be also perceived an increase in the number of active job postings in some of these platforms for the same time period. In fact, even though half of those websites did not observed a positive increase, the total volume of active postings for those 4 players grew around 13,97% during the mentioned time period.

6.3. Forces of Competition: Assessing the Attractiveness

Michael Porter developed a framework which examines the main forces that outline an industry's competition and which reveals insights about its attractiveness¹⁵. According to the model's author, "*understanding the competitive forces, and their underlying causes, reveals the roots of an industry's current profitability while providing a framework for anticipating and influencing competition (and profitability) over time*" (Porter, 2008).

The model's five forces will be further detail for the proposed project's scenario and previously identified market players. Each of the forces will be concluded with an overview of its overall attractiveness.

6.3.1. Threat of New Entrants

Barriers to entry: "*Entry barriers are advantages that incumbents have relative to new entrants. There are seven major sources*" (Porter, 2008):

- *Supply-side economies of scale* – the main aspects that can be scaled in terms of supply are the hardware and software needs (as servers and marketing tools), since a larger user base would increase those needs but at a lower cost per user.
- *Demand-side benefits of scale* – the willingness of a user to access a job portal increases if that platform has more active job opportunities and a higher number of

¹⁵ Consult the annex 12.3.1. Michael Porter's Five Forces of Competition.

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participating employers. New entrants may face difficulties in early attracting a larger number of companies to use its solutions.

- Customer switching costs – in the job candidates' perspective, it is easy to switch from using one platform to another since the majority of them allow a free access, so competitors are only at a distance of some clicks. As for the employers' side, their investment in some platforms may be a barrier to switch from the ones which are fulfilling the current needs.
- Capital requirements – the main capital needs for a technological project as the proposed job portal mainly are the product development costs and also the needed capital for user acquisition (growth marketing for job candidates and sales work for employers).
- Incumbency advantages independent of size – there might be some competitive advantages for some competitors such as exclusivity partnerships or contracts between specific job portals and employers and also consolidated recruitment strategies through specific channels and platforms.
- Unequal access to distribution channels – some of the main distribution channels for any website are search engines (as Google search) and other pages (as news' websites or blogs). The incumbent players may have an advantage on those by having higher organic search rankings (which lead to more visitors) and also more referral visits coming from other websites.
- Restrictive government policy – the few existing rules regarding job portals, as the prohibition of discrimination in job opportunities, can easily be adopted by both new or old market players.

Expected retaliation by the incumbents: since there is a big number of employers currently using the existing job portals, one possible reaction from the incumbents may be trying to retain them by offering more attractive prices or trying close exclusivity partnerships with some of them (such as larger employers).

Global power of the Force: medium attractiveness - even though this market presents some advantages for the incumbents, its characteristics still offer a significant chance for new entrants to start acting on the market and increasing their competitive advantages as they keep growing.

6.3.2. Bargaining Power of Suppliers

“A supplier group is powerful if” (Porter, 2008):

- It is more concentrated than the industry it sells to – regarding office equipment and technological suppliers, those are not concentrated since there are many different suppliers as such. However, the labour factor regarding product development (such as programmers and game developers), those are very concentrated and the industries to which they supply to are much more fragmented.
- The supplier group does not depend heavily on the industry for its revenues – on both mentioned cases, those suppliers do not depend at all on this industry for their revenues, since they offer their products and services to many industries.
- Industry participants face switching costs in changing suppliers – it may be easy to switch the supplier of equipment or resources in this case. However, the specialization in a specific product’s development may be a relevant factor which difficult changing the development team or substituting some of its individuals.
- Suppliers offer products that are differentiated – the office equipment and technological suppliers’ products are not much differentiated as there are other suppliers with a similar offer. However, labour suppliers in terms of technological knowledge can be very differentiated (depending on their skills and its impact on the products development).
- There is no substitute for the product that the supplier provides – similar to the previous topic, technological workforce suppliers may be harder to substitute or to find ones with similar characteristics.
- The supplier group can credibly threaten to integrate forward into the industry – this situation may occur if the product development team decides to abandon the current project and use their current knowledge about the product to create their own platform (and taking advantage of knowing the intrinsic characteristics of the previous project).

Global power of the Force: medium attractiveness – on one hand, the resources’ suppliers do not reveal themselves as very powerful in this scenario. On the other hand, the labour referring to the product’s development team has a great power as their skills and participation on the project may be crucial to its successful launch and progress.

6.3.3. Bargaining Power of Buyers

“A customer group has negotiating leverage if:” (Porter, 2008):

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- There are few buyers, or each one purchases in volumes that are large relative to the size of a single vendor – even though these platform’s access is free to job candidates, the objective is to reach a large number of them, so their power in this case will be lower. On the employers’ side, however, their negotiation power can be significantly higher if there is a small set of employers investing in premium services.
- The industry’s products are standardized or undifferentiated – given the current industry, as previously described, the majority of existing platforms offer standardized solutions (traditional online job portals).
- Buyers face few switching costs in changing vendors – the job candidates face almost no switching costs of changing from one platform to another since the majority has free access. However, the employers which are currently investing in some specific channels may face costs in changing to different platforms (such as monetary costs, different visibility, employer branding strategies restructuring, among other factors).
- Buyers can credibly threaten to integrate backward and produce industry’s product themselves if vendors are too profitable – on the job candidates’ side, this scenario is very unlikely to happen due to the needs of creating a technological project as this. On the other hand, the employers which obtain their desired success through some job portals may think of creating their own solution with a more specific focus for their talent acquisition needs and goals.
- Buyers are price sensitive – given the free access for job candidates, the price factor mostly applies to employers using this industry’s offer:
 - *The buyer group earns low profits* – the profit the employers get is the value of their hiring efforts’ results, I mean, the value of their new hired employees, which can represent a great value to the company.
 - *The quality of buyer’s services is little affected by the industry product* – the quality of hire is one major factor for talent acquisition decision makers since those new employers can significantly the company’s results and outcomes. With better recruitment tools (as this industry’s products), it may be easier for the employers to find more quality hires.
 - *The industry’s product has little effect on the buyer’s other costs* – if those employers are able to successfully use job portals and obtain new quality hires, those new employees can impact the company’s respective departments, strategies and designated budgets.

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Global power of the Force: low attractiveness – on one hand, job candidates usually use this industry's services through a free approach, so their negotiation power is weak. On the other hand, this industry's revenues significantly depend on the employers' investment in these services, which gives them a higher negotiation leverage. This fact leads to a lower attractiveness level of the industry, since it represents a challenge for its players.

6.3.4. Threat of Substitute Products or Services

"The threat of a substitute is high if:" (Porter, 2008):

- It offers an attractive price-performance trade-off to the industry's product – some substitute products can offer solutions for accomplishing similar goals for a lower price, such as job centres and labour-related press, and sometimes even for free, such as career fairs. However, there are other substitutes which present higher prices such as recruitment specialized services.
- The buyer's cost of switching to the substitute is low – the employers' recruitment strategies may already include other products as complementary channels to promoting their employer brand, so the costs of switching from one channel to another may be low (since they may already be being used).

Global power of the Force: medium attractiveness – the existing substitute products or services may represent a potential threat to this industry but it is important to notice that some of them may become obsolete in the future. Given the society's habits transitioning from the offline to the online world, the offline substitutes may need to reinvent themselves in order to be able to offer attractive value propositions comparing with the online solutions.

6.3.5. Rivalry Among Existing Competitors

"The intensity of rivalry is greatest if:" (Porter, 2008):

- Competitors are numerous or roughly equal in size and power – the number of existing job portals in the Portuguese context is high, but some of them reveal themselves more powerful since they have more monthly visitors and more active job postings, as previously revealed.
- Industry growth is slow – given the previous market analysis, there is evidence that there is a significant growth in recent years, which may be due to an increase in

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- demand (because of the unemployment scenario), due to the continuous improvement by the competing players (by introducing new features and content on their platforms) or due to the higher investment by the companies in their hiring efforts (which leads to using more of those platforms in order to accomplish their recruitment objectives).
- Exit barriers are high – being an online platform, exit barriers are lower, given the fact that initially there is not needed such a high investment for physical structures or inventory, as it would happen with a retailer for example.
 - Rivals are highly committed to the business and have aspirations for leadership – some of the existing job portals reveal constant efforts in promoting their websites in order to get more visitors (by potential job candidates) and more companies using their premium services, increasing their revenue flows.
 - Firms cannot read each other's signals well because of lack of familiarity with one another, diverse approaches to competing or differing goals – even though the competing job portals reveal their information directly on the respective platforms (such as the existing job opportunities and, for that reason, their current buyers from the employers' side), some of those websites do not openly reveal possible special agreements or conditions negotiated with some specific companies neither reveal any possible new features of improvements to the website until those are publicly available and online.

Global power of the Force: medium attractiveness – on one hand, the existing players reveal a fierce competition between themselves. On the other hand, there are enough conditions for new players so start acting in this market and be able to compete with that level of rivalry, which shows that this market can still be attractive for new businesses.

6.3.6. Attractiveness Overview

The previous analysis for each force of competition revealed that this market mainly has a medium level of attractiveness: even though there are some challenges for its players, not being an easy industry to act in, there are good enough conditions for new players to start and to be successful. However, the bargaining power of the buyers represents a lower attractiveness contribution since this market's players are reliant on the investment of employers, not only about the revenue they generate but also given the number of job opportunities they need to publish in order for a job portal be attractive enough for job candidates to frequently visit the platform.

6.4. Competition Analysis

6.4.1. Direct Competitors

Even though the proposed project will be an innovative approach to this market, using gamification and crowdsourcing elements to better engage with its users, its core foundations are still the same as the other market players: it is based on sharing job opportunities and reaching potential job candidates. In this sense, its most direct competitors, as previously mentioned, are the already existing job portals, which act with similar overall strategies but may have different approaches to their main users: job candidates and employers.

6.4.1.1. Competitive Positioning

The existing job portals may position themselves in different ways according to their identity and the genre of job opportunities they offer, being the main varieties focusing on niche markets or being generalist websites.

There is a set of **niche** job portals which mainly focus on a particular activity area. Two examples of this are itjobs.pt, which only presents job opportunities for technological areas or projects, and empregosaude.pt, which content is targeted to the medical sector. On one hand, this strategy gives these platforms a more distinctive positioning and a more attractive identity to its users, because they may be perceived as the leader or pioneer portals for those respective topics. On the other hand, it may narrow its user reach and, for that reason, have a small user base and lower visit volumes.

The most common approach for the currently existing job platforms is to be a **generalist** website, by presenting job opportunities for as many activity areas as possible. This allows to have an offer to a greater user base and, for that reason, to receive more monthly visits and more public recognition. In fact, as it will be further detailed, the 4 main players previously identified as the ones with more visits (which can reveal more success in this market) are generalist platforms. Even though there are some advantages of this strategy, it is also important to notice that playing within this segment may be a tougher challenge as it is the additional factor of needing to compete with both the other generalist websites and also the niche ones, who can more easily seduce some particular sets of users.

6.4.1.2. Competition's Revenue Models

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While it is common for the existing job portals to allow a free access by its users (job candidates), not all of them have that same approach regarding the employers' (job publishers) side.

There is a set of job platforms, such as Net Empregos or Universia, which actually have the possibility for employers to promote job opportunities without paying for that service. In these cases, those websites may obtain their main revenues through other tactics, such as having paid advertising throughout the website or by having some sponsored content.

The proposed project may follow another tactic which is currently being used by some other players (such as Sapo Emprego): having a freemium service. This allows to some job publishers to successfully use the platform without the need of paying but also with the possibility of paying for more advanced features or the basic features but without any limitations (in terms of usage or user reach, for example).

A third alternative also being currently used is to have a fully premium service, as the case of Alerta Emprego or Expresso Emprego. Those websites demand a paid access in order to be possible to publish or promote job opportunities. This strategy may reveal itself as more profitable, since it may lead to a higher number of paying customers, but can also be a barrier for smaller employers who do not have enough financial resources to invest on those hiring channels.

6.4.1.3. Main Competitors

According to the performed market analysis, 4 main players were highlighted based on their users' monthly visits and their volume of active job postings and opportunities, who may be seen as the most recognized and impactful players in this market:

- Net Empregos – with more than 3.700.000 registered job candidates and more than 154.000 registered companies (according with the data present on their own website), this is claimed to be the biggest job portal in Portugal. Being a free and generalist platform, their main competitive advantages are the high volume of currently active job postings (due to the easiness of creating new ones) and their successful communication strategy by promoting the job posts in social media (having, as an example, almost 1 million followers on their Facebook page).
- Sapo Emprego – this website greatly relies on the company's overall positioning: Sapo.pt is one of the most notorious web portals in Portugal, having many sub categories (not only related to labour) and reaching a very large user base. Their

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- employment segment not only takes advantage of that successful branding but also shows a complete approach to job candidates by promoting not only job opportunities but also other relevant content such as information about trainings and career guides.
- Alerta Emprego – this platform's competitive advantages are their investment in content creation and on getting a closer relationship with job candidates and employers. This may be observed on their blog, where it is shared content as guides, reports, tips, articles, templates and many others on a daily basis, and during events as career fairs, where this company is usually present to promote their platform and to have a more personal relationship with some of their users and potential customers.
 - Expresso Emprego – being a generalist but premium portal, this website's main competitive advantage is the potential reach of the published job opportunities. Even though it may not have as many monthly online visitors as the previous competitors, this company also owns one major Portuguese weekly newspaper (Expresso) and that newspaper is complemented with a job segmented with some of the content of their online version. Not only this allows them to reach more offline users compared with other players but they also have an innovative tactic to better engage the users: they perform an online event (named Job Fair) where, by partnering with a big set of Portuguese universities, they promote some specific and valuable opportunities during a designated time period.

Given the positioning and revenue models' previous description and other existing job portals, it is possible to map how these main competitors act in this market and how do they relate to each other, as may be observed on the attached figure¹⁶. This map also supports an interesting fact: it seems that the freemium category is the one with fewer competition (either for the niche or for the generalist segments), which corresponds to the revenue model being proposed for the current project.

6.4.2. Indirect Competitors

There are more websites that are not properly job portals, opposing to the ones mentioned above, but which can also be seen as competitors since also allow to achieve the same purpose: matching job candidates with employment opportunities. Some examples are Glassdoor, which still offers job opportunities but its main goal is have a channel for potential candidates to get to know different companies, their recruitment processes and

¹⁶ Consult the annex 12.3.2. Portuguese Job Portals' Mapping.

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feedback from previous and current employees; and the Michael Page's website, which despite being an institutional website of a recruitment company, also presents job opportunities.

Social and professional online networks are also very fierce competitors, due to their large user base and to their features that can replace the solutions presented by any job portal. Social media channels as Facebook, for example, allow for companies to directly promote their job postings to their desired targets through their fan pages, paid advertising and communities (as Facebook groups related to unemployment). Professional networks as LinkedIn, for instance, represent an even more significant threat as competitors by allowing employers to create job postings inside the network and allowing those to be shared among the users' connections. Their focus on the professional aspects as the user profile with the professional experience and their company pages also allow for an easier and more direct communication between both sides when compared to a job portal.

7. Internal and External Analysis

7.1. SWOT

Internal Analysis	External Analysis
Strengths	Opportunities
<ul style="list-style-type: none"> - Unique value proposition; - Gamification elements; - Crowdsourcing and social advantages; - Mobile game; - Free access and features; - More accurate job matching; - Specialized team; - Differentiated positioning and branding; - Investment in Marketing. 	<ul style="list-style-type: none"> - High total and youth unemployment; - Young people frequently online; - Youth's lack of experience; - Skills mismatch between candidates and employers; - Growing entrepreneurial ecosystem in Portugal; - Lack of motivation from candidates; - Technological growth (internet and mobile games); - Growing investment in talent acquisition; - Seasonality and part-time jobs.
Weaknesses	Threats
<ul style="list-style-type: none"> - Inexperience in the industry; - Few initial job opportunities; - Small initial user base; - Low brand notoriety; - No initial agreements with employers; - Replicable business model. 	<ul style="list-style-type: none"> - High bargaining power of buyers; - Experienced and mature market; - High number of competitors; - Social networks competing with this market; - Employers also investing in other channels; - Benefits for being unemployed.

Table 3 – SWOT Analysis.
Source: Author (2016).

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The table presented above (SWOT Analysis) summarizes the internal analysis conducted so far, with the company's potential strengths and unfavourable factors, as also the external analysis, by presenting potentially helpful and harmful factors which should be considered in order to compete within the proposed context and environment.

7.2. Cross SWOT

The previous model's insights are relevant in order to trace possible strategies to adopt and to be aware of contextual factors that may impact the company's success. For that reason, it is important to explore how the previous elements relate to each other and, through the dynamic SWOT analysis presented below, understand possible challenges to undertake, restrictions that might happen, risks that should be considered and warnings that should be avoided and monitored throughout the business' activity.

	Strengths	Weaknesses
Opportunities	<p style="text-align: center;">Challenges</p> <ul style="list-style-type: none"> - Attract the unemployed youth's through the value proposition; - Create and promote a more engaging experience; - Use social connections to grow the user base; - Reach a significant number of employers; - Take advantage of being a startup (and not only a website); - Have a relevant volume of successful job matches. 	<p style="text-align: center;">Restrictions</p> <ul style="list-style-type: none"> - Difficulty in penetrating the market; - Not meeting gamers' expectations; - Inefficient job platform.
Threats	<p style="text-align: center;">Risks</p> <ul style="list-style-type: none"> - Less market share due to not having a desktop version; - Candidates play but do not apply to opportunities; - Struggle to have short term profit. 	<p style="text-align: center;">Warnings</p> <ul style="list-style-type: none"> - Users abandonment after initial interaction; - Employers not believing in possible results; - Competitors may adopt similar features.

Table 4 – Cross SWOT Analysis.

Source: Author (2016).

8. Business Plan

The Business Model Canvas is composed by 9 major blocks that highlight the key elements of a project and its activity. The model allows to create a visual framework that summarizes the proposed business plan (the one found below), however the following analysis will further detail each of the major blocks.

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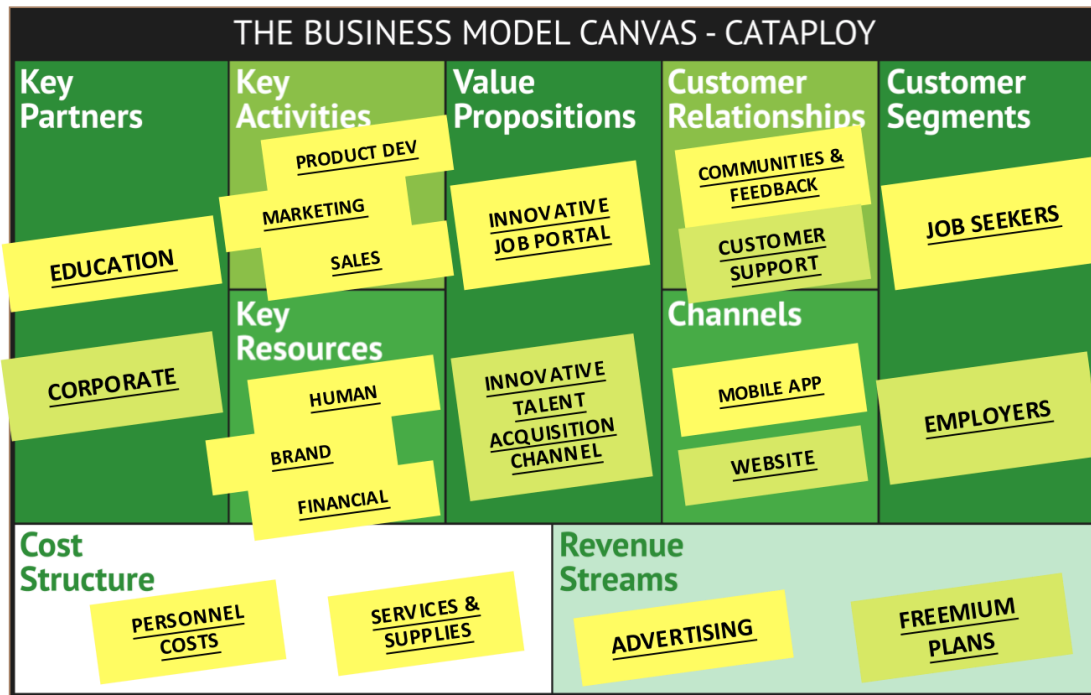


Figure 2 – Business Model Canvas for the proposed project.
Source: Author (2016).

8.1. Customer Segments

Being the proposed project a mobile job matching platform, there are 2 main user categories: (1) job seekers and (2) employers.

8.1.1. Job Seekers

8.1.1.1. Target

As it was previously mentioned, the unemployment issue is more severe regarding the young people. Given the context of the proposed project, those will be the main target when it comes to the platform's users, who will be the ones potentially interested in the job platform's content: job opportunities. For that reason, the segmentation and targeting criteria to define this customer segment are the following:

- Sex: both genders;
- Age: 15 to 24 years old (considered age group for youth unemployment's rate);
- Education: all levels;
- Geography: Portugal;
- Behavioural: mobile smartphones' users;
- Occupation: unemployed.

8.1.1.2. Customer Jobs

The customer jobs refer to the activities that a specific customer segment is trying to perform or their needs that should be satisfied.

Following the Business Model Canvas' author proposal for this framework development, the main jobs for the customer segment should be listed and then, on the value proposition analysis, those will be compared with the proposed product's goals. For the current customer segment, it is possible to list the following customer jobs: get a new job; find first job; change career; advance career; help unemployed relatives; look good with the relatives; have financial stability; contribute to society; help the others; contribute to economic growth; develop ideas and projects; earn more money; change work location.

8.1.1.3. Pains

The customer segment's pains correspond to the obstacles or challenges it faces when trying to achieve the mentioned customer jobs. Given the jobs previously listed, the following are some of the main pains for those customers: lack of motivation; lack of patience; lack of time; getting stuck in career; lack of money; being associated with a failure; few job opportunities; low job protection; lack of experience; lack of skills; unwanted qualifications; not finding opportunities; bad management; boring job; bad employer; poor career choices; pressure from decisions; difficult recruitment processes; unreachable employers; lack of feedback; no career support; being fired; salary decrease.

8.1.1.4. Gains

Opposing to the pains, the gains are the potential benefits or results the customers want from achieving the previous jobs. For the current case, the main gains may be the following: be seen as competent; get job security; be promoted; salary increase; be recognized; have a happy life; make things happen; have a challenging job; know different cultures; increase network; increase knowledge; meet new places.

8.1.2. Employers

8.1.2.1. Target

When it comes to an employment process, there is also the crucial side of the employers. Those are the ones who open a job opportunity and that are interested in reaching quality hires that would integrate the company and add new value.

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Regarding the proposed job platform, the main target are all the Portuguese companies, since having enough and appropriate human resources is needed for every business to run. Nevertheless, the individuals from those companies being targeted are specific: talent acquisition decision makers. In smaller businesses, these individuals may also simultaneously be the owners of the company. In larger enterprises, however, those may be Human Resources Directors or Recruiting Managers. The relevant criteria in this case is having the decision power to adjust the existing recruitment and hiring strategies so that they may also include investing in this platform as a recruitment channel.

8.1.2.2. Customer Jobs

Following the same guidelines as for the previous customer segment, the main needs that these talent acquisition decision makers may want to satisfy are the following: promote their employer brand; promote their employer value proposition; promote their generic brand; find job candidates; obtain applications; achieve successful hires; build a team; meet skills gaps; restructure departments; perform temporary projects.

8.1.2.3. Pains

For this customer segment, the main obstacles when trying to accomplish the previous tasks may be the following: lack of strategy; lack of budget; lack of knowledge; lack of time; few available resources; bad recruitment processes; bad applicants; candidates' skills mismatch; not reaching the right target; fierce competition; bad communication.

8.1.2.4. Gains

Opposing to the pains, the main positive outcomes those decision makers are desiring may be the following: achieve quality hires; be recognized as good employers; high brand's notoriety; successful teams; great intellectual resources; less costs; great internal culture and environment; new perspectives; better financial results; new value added.

8.2. Value Propositions

8.2.1. Overall Value Proposition

8.2.1.1. Product

The proposed job portal will be developed in an innovative format (not used so far by any other player in the market): it will be a game for mobile devices, such as smartphones and

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tablets. According to the customer segments mentioned above, the users may access the game through 2 different perspectives: as job seekers or as employers.

8.2.1.2. How to Play

Step 0 (create content) – Before it is possible to play the game, it is necessary to create the content which will be used during the challenges, which will be the job opportunities. Employers must create a profile in the platform so that they can both fulfil all the presented information about the company and also create the job postings they want to promote. There will be the necessity of reaching interested employers before the game is publicly available so that the platform can have enough content for the job seekers to start playing.

Regarding their profile, besides the account's email and password, it will be important to submit details as the company's name, logo, website, short description, area of activity, foundation date and main location.

When a job posting is created, it should have the following information: function name, area of activity, desired years of experience (range), job location, applications' deadline, function description and either a website link (to a web page with more information) or either an email address (so that job seekers can directly apply via email).

As soon as there are enough employers and active job opportunities in the platform, the game may become online.

Step 1 (install the game) – When the game becomes available to play, job seekers need to download and install the application into their mobile devices in order to start playing.

Step 2 (create an account) – Once the players open the game for the first time, they will need to create an account. This process may be done through 2 different approaches: either using another social network's existing account (using their profile details from Facebook or LinkedIn) or either creating a new profile from scratch, fulfilling all the needed information. The main mandatory fields to fulfil, besides their email and password, will be their name, photography or image, interest area of activity, years of experience and location.

Step 3 (play the game) – By having an account created, it is then possible to play the game. The first task before the challenge begins is to choose 3 individuals who will be shown on the game, who can be the player itself and 2 other friends, for example. Those

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other individuals will not be playing at the same time but the current player can also have them inside his game so that he can also help other people trying to have a match with a job opportunity.

Once the game opens, the game screen has 2 major parts¹⁷: the bottom part and the top part. In the bottom, it will appear a catapult and 3 avatars representing the 3 chosen players. One of them will appear in the middle position, which is the one who can be thrown by the catapult. The player can swipe to both sides in order to change the player who will be thrown to an opportunity. In the top part of the screen, it will appear an opportunity, which will show the company name and logo, the function name, years of experience required and job location. There will be also a small timer that will count 7 seconds, which is the maximum time the player has to try to achieve that opportunity.

In order for the match to occur, the steps are the following: the player choose the individual who will be thrown away by the catapult (swiping to the sides to switch the person). Then, he needs to swipe from down to the upper side of the screen in order to throw that individual to the opportunity. The company logo will be the target, working similar to an arrow target. The opportunities will not appear always on the exact same position: they can be higher or lower. This means that the player needs to throw the individual with the correct amount of strength in order for that throw to hit the target, which means that the player may sometimes fail hitting the target.

The idea is for the player to see the opportunity, think about the individual who would make the best fit with that job posting and throw that person to it. If the gamer does not have any other connections yet, he can play by himself and having the change to only throw himself or not.

After a person is thrown away for an opportunity or the timer finishes its time, the screen will change for the next opportunity. The player can be playing whatever time he desires, as long as there are available opportunities to see. This element will be further detailed below, regarding possible upgrades.

Every player will have a jobs inbox¹⁸. This means that whenever that person is thrown away for an opportunity that he or she have a fit with the required criteria, a notification about that job posting will appear in the inbox. By having this notification, that person

¹⁷ The game screen may be found on the annex 12.4.1. Game's Screenshots (with illustrative examples).

¹⁸ The jobs inbox may be found on the annex 12.4.1. Game's Screenshots (with illustrative examples).

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can then open the fully detailed job opportunity and decide to apply (via email or an external website) or not.

8.2.1.3. Social Elements

Having social elements in this game, together with the gamification elements described below, is one of the main ingredients for its possible success.

In a first perspective, it is vital for the game itself, since the objective is for the player to have the opportunity to also throw his connections to the opportunities and, in that way, materializing the crowdsourced job matching process successfully. It is then crucial for the player to have his connections associated to his account, which can be done by 2 different ways: (1) using the connections from the online social networks, in case that person created the account associating a social media profile; or (2) adding new connections through the email address or associating email contacts.

In a second perspective, having these social elements may also be very important regarding user acquisition and growth marketing: if the players start using the game and spread the message amongst their peers and social connections, it is easier for the platform to grow its user base through an organic way (besides the paid marketing strategies that will be further described). The need for having social connections to have a more pleasant game experience may lead to the players to share the game within their friends and colleagues.

8.2.1.4. Gamification Elements

As previously observed, one relevant factor for youth unemployment is the lack of motivation to search for a new job. Since the proposed job portal is a mobile game, it presents itself as a more engaging experience, specially for this targeted age group.

Having engaging gaming elements is then crucial for the application to be successful and to retain its users, since there is always the possibility for the users to try the game and then abandon it, which should be avoided as much as possible.

Match Score – each job opportunity, as mentioned earlier, will have its area of activity (such as Marketing, Sales or Accountability, for example) and desired years of experience (range). When a person is thrown to a specific job posting, that person's area of interest and years of experience should match with the opportunity's requirements, so that it can appear on the player's inbox for him to analyse later and decide about applying or not.

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The previous scenario means that, when someone is thrown, 2 outcomes may happen: (1) that person may have a good fit with the opportunity, which, in this case, will reward the player that threw the person with 5 points; or (2) that person may not fit with the opportunity, which will mean the player losing 3 points.

Given this scoring system, each player will have his total score number with the accumulation of all the gathered points throughout the different opportunities.

There will also be a special kind of opportunities (in order to attract more employers to invest in premium services, as will be further detailed later): the gold opportunities. Those will work in a similar way to the other opportunities but their awarding points for having a good match will be 20 points instead of 5, which may also attract players to throw more users to these opportunities. This will be a good option for employers that want to increase their brand awareness and attract more future candidates.

Aim Rate – since there is the possibility for the player to fail hitting the target, there will be also another scoring element: the aim rate. This percentage is calculated based on the amount of successful throws (regarding hitting the target's position) compared with the total amount of throws (successful or not).

Ranking – the ranking system will be based on the match score, so the players will be listed on the ranking table according to their total score. Even though their aim rate will not count as a ranking factor, this element will be also present on the ranking table for the players to compare between themselves. This factor will be only used for the players with the exact same total match score, working as tiebreaker.

Badges – not only there will be a ranking system, which motivates users to keep playing the game in order to achieve the best rankings, but there will also be the possibility to earn special badges. This element, frequently used in gamification approaches, also motivates players to engage more with the game and to use its features to get personal recognition. The initial available badges will be the following: (1) best player of the day (ranking); (2) best player of the week (ranking); (3) best player of the month (ranking); (4) most helpful player of the week (highest amount of throws); (5) weekly perfect aim (having 100% aim rate).

Those badges will then be displayed in each user's profile, so that they can compare between players and get motivated to play more and achieve more rewards.

8.2.2. Available Challenges

8.2.2.1. Initial Phase

At the moment the game will be initially released, the volume of active job postings will be lower compared with the future. For that reason, when a player initially opens the game, there will be the need to choose 1 of the 2 available categories: (1) new challenges and (2) seen challenges. The first category will present all the active job postings that the player did not see yet, while the second one will show the opportunities which the player has already seen. This may be interesting in case that player decides to review some opportunities for a second time so that he can throw different connections (or himself) to those specific opportunities. In case that the user starts playing through the first category but reaches the end, I mean, sees all the available active postings (which may happen in the early stage of the game, when there are less opportunities), a message will appear asking if he desires to play again the same opportunities (second category). In case that player does not want to repeat them, the possible next steps are waiting for new opportunities to be uploaded to the platform.

8.2.2.2. Future Upgrade

Whenever the platform reaches a high volume of active job postings enough to avoid the previously mentioned situation (which is predicted to happen in the beginning of 2019), there will be an upgrade in order to make the game more challenging and effective for job seekers and also with greater value for employers. Instead of only having the 2 previous categories, it may have 4 ones: (1) jobs by location – the game will present the job postings according to a selected location; (2) jobs by industry – the game will present postings according to a selected industry; (3) hot jobs – the game will present postings uploaded as hot jobs by employers, which will be only possible by subscribing a premium plan; and (4) ending soon – the game will present the postings that have their deadline coming soon.

The possible ways for employers to take advantage of these categories will be further detailed in the Revenue Streams analysis of the current business plan.

8.2.3. Job Seekers

8.2.3.1. Value Proposition

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Given the proposed game, the value proposition for job seekers becomes more clear: the game is an engaging way of job seekers to explore the existing job opportunities and, through an innovative approach to crowdsourced content sharing, to raise those opportunities' awareness among their peers.

With the job inbox, job seekers have an organized way to having all their desired opportunities in the same place and with the necessary details in order to make a decision about either apply or not to those opportunities. Since that inbox will also contain the opportunities that other peers selected for the player (by throwing him to those postings), it is even possible to have a full inbox of potentially good job opportunities without actually playing the game or facing those opportunities before.

8.2.3.2. Pain Relievers

This value proposition seems to have a good fit with the job seekers' jobs, which mainly are to find a job or to achieve the first job. It does it also by decreasing some of the mentioned pains for this customer segment: lack of motivation; lack of time; getting stuck in career; lack of experience; lack of skills; unwanted qualifications; not finding opportunities; poor career choices; pressure from decisions; unreachable employers.

8.2.3.3. Gain Creators

By presenting possible job opportunities for the job seekers to achieve, this value proposition also seems to generate some of the mentioned gains: be seen as competent; get job security; be recognized; have a happy life; make things happen; have a challenging job; increase network; increase knowledge.

8.2.4. Employers

8.2.4.1. Value Proposition

The value proposition for employers can be simply defined as an innovative approach for companies to reach more and better job candidates, which allow them to meet their talent acquisition and employer branding goals.

This objective may be achieved by a broader perspective, which is the case for those employers that have a high volume of opportunities and that want to reach as much job candidates as possible, or by a narrower perspective, which is the case for employers that are trying to find specific profiles that may be harder to reach through other channels.

8.2.4.2. Product Features

The previously mentioned value proposition consists on the following game features that employers may use, according to the plan they subscribe (based on the freemium model that is further detailed on the Revenue Streams' segment):

- Job postings – job opportunities published in the platform by the employers;
- Customized ads – the banners inside the game used for advertising may sometimes be used for customized ads created by the paying employers, instead of the automatic ads being shown by the advertising network;
- Sponsored inbox notifications – paid notifications that show sponsored job opportunities directly in the jobs' inbox of the targeted players;
- Gold opportunities – highlighted opportunities that reward more points to players;
- Hot jobs – job postings highlighted in this specific category;
- Ending soon jobs – job postings highlighted in this specific category;
- Email newsletter – having job postings promoted on a targeted email newsletter;
- Premium support – having custom support by the sales account strategists.

8.2.4.3. Pain Relievers

Regarding the mentioned pains for this customer segment, the proposed value proposition may contribute to reducing the following ones: lack of strategy; lack of budget; lack of time; candidates' skills mismatch; not reaching the right target; bad communication.

8.2.4.4. Gain Creators

By having the possibility to reach potential job candidates that may eventually be hired for the company, this product may present employers some of the desired gains: achieve quality hires; be recognized as good employers; high brand's notoriety; successful teams; great intellectual resources; less costs; new perspectives; new value added.

8.3. Customer Relationships

8.3.1. Job Seekers

In order for the game to be constantly improved, it is important to maintain a close relationship with job seekers and to analyse all the received feedback. A better or worst user experience may have a big positive or impact in the game's performance, so it is

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crucial to understand if the platform is meeting the job seekers' expectations and allowing them to satisfy their needs.

Not only there will be a contact page on the official website and social medial public channels, as there will be a main channel for managing this relationship: an online community through a Facebook Group. The whole team will be present and all players are invited to access and to contribute to that community (with jobs or gaming related content, for example), so that there is real-time feedback about their experience and a faster response time from the development and management teams.

8.3.2. Employers

It is also crucial to maintain a good and close relationship with employers in order to understand if the current applied model is working for companies and their hiring goals, which will also allow feedback for possible product improvements.

For the employers using the free features of the game, this relationship will be managed by the regular customer support channels, such as email or contact form, which will be present on the platform's website.

Regarding the employers using some of the premium plans, they will have the chance to enjoy a premium customer service, which will be executed by the sales team. This means that those companies may have a custom and faster support by their respective account strategists.

8.4. Channels

8.4.1. Mobile Application

Being a mobile game, the platform will be a mobile application for smartphones and tablets. In order to reach the highest possible volume of potential users, it is important to have it available in the main distribution channels for mobile applications: Google Play (web store for Android operating system) and App Store (web store for iOS operating system). Those systems are the most commonly used by the majority of mobile hardware producers and those may be combined with paid promotion tactics in order to increase its user base.

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8.4.2. Website

As previously described, the main interaction between job seekers and employers will occur inside the mobile game. However, the website still represents an important channel in order for the relationship with both sides to be complete.

Regarding the job seekers, the website gives them the possibility to create and access their account (in case they did not create it before in the mobile application) and, most importantly, to see their jobs inbox. While the user experience for playing the game is more pleasant in a mobile device, some users may prefer using a desktop for analysing the job opportunities they found and to apply in there (through the employers' website or via email). However, there is no possibility of playing the game inside the website.

For the employers, the website will be their main management channel. By accessing the company's account, it is possible to edit its profile and details, create new job postings and see its statistics (as the number of people thrown to a certain opportunity, which may help measuring the success and the return on investment), compare and subscribe to the available premium plans and to access customer support.

This channel will be also used under the customer acquisition tactics, mostly for the employers' side. The strategy will be to drive potential employers to the website and present them the advantages of using the platform, so that they can start using it and, most importantly, subscribe one of the premium plans.

8.5. Key Activities

8.5.1. Product Development

The proposed project's value proposition is very focused on what the platform has to offer and the innovative way how job seekers can interact with job opportunities. For this reason, the most important activity in order for its success is its development (not only its initial creation but also its improvement over time). As mentioned earlier, the mobile application will be developed for the 2 most used mobile operating systems: Android and iOS. This will require at least 2 computer engineers: one with good programming knowledge (who has experience with the coding languages used by those operating systems, which are Java for Android and Swift for iOS) and other with design expertise (who can illustrate the graphical elements and visuals of the game), so that both can work together in the game's elaboration.

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When the game is publicly launched, it is important to keep tracking of any possible feedback or insights about how is the user experience while playing it. For this reason, some analytics tools (as Google Analytics, for example) should be used in order to track and analyse the players' behaviour inside the game. This will give clues and details about which screens are more frequently seen or which buttons have more interaction, for example, which is relevant data for understanding possible features to be improved.

8.5.2. Marketing

As analysed before, the job portals' market in Portugal has a big number of current competitors and some of them with a high volume of users and high visibility. In order for the game to successfully penetrate this market and achieve a good volume of users and customers, it is crucial to have a structured marketing and communication approach. This strategy should be based on an integrated set of tactics targeting the mentioned customer segments.

8.5.2.1. Targets

Even though the approach will be different for each of them, the targets for this strategy will be the 2 customer segments previously defined: the job seekers and employers.

8.5.2.2. Objectives

The objectives in communicating this value proposition for job seekers are: (1) user acquisition – leading them to know about this platform, to know its advantages, to download it and create a new account; and (2) user retention – leading them to continue frequently playing the game after the first try, since the platform will keep being updated with new content (as job postings) and new features.

Regarding employers, the main objectives of the communication strategy will be: (1) customer acquisition – leading them to use the platform and to subscribe one of the premium plans; and (2) customer growth – this means helping the customer improving his performance by supporting him on using the platform's features in order to have a successful recruitment strategy and, consequently, achieve his own goals.

8.5.2.3. Message

The most common promoted message by other job portals usually refers to the fact that those platforms have a high volume of job opportunities and, therefore, there is a good change for the job seeker to find his desired opportunity. However, the proposed project's

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communication strategy will have a different approach: the main message to be promoted is that this platform is distinct from the existing ones since it provides a unique and engaging experience while job searching, which can reveal itself as a more pleasant way to search for a job as also for helping peers finding their ideal opportunity.

Regarding the main message for the employers, it will be mainly focused on 2 perspectives: (1) this game's features provide a complete approach to online recruitment and employer branding and an easy way to successfully promote their job opportunities by individually present them to job seekers; and (2) being a unique job platform, it may attract some specific users (potential job candidates) that could not be reached so easily through other channels.

8.5.2.4. Communication Mix

8.5.2.4.1. Website

Besides the mobile game itself, the website will be the main communication and interaction channel with job seekers and employers. Not only it will contain the features previously described as it will be structured according to a coherent content strategy: the information and graphic content available on the website will follow the same guidelines as the content that will be shared among the other channels (as social media), such as having similar design and written descriptions about the game and features, for example.

There will be also important to develop a good Search Engine Optimization (SEO) strategy, which means having the website developed and optimized in a way that increases its indexing ranking throughout online search engines (such as Google). This can be achieved by the implementation of multiple tactics as having the website optimized for mobile devices, having a secure and fast connection, having relevant and original written content and having other websites (as news' websites) referring this domain and leading new visitors to its pages.

8.5.2.4.2. Search Engine Marketing

While the SEO strategy refers to free tactics that might be applied to the website in order to improve its organic ranking in search engines, Search Engine Marketing (SEM) refers to the use of paid advertising to promote the website in those search engines (independently of their organic ranking). In the current strategy, the proposed tool to be

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used is Google AdWords, which is one of the more efficient pay-per-click advertising platforms.

Given the customer segments and targets, this platform will be used for 2 specific types of advertising campaigns:

- Mobile app installs campaigns (for job seekers) – campaigns for promoting the game in Google’s networks such as Google Search Network, Google Display Network, YouTube and Google Play. These ads show the game’s name, icon, description and, sometimes, a small video, so that it can attract users to open the ad and download the game.

- Search campaigns (for employers) – campaigns showing ads on Google’s search engine focusing on queries related to recruitment or hiring strategies. These ads will be presented when employers search for this kind of content and they will be redirected to the game’s website where they can find all its features and advantages to use it.

8.5.2.4.3. Social Media

Instead of trying to be present in all the major social networks but with a weak presence in each of them, the proposed strategy will be by being only present on Facebook and making sure this channel has good and relevant content for the customer segments (following the guidelines mentioned earlier). This social network’s main advantages are its reach to a wider audience when compared with other channels, the flexibility in terms of content’s formatting and also the future possibility of investing in paid advertising to promote the page’s content for specific targets.

8.5.2.4.4. Direct Marketing

This communication mix will also use one form of online direct marketing: email newsletters. Since the game has data about the players’ profiles (such as the industry or area where they would like to work), this newsletter can be highly customized with specific content for some specific set of users (for instance, sending a group of job opportunities for the players who might be interested in those job functions). It may also contain more content in order to attract the users to keep playing the game frequently over time, since it is important to retain those players and make sure they continue playing the game and enabling more revenue.

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8.5.2.4.5. Public Relations

The value proposition presented by this project takes into account the social challenge it aims to decrease: youth unemployment. Being a major social issue in the country, it is important to trace a public relations' strategy and to define the channels to be used:

- Press – when the game becomes publicly available, this channel may be crucial in order to increase the platform's notoriety and attract early players. This could be achieved by having interviews or articles about the game in labour related news (such as online news or newspapers). It may also be relevant to use this channel throughout the future in order to keep attracting more players and employers to the platform, which may be easier when there are real results and feedback by the early users that have already experienced it.

- Partnerships – it is important to have some key partners to reach the desired customer segments more easily, such as universities or start up incubators. This strategy will be further detailed on the Key Partners' segment of this business plan.

- Events – events such as career fairs precisely gather the both targeted customer segments: job seekers and employers. Being present in such occasions may be a very successful tactic, since it is possible to reach both audiences and to easily present them the game's features and value proposition. For job seekers, such as college students, it may also be interesting to participate in or to create smaller activities such as workshops or presentations directly in their universities, so that they get to know the game even before they are really searching for their first job.

8.5.2.4.6. Sales Promotion

Having sales promotion will also be a very relevant tactic for this game. Being such an important activity, which in this case goes even beyond simply selling the services, it will be further described below as one of this business' key activities.

8.5.3. Sales

In order to get a good volume of employers using the platform, feeding the game with job opportunities, subscribing a premium plan and maintaining a long term relationship, it is crucial to have a sales plan. In the current proposal, the sales representatives will be considered as account strategists, since their functions will not be limited to selling:

- Customer acquisition – their main job will be acquiring new employers, by leading them to use and feed the platform with content and, in a second level, subscribing a premium

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plan. This will be done through the classic sales approach of contacting the potential customers and presenting them the advantages of working with this job platform.

- Digital consultancy – it is important to help those employers having as much success rate as possible, in order for them to keep investing in this game. For that reason, those customers should be guided in terms of potential online recruitment strategies to adopt which may be complementary to the game's features, such as potential improvements to the companies' websites.

- Customer support – the account strategist will also be responsible for supporting the employers who have subscribed a premium plan, giving them a more customized and dedicated help. This may be useful whenever they have a technical issue or unexpected results by the platform usage, for example.

8.6. Key Resources

8.6.1. Human Resources

Due to the technological characteristics of this project, its success does not depend on tangible assets (such as inventories or raw materials) but, instead, depends on the needed knowledge and skills to achieve the previous key activities (product development, marketing and sales). For that reason, the team's composition will follow a human resources planning¹⁹ that contains the following functions:

- Chief Executive Officer (CEO) – the main project manager, who will lead and organize all the operations and manage the whole team;

- Software Engineers – the individuals with the required technological expertise to accomplish the desired product development;

- Marketing Managers – the marketers who will plan and implement the marketing efforts mentioned on the communication mix;

- Sales Account Strategist – the specialists who will have a closer relationship with customers through the mentioned functions (acquisition, consultancy and support);

- People Operations Manager – the responsible for the administrative and people-oriented activities, who will be also responsible for accounting and financial processes.

¹⁹ The Human Resources Planning may be found on the annex 12.4.2. Human Resources Planning.

8.6.2. Brand

8.6.2.1. Name

The name for the proposed platform is Cataploy.

This word's origin is the combination of 3 main elements: catapult + employers + play. The reference to a catapult ("Cata") is related to the fact that this is a throwing game and the experience itself is exactly throwing the users to a job opportunity through a catapult.

The second part of the name ("ploy") is both referring to employment, which is the objective that the players want to achieve, and to play, since it is done by playing a game.

It is important to notice that this naming also reveals an innovative approach to this market, which is coherent with its unique value proposition. This identity focus on the experience itself, as described above, while the existing competitors mainly focus on the final objective (with very similar names such as Sapo Emprego or Alerta Emprego).

8.6.2.2. Message

As mentioned before, the main message promoted by the brand will revolve around the uniqueness of the platform and the differentiated experience it provides for the job searching process.

The slogan proposed for this game is "Let's jump!".

This expression refers to 2 different aspects: (1) the first word (Let's) that relates to us, as group of people, instead of focusing on only one individual, which comes from importance of social connections and crowdsourcing efforts for the players' success; and (2) the second word (jump!) that relates to the throwing element of the game, since the players seem to be jumping directly to a new job.

This sentence will also appear in the game itself, being present as a motivational factor for the players to play and to throw themselves for the job opportunities.

8.6.2.3. Corporate Branding

The proposed corporate branding elements for this company can be found in the annex 12.4.3. Corporate Branding. These include the main components to be used in the game's design and promotion and also in corporate resources:

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- Colour scheme – set of primary and secondary colours to be used. The main colour is green since it is usually associated to positive emotions and scenarios, such as renewal and growth. These seem to have a great match with the platform's value propositions.
- Logotype – this visual not only reveals the game's name as it also contains a draw of a catapult and graphic hints that refer to the throwing process, being once again coherent.
- Logo and icon – based on the logotype, there is also a logo (being both in colours or black and white) which will have multiple uses: (1) it will be the icon for the mobile application (which appears on the applications' stores and on the mobile devices after installation); (2) it will be used on social media (as the main profile's photo); and (3) it will be used for corporate resources as documents or promotional materials.

8.6.3. Financial Resources

In order to accomplish the mentioned activities and for the business to run successfully, it will be necessary an initial investment that may come from external financial support, such as bank loans, risk capital funds or credit lines. In the current case, it is assumed that the initial investment will be undertaken by a business angel. The provided capital will need to support the company's early costs (such as personnel, marketing or administrative costs) and it will be done according to a given required rate of return.

8.7. Key Partners

8.7.1. Education Partners

Being one of the customer segments the young job seekers, having partnerships with entities as polytechnic schools and universities may be a very efficient tactic for attracting new players. This may be achieved by organizing events on those schools such as soft skills workshops (that help preparing those students for entering the labour market), social events or other activities, which may increase the brand's notoriety among the students. These partnerships are also interesting on the schools' perspective, since the game may help their students achieve their first job and contribute to increasing the school's employment rates.

Also focusing on these young individuals, there are other organizations which may became good partners: students' associations such as students' unions and junior enterprises. Those are usually fully structured and managed by students, who have the

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interest of developing their careers. Having joint collaborations with them may also help increase the game's notoriety and attract more players.

8.7.2. Corporate Partners

On the employers' side, there are also possible beneficial partnerships. Some of the organizations that may struggle more to get new hires are start-ups, usually due to not having an established recruitment strategy yet or because, being a new company, they still have low brand's notoriety and get low volumes of job applicants.

For this reason, start-up incubators and accelerators such as Startup Lisboa or Faber Ventures may be great partners for this game's success. These start-ups of their portfolios might be interested in using the platform in order to reach new job candidates and, through this partnership, it is easier for the game to have more customers on the employers' side.

8.8. Revenue Streams

8.8.1. Advertising

Job seekers will have free access to use the game, as it happens with other existing job portals. Even though the main revenue stream will come from the employers' side, who are the ones that have interest and capital for investing in recruitment strategies and channels, job seekers playing the game may also allow a secondary source of revenue: monetizing the mobile application with advertising. This is possible by showing ads inside the game and monetizing through advertising networks such as Google AdMob, since these networks pay according to the volume of the ads' views by the players using the mobile application.

It is then relevant to forecast the potential volume of acquired users and visits to the game. According to the previously mentioned communication tactics that may help with new users' acquisition (such as Search Engine Marketing or Partnerships), these will lead interested individuals in getting the game to the official website mainly by 2 ways: paid and organic traffic. By exploring the potential players' volume coming from both traffic sources, it is possible to forecast potential revenues.

8.8.1.1. Paid Traffic

The paid traffic will be acquired through the AdWords campaigns mentioned before. In order for those campaigns to be successful, they should be targeting the search terms used by the customer segment (job seekers) so that they can reach potentially interested users.

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According to the tool Google Global Market Finder²⁰, the keywords with higher volume of monthly searches in Portugal related to this topic are: “empregos”, “ofertas de emprego”, “curriculo”, “empregos online”, “procura de emprego”, “sites de emprego”, “procurar emprego”, “bolsa de emprego”, “procuo emprego” and “anuncios de emprego”. According to Google Keyword Planner²¹, one advertising campaign that contains these keywords have a potential reach of approximately 5.373 clicks per month (which would mean a cost of 304 US dollars – or 276.72 euros – per month, based on a 10 US dollars daily budget).

Having those 5.373 potential monthly website visitors, it is relevant to understand the number of visitors who would result in conversions, I mean, who would download and install the game. Assuming a standard conversion rate of 5%, it would mean having approximately 269 new game installs per month coming from this source.

8.8.1.2. Organic Traffic

According to SimilarWeb’s data, 2 out of 4 of the main players in this market also have both paid and organic traffic, having the following distribution: (1) Net Empregos: 94,47% (organic) and 5,53% (paid); and Alerta Emprego: 92,76% (organic) and 7,24% (paid). These main competitors reveal an average of 93,62% of their traffic coming from organic search and 6,39% coming from paid search. Since it was forecasted above that 269 new game installs per month would come by paid traffic, it is possible to assume that the organic search would lead to approximately 3.941 new game installs per month.

8.8.1.3. Revenue Overview

Given the previous estimations, it is possible to forecast potential revenues from advertising²². It is important to note that the following assumptions were made during those calculations:

- Sources’ distribution – the percentage of traffic coming from each source (paid or organic) was assumed to be constant during the mentioned time period.
- Churn rate – in the initial year, the game will have a lower volume of active opportunities. For that reason, there is a higher probability of new users to quit playing the game after their first visit. For that reason, it is assumed an initial 80% churn rate

²⁰ This tool’s usage may be found on the annex 12.4.4. Advertising’s Paid Traffic.

²¹ This tool’s usage may be found on the annex 12.4.4. Advertising’s Paid Traffic.

²² The advertising’s revenues may be found on the annex 12.4.5. Advertising’s Revenue Maps.

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(meaning 80% of the users will quit playing the game after their first interaction) and this rate will decrease 1% each month during the first year (since the volume of opportunities will keep increasing, which improves the game attractiveness). For the second year, it will be assumed a 60% churn rate and for the third and fourth years it will be assumed a 50% churn rate.

- Monthly visits per user – this will be calculated assuming that, during the first year, each player that installed the game (and keeps playing it) visits the game one average 1.5 times per day. Given the new features in the future, it is assumed that this average will increase to 2 times per day in the following years.

- Revenue estimation – the ads that will allow this form of monetization will be placed on the game's initial screen (home page). Assuming that each visit to the game will only pass by the initial screen one time (to start playing), the number of monthly visits will match the number of monthly views of the ads. Assuming a standard rate of 1 euro per each thousand impressions (views), it is possible to achieve estimations for the obtained revenue.

8.8.2. Freemium

Having a freemium business model will allow employers to use the platform by subscribing a basic plan, for free, and also through premium plans, which offer more features and greater value for them in exchange for a high price. Even though advertising is estimated to have some revenue in the future years, those premium plans will be the main source of revenue for the company.

8.2.8.1. Freemium Plans

The previously mentioned features for employers will be available according to the plans presented on the table below. The main difference between them will be the set of available features for each one of them and also the new categories (hot jobs and ending soon jobs) that will be developed for 2019. With that upgrade, all the paid plans will have their monthly price increased, which is also justified by the increasing volume of players accessing the game each month.

Regarding the presented monthly prices, those were defined based on mainly 2 criteria: (1) direct and indirect competition's offer and also the prices of other freemium-based

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projects; and (2) the features of the different plans and the added value each of them may represent for the subscribing customers (the employers).

Freemium Services - Plans and Features						
	Initial Phase (2018)			Future Upgrade (2019)		
	Basic Plan	Premium Plan	Gold Plan	Basic Plan	Premium Plan	Gold Plan
Job postings	Up to 10	Up to 30	Unlimited	Up to 10	Up to 30	Unlimited
Sponsored inbox notifications	No	Yes	Yes	No	Yes	Yes
Customized ads	No	No	Yes	No	No	Yes
Gold opportunities	No	No	Yes	No	No	Yes
Hot jobs	No	No	No	No	Yes	Yes
Ending soon jobs	No	No	No	No	Yes	Yes
Email newsletter	No	No	Yes	No	No	Yes
Premium support	No	No	Yes	No	No	Yes
Monthly Price	Free	€ 30	€ 90	Free	€ 50	€ 150

Table 5 – Freemium Services’ Plans and Features.
Source: Author (2016).

8.2.8.2. Customer Acquisition’s Forecast

In order to calculate the potential revenue coming from the employers and subscribed plans, it is necessary to estimate the volume of employers subscribing each of the plans throughout the years²³. These estimations were made according to proposed customer acquisition’s targets and strategies:

- Free employers – the first target will be achieving up to 100 free employers by January 2018, which is when the game will be officially launched. This means that potential customers should be approached during the year 0 (2017), in order to convince them to publish job opportunities so that the game can start with enough content. For the long term (2021), the target will be achieving at least 5.000 free employers, which is a realistic value when compared with other job portals: Net Emplegos, for example, has more than 155.000 free employers registered in their platform.
- Premium employers – for this segment, the target will be achieving at least 10% of the volume of free employers, which will require successful results from the marketing and sales tactics. It is important to notice, however, that those targets growth rate will start decreasing in later years due to the increase of the plans’ prices.

²³ The freemium services’ sales map may be found on the annex 12.4.6. Sales’ Revenue Maps.

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- Gold employers – similarly to the previous segment's strategy, the target will be achieving at least 5% of the volume of free employers and the growth rate will also be lower in the long term. Even though this forecast may seem too optimistic, it is realistic if compared with real market data. Espresso Emprego, for example, is one of the paid job portals and it currently has more than 1.400 registered companies, while here the target is achieving 500 paid employers (premium and gold) by 2021.

8.2.8.3. Revenue Overview

Given the previously described assumptions, prices and features of the available plans and the customer acquisition's estimations and targets, it is possible to forecast the sales revenues coming from this revenue stream²⁴, which is the main element to contribute to the possible success or failure of this project.

8.8.3. Total Revenue

Gathering the estimations for both advertising and sales' revenues, it is possible to analyse the predicted total revenues for this project, as it may be seen on the table below.

Total Revenue Map					
	2017	2018	2019	2020	2021
Advertising Revenues	-	€4 092,93	€29 487,51	€55 289,09	€73 718,78
Sales Revenues	-	€58 500,00	€324 000,00	€372 000,00	€420 000,00
Total Revenues	-	€62 592,93	€353 487,51	€427 289,09	€493 718,78

Table 6 – Total Revenue Map from 2017 (year 0) to 2021 (year 4).
Source: Author (2016).

It is clearly stated that the revenues coming from the employers' side, with the subscribed plans, are the most impactful regarding the total expected revenues. Nevertheless, advertising reveals itself as a good secondary stream of revenue that contributes to meet the existing costs, which will be further detailed.

8.9. Cost Structure

8.9.1. Personnel Costs

As may be observed on the Financial Evaluation, the main expenses of the proposed project will be the costs with the human resources. Those are estimated following the mentioned human resources' planning and include the team members' salaries, food

²⁴ The freemium services' sales map may be found on the annex 12.4.6. Sales' Revenue Maps.

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allowances, social contributions and insurance²⁵. It is important to notice that, for the salaries calculation, it was assumed that the CEO would not receive any salary during the initial year and also that the salaries would not increase during the project's duration.

8.9.2. External Services and Supplies

All the other existing costs assumed for the proposed project were considered as external services and supplies' expenses since they refer, in fact, to services provided by external entities. Those represent a significant lower portion of the total costs, given the volume of personnel costs, but those include many different expenses such as²⁶:

- Specialized services – private office and utilities (assuming the office will be rented: this will include the rent, energies, utilities, security and internet access) and accounting services;
- Marketing – search engine marketing and promotional materials for events;
- Product development – hosting and publishing fees and software expenses;
- Administrative costs – office supplies, communications, company's creation and travel expenses.

It is relevant to note that these expenses were calculated assuming a stable Value Added Tax of 23% and that the presented values were based on requested quotations and available prices in the current market.

9. Financial Evaluation

9.1. Assumptions

As mentioned before, all the revenues and costs' maps and the present financial evaluation were calculated based on the assumption that the first year of activity of this project is 2017. This is considered as the year 0 since it will be mainly focused on the product's development and acquiring the initial customers. However, the game will only be publicly available starting from January 2018, so that will be the first year with earnings coming from the platform.

²⁵ The personnel costs' maps may be found on the annex 12.4.7. Personnel Costs.

²⁶ The external services and supplies may be found on the annex 12.4.8. External Services and Supplies.

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The current analysis will present projections for the following 4 years (which means that it represents, in total, the first 5 years of activity) for mainly one reason: being a technological start-up, the product's development over time and the market's reaction to the game may highly influence the potential results of a product like this. Having projections for a larger period of time would mean that those would not be so realistic, since until then the game may have many unexpected outcomes such as an initial greater growth or being a failed project and ending before that period.

When it comes to monetary values, the inflation rates were not considered for the presented calculations by a matter of convenience and given its small significance when it comes to the project's purpose and desired outcomes.

In terms of the investment needed, it was assumed that its coverage is done by a business angel in exchange for a required rate of return (that corresponds to 10%), which is a common scenario to happen under the circumstances of a technological start-up as this. For that reason, it was not considered the necessity of having bank loans or credit lines in order to have enough financial resources. Besides the initially expected investment, the following needed financing will be supported by the positive cash flows of the project's activity. Taking into account the available interest rates at the moment, which are low, it is assumed that the positive cash flows will not be used for investing in financial products.

Regarding that investment's usage, there will be no relevant investment in capital expenditures. The main used physical assets will be the personal computers of the team's individuals but, given the risk scenario of a project like this and having other more important costs in the early stage of the project, those will be assumed as being their personal computers (instead of being the company acquiring and owning new ones). Other possible expenditures would be owning the office, which is not the case (since it will be rented and fully furnished) and other small items such as office supplies, but given their small significance those were also not considered. For that reason, it was assumed that the CAPEX would correspond to zero and, similarly, there will be no amortisations and depreciations being used for these calculations.

9.2. Financial Analysis

9.2.1. Income Statement

Given the estimated revenues coming from sales (freemium services) and other sources (advertising) and the estimated costs, it is possible to analyse (in the table below) if the

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project's outcomes will result in positive or negative net incomes. It may be observed that the project will start having profit during the second year of having the game available and, on the following years, the net income is expected to increase, reaching more than 220.000 euros after 5 years of the project's starting point.

It is relevant to note that: (1) the operational cash flows will correspond to the net income values since there will be no depreciations and interest expenses; and (2) it was assumed a stable Corporate Income Tax of 21%.

Income Statement					
	2017	2018	2019	2020	2021
Sales Revenue	€-	€58 500,00	€324 000,00	€372 000,00	€420 000,00
External Services and Supplies	€8 151,57	€10 824,35	€14 640,95	€15 157,04	€15 257,04
Personnel Costs	€67 993,20	€117 244,60	€166 496,00	€181 750,80	€197 005,60
Other Sources of Revenue	€-	€4 092,93	€29 487,51	€55 289,09	€73 718,78
EBITDA	-€76 144,77	-€65 476,02	€172 350,57	€230 381,25	€281 456,14
Amortization and depreciation	€-	€-	€-	€-	€-
Earnings Before Interest and Taxes (EBIT)	-€76 144,77	-€65 476,02	€172 350,57	€230 381,25	€281 456,14
Interest Expense	€-	€-	€-	€-	€-
Earnings Before Taxes (EBT)	-€76 144,77	-€65 476,02	€172 350,57	€230 381,25	€281 456,14
Corporate Income Tax (21%)	€-	€-	€6 453,25	€48 380,06	€59 105,79
Net Income	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
Operational Cash Flows	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35

Table 7 – Income Statement from 2017 (year 0) to 2021 (year 4).
Source: Author (2016).

9.2.2. Financial Statement²⁷

The Income Statement shows that the EBITDA will be negative for the first 2 years. Given that forecast and the investment for Working Capital, it is needed an initial investment of 164.318,55 euros (supported by a business angel, as previously stated).

Investment Coverage (2017 and 2018)			
	Need	Capital	Coverage
Investment in Working Capital	€22 697,76	€ 164 318,55	€ 164 318,55
Negative EBITDA	€141 620,79		
Total	€164 318,55	€164 318,55	€164 318,55

Table 8 – Investment coverage for the early years (2017 and 2018).
Source: Author (2016).

The Financial Statement (Balance) evidences that, as explained before, the company will have a low volume of owned assets (besides cash and bank deposits), given the

²⁷ Consult the annex 12.5.1. Financial Statement Calculations.

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technological aspects of this project. As for the equity, it is mainly constituted by the share capital initially invested and the expected positive results throughout its activity.

Balance Sheet					
	2017	2018	2019	2020	2021
Assets					
Fixed Assets	€-	€-	€-	€-	€-
Current Assets					
Inventory	€-	€-	€-	€-	€-
Clients	€-	€-	€-	€-	€-
State and other Public Entities	€1 874,86	€-	€-	€-	€-
Cash and Bank Deposits	€87 034,50	€26 692,99	€214 568,98	€441 417,46	€586 397,70
Total Assets	€88 909,36	€26 692,99	€214 568,98	€441 417,46	€586 397,70
Equity and Liabilities					
i) Equity					
Capital	€164 318,55	€164 318,55	€164 318,55	€164 318,55	€164 318,55
Legal Reserves	€-	€-	€-	€8 294,87	€17 394,92
Retained Earnings	€-	-€76 144,77	-€141 620,79	€15 981,66	€97 882,20
Net Income	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
Total Equity	€88 173,78	€22 697,76	€188 595,08	€370 596,26	€501 946,02
ii) Liabilities					
Non-Current Liabilities	€-	€-	€-	€-	€-
Current Liabilities					
State and other Public Entities	€735,58	€3 995,23	€19 520,65	€22 441,14	€25 345,89
Corporate Tax Estimation	€-	€-	€6 453,25	€48 380,06	€59 105,79
Obtained Financing	€-	€-	€-	€-	€-
Total Liabilities	€735,58	€3 995,23	€25 973,90	€70 821,20	€84 451,68
Total Equity and Liabilities	€88 909,36	€26 692,99	€214 568,98	€441 417,46	€586 397,70
<i>Balance Control</i>	€-	€-	€-	€-	€-

Table 9 – Financial Statement (Balance) from 2017 to 2021.

Source: Author (2016).

For the Working Capital's map and the Balance Sheet's calculations, there were also more assumptions taken in consideration:

- The defined cash reserves policy requires that, every year, it must cover 25% of the personnel costs and 25% of the expenses in specialized services and supplies of that year;
- For the Personal Income Tax Retention's calculation, it was assumed a personal income tax for single persons with no dependent;
- The company will start paying dividends in the second year it generates profits (2020). It was assumed a percentage of 50% in 2020 and 70% in 2021. Those dividends will be liable to taxation at a stable rate of 28%;

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- In Portugal, it is mandatory that at least 5% of each year's profits are appropriated to a legal reserve until this reserve equals the minimum requirement of 20% of share capital.

9.2.3. Economic Viability

As may be analysed in the annex²⁸, the Free Cash Flows for the Firm (FCFF) and Free Cash Flows for the Equity (FCFE) were obtained. However, for the current economic viability analysis, the main indicators were calculated based on the Operational Cash Flows and the required rate of return (by the investor).

Economic Viability					
	2017	2018	2019	2020	2021
Operational Cash Flows	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
Required Rate of Return	10%				
Net Present Value (NPV)	€290 045,26				
Internal Rate of Return (IRR)	73,89%				
Accumulated Cash Flows	-€76 144,77	-€141 620,79	€24 276,53	€206 277,71	€428 628,06
Payback Period					
Year	2	0,8537	Year	2019	
Month	10,2440		Month	November	
Day	307,3195		Day	3	

Table 10 – Economic Viability indicators for the project.
Source: Author (2016).

The **Net Present Value** (NPV) is estimated to be 290.045,26 euros. Being this a positive (and relatively high) value, it means that it is economically viable to develop this project and that it will provide benefits for its stakeholders, since the current value of the estimated earnings will exceed the anticipated costs of this project.

The observed **Internal Rate of Return** (IRR), which is the rate of growth the project is expected to generate, is 73,89%, being significantly higher than the required rate of return (10%). This also supports that this project will be profitable and there are good reasons to develop it according to the proposed business plan.

The **Payback Period**, which means the time period required to recover the investment, seems to be 2 years, 10 months and 3 days. If the investment occurs on January 1st 2017, it will be recovered on November 3rd 2019, which is in the third year of activity.

²⁸ Consult the annex 12.5.2. Economic Viability.

9.2.4. Economic and Financial Indicators²⁹

The **Return on Assets** (ROA) rate, which is the percentage of every euro invested in the business that was returned to the investor as profit, allow to understand how effective the company is at using its assets to generate profit. During the first 2 years, it is possible to see that the company was not generating value. However, the recovery occurs right after those years, due to the higher (and positive) net income registered in 2019.

The **Return on Equity** (ROE) shows what percentage of profit the investor earns for every euro of equity invested in the company. Similarly, this rate is negative on the first 2 years but it starts recovering on the following years for the same reason, which seems to be a positive medium-term scenario for the investor.

As expected, the **Financial Autonomy's** ratio is high since the majority of the project's assets is owned by the investor.

Sales Revenues will have a significant growth rate in 2019, which will decrease in the next years because of the projected mitigation due to the increasing services' prices.

The **Net Profit Margin** indicates what percentage of the sales revenue will remain after all costs have been considered, which will be approximately 50% starting from 2019.

10. Conclusion

This project was designed based on the observed data from the industry and from market trends. Given the lack of more detailed information and quantitative insights from the existing players and given all the assumptions that were considered for all the estimations and forecasts, it is comprehensible to say that this project only represents a draft of a possible Business Plan in order to pursue the detected business idea.

Nevertheless, the main objective was successfully fulfilled: it presents a complete approach on validating the existence of a business opportunity and a proposal for the needed implementation strategies and tactics for accomplishing the company's creation.

Even though that youth unemployment is a significantly severe social issue and that it would be hard for this project alone to be able to drastically decrease that issue, this whole analysis provides enough contextual and statistical evidence to support pursuing this opportunity and founding a new business venture to successfully disrupt this market!

²⁹ Consult the annex 12.5.3. Economic and Financial Indicators.

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12. Annex

12.1. Annex I – Literature Review

12.1.1. Portugal's Unemployment Rate



Chart 1 – Portugal's unemployment rate (%) from 1983 until 2016.
Source: Statistics Portugal (found on www.tradingeconomics.com).

12.1.2. Portugal's Youth Unemployment Rate

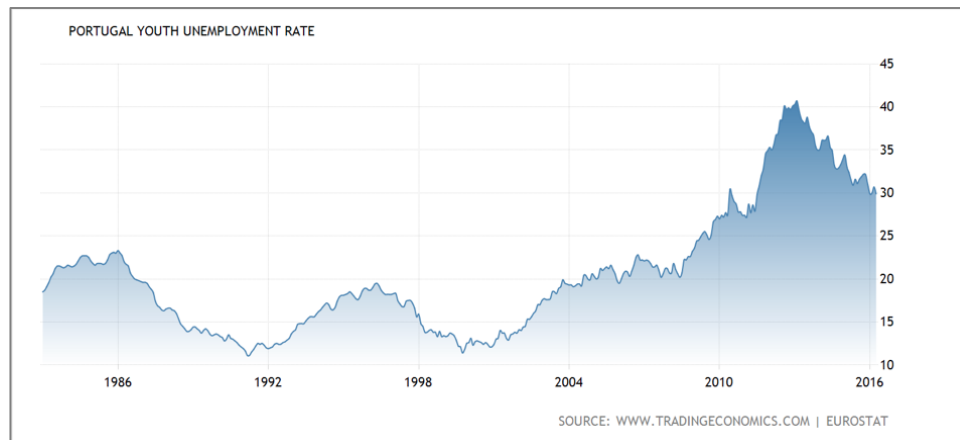


Chart 2 – Portugal's youth unemployment rate (%) from 1983 until 2016.
Source: Eurostat (found on www.tradingeconomics.com).

12.2. Annex II – PESTEL Analysis

12.2.1. Portugal's Gross Domestic Product (GDP)



Chart 3 – Portugal's GDP (USD Billion) from 2006 until 2016.
Source: World Bank Group (found on www.tradingeconomics.com).

12.2.2. Portugal's GDP per Capita

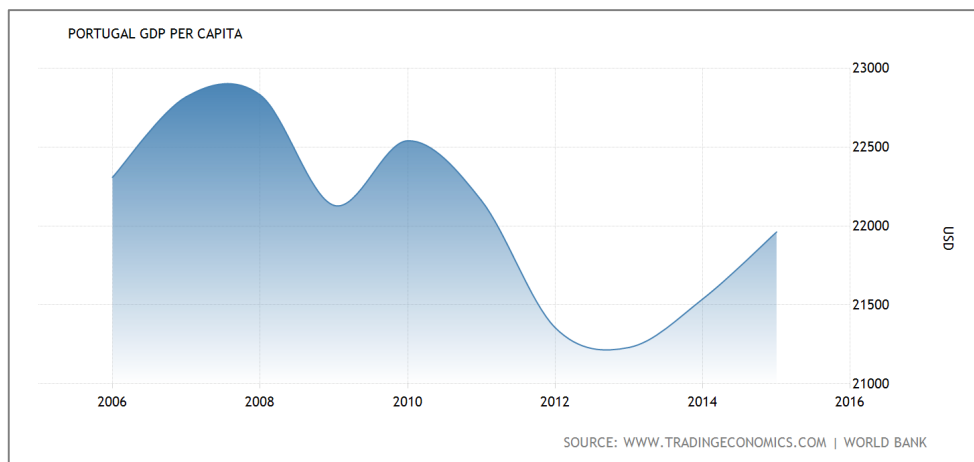


Chart 4 – Portugal's GDP per capita (USD) from 2006 until 2016.
Source: World Bank Group (found on www.tradingeconomics.com).

12.2.3. Portugal's Balance of Trade

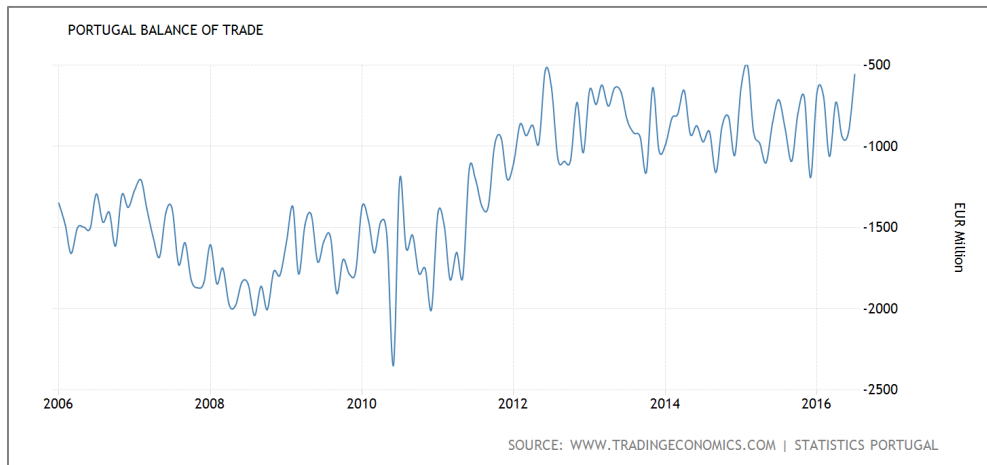


Chart 5 – Portugal's Balance of Trade (EUR Million) from 2006 until 2016.
Source: Statistics Portugal (found on www.tradingeconomics.com).

12.2.4. Portugal's Average Nominal Monthly Wage



Chart 6 – Portugal's Average Nominal Monthly Wage (EUR/Month) from 2011 until 2015.
Source: Gabinete de Estratégia e Planeamento (found on www.tradingeconomics.com).

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12.2.5. Portugal and Euro Area Labour Costs

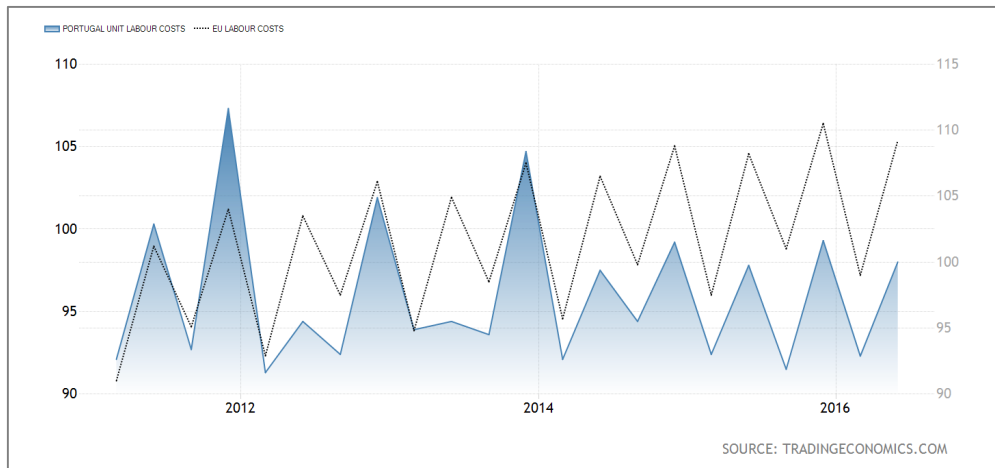


Chart 7 – Portugal and Euro Area Labour Costs (Index Points) from 2011 until 2016.
Source: tradingeconomics.com.

12.2.6. Unemployment in Portugal (total and by age group)

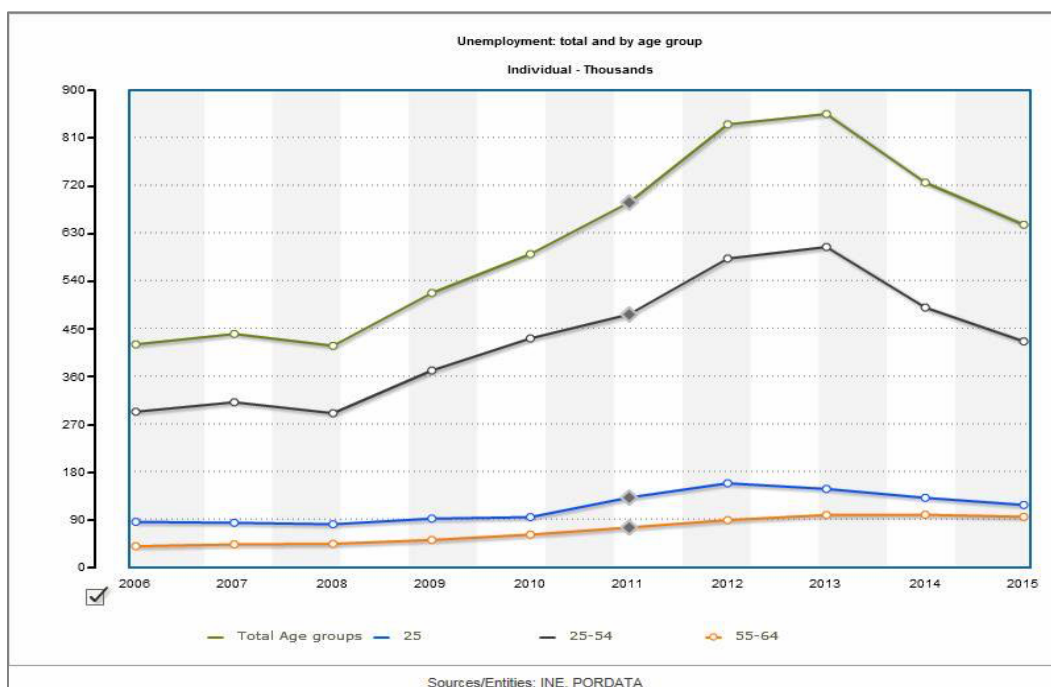


Chart 8 – Unemployment in Portugal: total and by age group (thousands individuals) from 2006 until 2015.
Source: Statistics Portugal and PORDATA.

12.2.7. Unemployment in Portugal (total and by type)

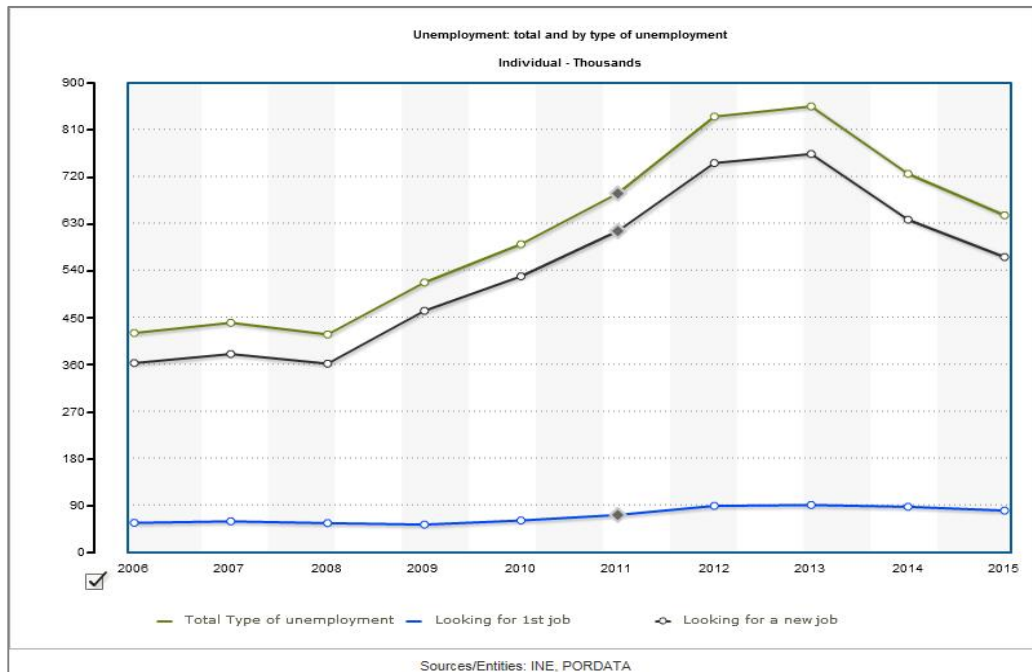


Chart 9 – Unemployment in Portugal: total and by type of unemployment (thousands individuals) from 2006 until 2015. Source: Statistics Portugal and PORDATA.

12.2.8. Unemployment in Portugal (total and by education levels)

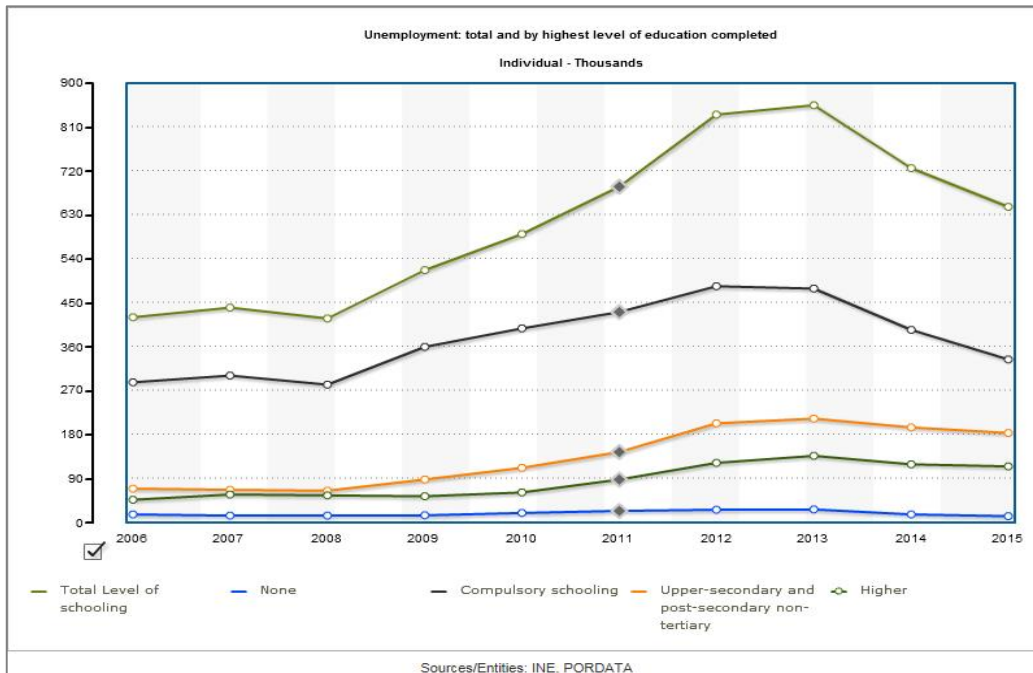


Chart 10 – Unemployment in Portugal: total and by highest level of education completed (thousands individuals) from 2006 until 2015. Source: Statistics Portugal and PORDATA.

12.2.9. Portuguese Population (total and by age groups)

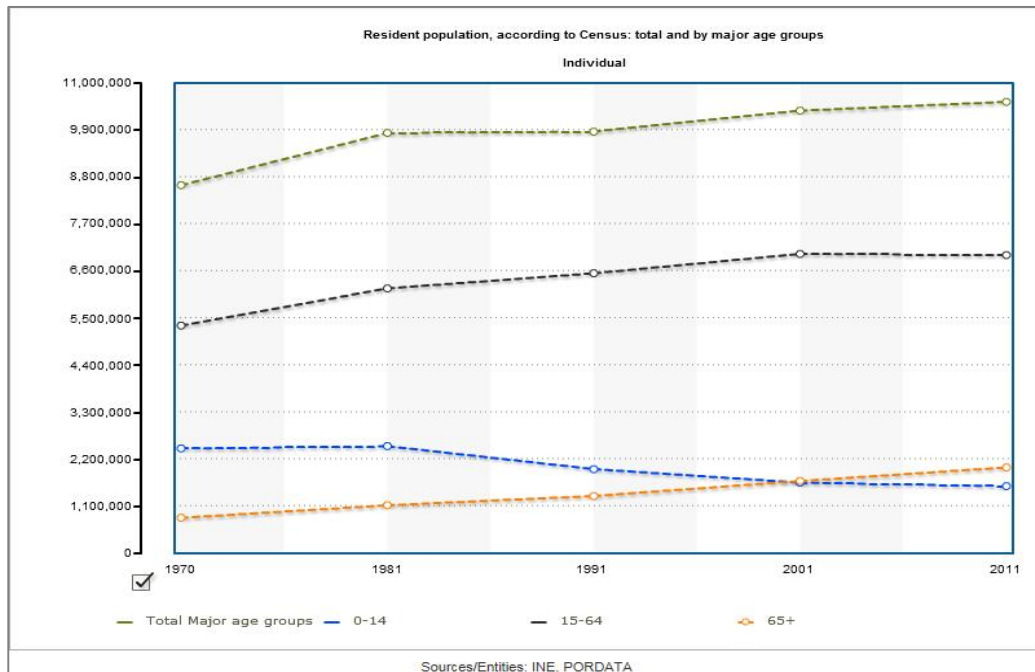


Chart 11 – Population in Portugal: total and by age groups (individuals) from 1970 until 2011. Source: Statistics Portugal and PORDATA.

12.2.10. Portugal's revenue in the "Mobile Games" segment

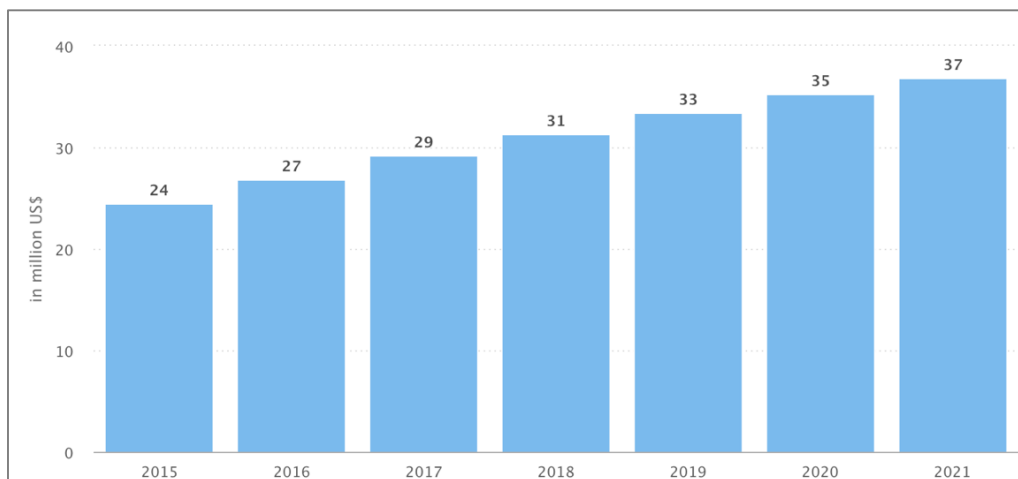


Chart 12 – Portugal's revenue (million US\$) in the "Mobile Games" segment. Source: Statista 2016 (found on www.statista.com).

12.2.11. Portuguese users in the "Mobile Games" segment (by age groups)

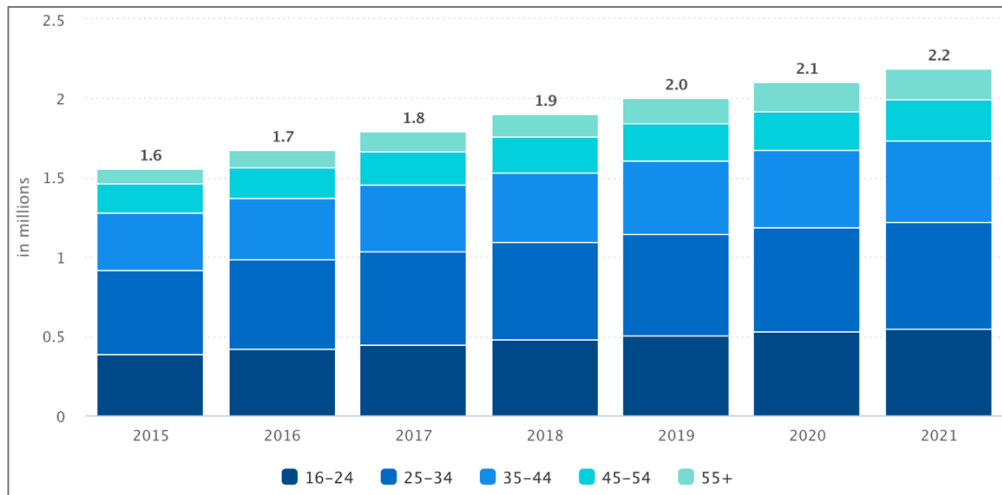


Chart 13 – Portuguese users (in millions) in the "Mobile Games" segment by age groups.
Source: Statista 2016 (found on www.statista.com).

12.2.12. Portugal's Tourism Revenues

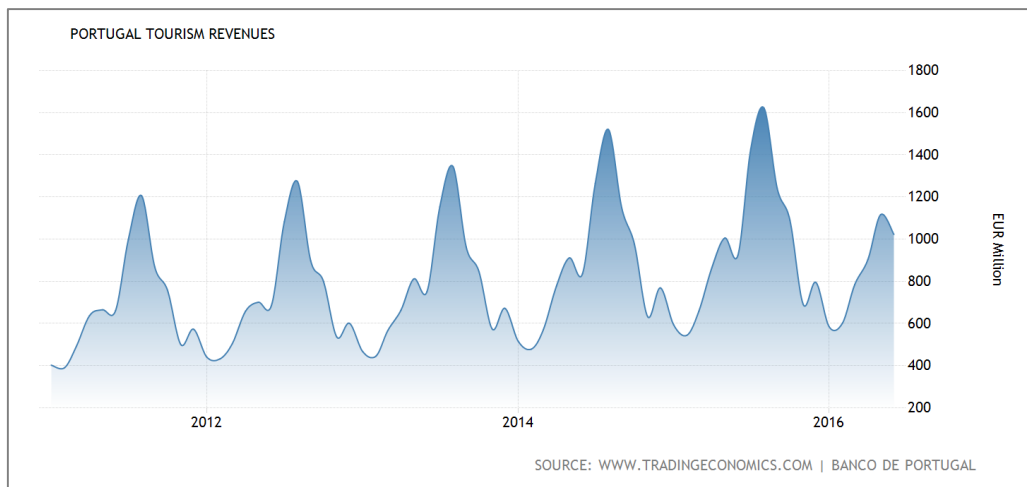


Chart 14 – Portugal's Tourism Revenues (EUR Million) from 2011 until 2016.
Source: World Bank Group (found on www.tradingeconomics.com).

12.3. Annex III – Industry Analysis

12.3.1. Michael Porter’s Five Forces of Competition

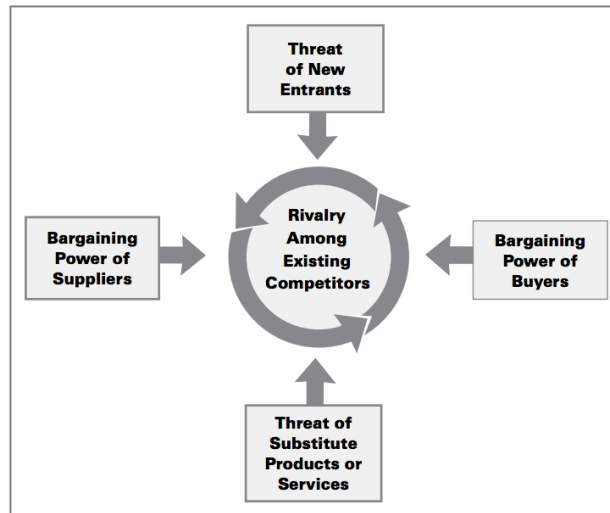


Figure 3 – Michael Porter’s Five Forces that shape Industry Competition. Source: Michael Porter (Harvard Business Review).

12.3.2. Portuguese Job Portals’ Mapping

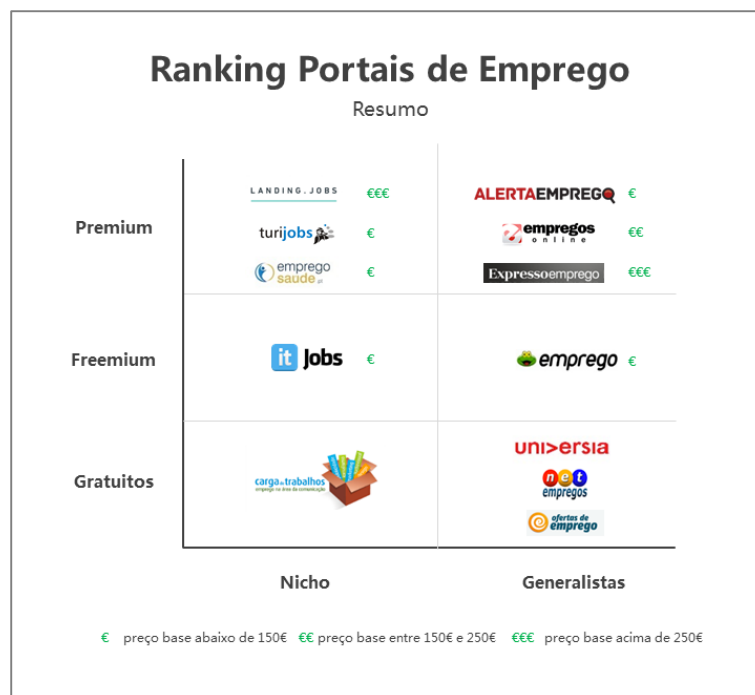


Figure 4 – Portuguese Job Portals’ mapping according to positioning and revenue model. Source: Alerta Emprego (2015).

12.4. Annex IV – Business Plan

12.4.1. Game’s Screenshots (with illustrative examples)

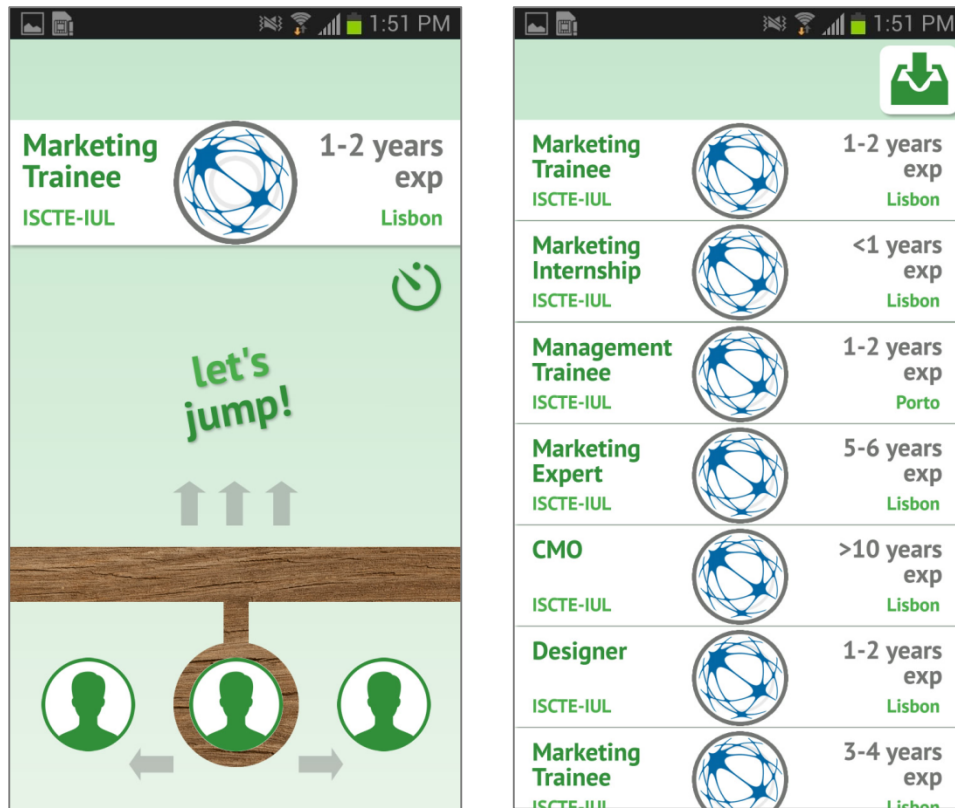


Figure 5 – Screenshots of the proposed game: (1) game screen; and (2) jobs inbox.
Source: Author (2016).

12.4.2. Human Resources Planning

Human Resources Planning					
	2017	2018	2019	2020	2021
CEO	1	1	1	1	1
Software Engineer	2	2	3	3	3
Marketing Manager	1	2	2	2	3
Sales Account Strategist	1	2	3	4	4
People Operations Manager	-	-	1	1	1
Team elements	5	7	10	11	12

Table 11 – Map of the Human Resources Planning.
Source: Author (2016).

12.4.3. Corporate Branding

12.4.3.1. Colour Scheme

#388E3C R56 G142 B60	#4CAF50 R76 G175 B80	#C8E6C9 R200 G230 B201	#FFFFFF R255 G255 B255
#8BC34A R139 G195 B74	#212121 R33 G33 B33	#757575 R117 G117 B117	#BDBDBD R189 G189 B189

Figure 6 – Colour scheme with primary (top) and secondary (bottom) colours.
Source: Author (2016).

12.4.3.2. Logotype, Logo and Icon



Figure 7 – (1) Logotype; (2) logo/icon (coloured version); and (3) logo/icon (black & white version).
Source: Author (2016).

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12.4.4. Advertising's Paid Traffic

12.4.4.1. Google Global Market Finder

Geographic distribution

Location	Opportunity [?]	Local Monthly Searches [?]	Recommended Bid [?]	Competition [?]
Czech Republic		92,630	\$0.04	
Slovenia		35,290	\$0.08	
Poland		24,790	\$0.46	
United Kingdom		309,490	\$0.61	
Portugal		52,040	\$0.11	
English		2,540	\$0.22	
Portuguese		49,500	\$0.10	
empregos		49,500	\$0.10	
Hide additional keyword suggestions from Keyword Planner				
curriculo		8,100	\$0.05	
ofertas de emprego		14,800	\$0.11	
vagas		720	\$0.08	
bolsa de emprego		1,600	\$0.11	
empregos online		5,400	\$0.16	
procura de emprego		2,900	\$0.08	
sites de emprego		2,400	\$0.10	
procurar emprego		2,400	\$0.10	
procuo emprego		1,600	\$0.11	
primeiro emprego		590	\$0.09	
site empregos		880	\$0.13	
oportunidade de emprego		720	\$0.13	
anuncios de emprego		1,000	\$0.16	
classificados empregos		480	\$0.09	
anuncio de emprego		480	\$0.12	
agencia de empregos		320	\$0.13	
emprego de motorista		170	\$0.04	
vagas de emprego		590	\$0.27	
classificados de emprego		210	\$0.08	
emprego ja		170	\$0.09	

Figure 8 – Keywords related to employment and local monthly searches.
Source: Google Global Market Finder (2016).

12.4.4.2. Google Keyword Planner

<input type="checkbox"/> Keyword	Ad Group	Max. CPC	Clicks ↓	Impr.	Cost	CTR	Avg. CPC	Avg. Pos.
<input type="checkbox"/> ofertas de emprego	empregos	\$0.10	2,701.21	170,809.14	\$165.73	1.6%	\$0.06	2.45
<input type="checkbox"/> empregos	empregos	\$0.10	826.04	33,635.96	\$50.33	2.5%	\$0.06	2.82
<input type="checkbox"/> procura de emprego	empregos	\$0.10	490.81	11,934.24	\$21.31	4.1%	\$0.04	3.08
<input type="checkbox"/> procuo emprego	empregos	\$0.10	372.46	8,729.24	\$13.93	4.3%	\$0.04	2.39
<input type="checkbox"/> sites de emprego	empregos	\$0.10	365.70	11,771.57	\$14.93	3.1%	\$0.04	2.80
<input type="checkbox"/> procurar emprego	empregos	\$0.10	255.34	7,786.29	\$15.31	3.3%	\$0.06	3.65
<input type="checkbox"/> empregos online	empregos	\$0.10	245.34	8,869.03	\$14.38	2.8%	\$0.06	2.89
<input type="checkbox"/> bolsa de emprego	empregos	\$0.10	89.12	4,372.88	\$6.46	2.0%	\$0.07	2.40
<input type="checkbox"/> curriculo	empregos	\$0.10	19.48	339.31	\$1.08	5.7%	\$0.06	1.68
<input type="checkbox"/> anuncios de emprego	empregos	\$0.10	7.66	710.39	\$0.54	1.1%	\$0.07	2.67
Total			5,373.15	258,958.06	\$304.00	2.1%	\$0.06	2.59

Show rows 30 1 - 10 of 10 keywords |< < > >|

Figure 9 – Keywords related to employment with potential reach (clicks and costs).
Source: Google Keyword Planner (2016).

12.4.5. Advertising's Revenue Maps

12.4.5.1. Advertising Revenue (2018)

Revenue Map - Advertising												
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Paid Users	269	538	807	1 076	1 345	1 614	1 883	2 152	2 421	2 690	2 959	3 228
Organic Users	3 941	7 882	11 823	15 764	19 705	23 646	27 587	31 528	35 469	39 410	43 351	47 292
Total Users	4 210	8 420	12 630	16 840	21 050	25 260	29 470	33 680	37 890	42 100	46 310	50 520
Frequent Users	842	1 768	2 779	3 873	5 052	6 315	7 662	9 094	10 609	12 209	13 893	15 661
Views (visits)	46	46	46	46	46	46	46	46	46	46	46	46
Total Views (visits)	38 395	80 630	126 704	176 618	230 371	287 964	349 396	414 668	483 780	556 730	633 521	714 151
Advertising Revenues	€38,40	€80,63	€126,70	€176,62	€230,37	€287,96	€349,40	€414,67	€483,78	€556,73	€633,52	€714,15

Table 12 – Estimated revenues (EUR) coming from advertising in 2018.
Source: Author (2016).

12.4.5.2. Advertising Revenue (2017-2021)

Revenue Map - Advertising					
	2017	2018	2019	2020	2021
Paid Users	-	-	6 456	9 684	12 912
Organic Users	-	-	94 584	141 876	189 168
Total Users	-	-	101 040	151 560	202 080
Frequent Users	-	-	40 416	75 780	101 040
Views (visits)	-	-	730	730	730
Total Views (visits)	-	4 092 928	29 487 514	55 289 088	73 718 784
Advertising Revenues	-	€4 092,93	€29 487,51	€55 289,09	€73 718,78

Table 13 – Estimated revenues (EUR) coming from advertising from 2017 to 2021.
Source: Author (2016).

12.4.6. Sales' Revenue Maps

12.4.6.1. Sales Revenue (2018)

Sales Map - Freemium Services												
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Free Employers	100	200	300	400	500	600	700	800	900	1 000	1 100	1 200
Premium Employers	10	20	30	40	50	60	70	80	90	100	110	120
Gold Employers	5	10	15	20	25	30	35	40	45	50	55	60
Free Revenue	€-	€-	€-	€-	€-	€-	€-	€-	€-	€-	€-	€-
Premium Revenue	€300,00	€600,00	€900,00	€1 200,00	€1 500,00	€1 800,00	€2 100,00	€2 400,00	€2 700,00	€3 000,00	€3 300,00	€3 600,00
Gold Revenue	€450,00	€900,00	€1 350,00	€1 800,00	€2 250,00	€2 700,00	€3 150,00	€3 600,00	€4 050,00	€4 500,00	€4 950,00	€5 400,00
Sales Revenues	€750,00	€1 500,00	€2 250,00	€3 000,00	€3 750,00	€4 500,00	€5 250,00	€6 000,00	€6 750,00	€7 500,00	€8 250,00	€9 000,00

Table 14 – Estimated revenues (EUR) coming from sales in 2018.
Source: Author (2016).

12.4.6.2. Sales Revenue (2017-2021)

Sales Map - Freemium Services					
	2017	2018	2019	2020	2021
Free Employers	-	1 200	3 000	4 000	5 000
Premium Employers	-	120	300	350	400
Gold Employers	-	60	80	90	100
Free Revenue	-	€-	€-	€-	€-
Premium Revenue	-	€23 400,00	€180 000,00	€210 000,00	€240 000,00
Gold Revenue	-	€35 100,00	€144 000,00	€162 000,00	€180 000,00
Sales Revenues	-	€58 500,00	€324 000,00	€372 000,00	€420 000,00

Table 15 – Estimated revenues (EUR) coming from sales from 2017 to 2021.
Source: Author (2016).

12.4.7. Personnel Costs

12.4.7.1. Total Personnel Costs

Personnel Costs					
	2017	2018	2019	2020	2021
Wages + Food allowance	€55 627,20	€95 947,60	€136 268,00	€148 774,80	€161 281,60
Social contribution (company) (23,75%)	€11 970,00	€20 615,00	€29 260,00	€31 920,00	€34 580,00
Workmen's compensation insurance (1%)	€396,00	€682,00	€968,00	€1 056,00	€1 144,00
Total Personnel Costs	€67 993,20	€117 244,60	€166 496,00	€181 750,80	€197 005,60

Table 16 – Estimated total personnel costs (EUR) from 2017 to 2021.
Source: Author (2016).

12.4.7.2. Personnel Costs (detailed by year)

Personnel Costs (detailed by year)								
	Salary (month)	Food Allowance (day)	Holidays	Working days	2017		2018	
					Salary	Food allow.	Salary	Food allow.
CEO	€1 000,00	€5,40	22	22	€-	€-	€14 000,00	€1 306,80
Software Engineer	€2 000,00	€5,40	22	22	€28 000,00	€2 613,60	€28 000,00	€2 613,60
Marketing Manager	€800,00	€5,40	22	22	€11 200,00	€1 306,80	€22 400,00	€2 613,60
Sales Account Strategist	€800,00	€5,40	22	22	€11 200,00	€1 306,80	€22 400,00	€2 613,60
People Operations Manager	€800,00	€5,40	22	22	€-	€-	€-	€-
Personnel Costs					€50 400,00	€5 227,20	€86 800,00	€9 147,60

Personnel Costs (detailed by year)						
	2019		2020		2021	
	Salary	Food allow.	Salary	Food allow.	Salary	Food allow.
CEO	€14 000,00	€1 306,80	€14 000,00	€1 306,80	€14 000,00	€1 306,80
Software Engineer	€42 000,00	€3 920,40	€42 000,00	€3 920,40	€42 000,00	€3 920,40
Marketing Manager	€22 400,00	€2 613,60	€22 400,00	€2 613,60	€33 600,00	€3 920,40
Sales Account Strategist	€33 600,00	€3 920,40	€44 800,00	€5 227,20	€44 800,00	€5 227,20
People Operations Manager	€11 200,00	€1 306,80	€11 200,00	€1 306,80	€11 200,00	€1 306,80
Personnel Costs	€123 200,00	€13 068,00	€134 400,00	€14 374,80	€145 600,00	€15 681,60

Table 17 – Estimated personnel costs (EUR) detailed by year from 2017 to 2021.
Source: Author (2016).

12.4.8. External Services and Supplies

12.4.8.1. External Services and Supplies Overview

External Services and Supplies					
	2017	2018	2019	2020	2021
Specialized Services					
Specialized Services	€3 722,50	€3 739,50	€7 040,00	€7 040,00	€7 040,00
Marketing	€2 948,71	€5 599,41	€5 699,41	€5 799,41	€5 899,41
Supplies					
Office Supplies	€400,00	€400,00	€400,00	€400,00	€400,00
Energies					
Electricity	€-	€-	€-	€-	€-
Water	€-	€-	€-	€-	€-
Various services					
Product Development	€148,16	€97,14	€97,14	€97,14	€97,14
Communications	€272,20	€388,29	€504,39	€620,49	€620,49
Litigation	€360,00	€-	€-	€-	€-
Travel expenses	€300,00	€600,00	€900,00	€1 200,00	€1 200,00
Cleaning, hygiene and comfort	€-	€-	€-	€-	€-
Total without VAT	€8 151,57	€10 824,35	€14 640,95	€15 157,04	€15 257,04
VAT	€1 874,86	€2 489,60	€3 367,42	€3 486,12	€3 509,12
Total with VAT	€10 026,43	€13 313,95	€18 008,36	€18 643,16	€18 766,16

Table 18 – Estimated costs (EUR) with external services and supplies from 2017 to 2021.

Source: Author (2016).

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12.4.8.2. Detailed External Services and Supplies

External Services and Supplies (supporting calculations)					
	2017	2018	2019	2020	2021
Specialized Services					
Private Office and Utilities	€3 360,00	€3 360,00	€6 720,00	€6 720,00	€6 720,00
Accounting					
Agreement Fee	€320,00	€320,00	€320,00	€320,00	€320,00
Number of Workers	€5,00	€7,00	-	-	-
Payroll Processing	€42,50	€59,50	€-	€-	€-
Accounting Expenses	€362,50	€379,50	€320,00	€320,00	€320,00
Total without VAT	€3 722,50	€3 739,50	€7 040,00	€7 040,00	€7 040,00
VAT	€856,18	€860,09	€1 619,20	€1 619,20	€1 619,20
Total with VAT	€4 578,68	€4 599,59	€8 659,20	€8 659,20	€8 659,20
Marketing					
Search Engine Marketing	€2 699,71	€5 399,41	€5 399,41	€5 399,41	€5 399,41
Pop Up Display Stand	€199,00	€-	€-	€-	€-
Promotional Materials	€50,00	€200,00	€300,00	€400,00	€500,00
Total without VAT	€2 948,71	€5 599,41	€5 699,41	€5 799,41	€5 899,41
VAT	€678,20	€1 287,87	€1 310,87	€1 333,87	€1 356,87
Total with VAT	€3 626,91	€6 887,28	€7 010,28	€7 133,28	€7 256,28
Product Development					
Website Hosting	€23,88	€23,88	€23,88	€23,88	€23,88
Google Play Store fee	€18,50	€-	€-	€-	€-
Apple App Store fee	€73,26	€73,26	€73,26	€73,26	€73,26
Illustrator software	€32,52	€-	€-	€-	€-
Total without VAT	€148,16	€97,14	€97,14	€97,14	€97,14
VAT	€34,08	€22,34	€22,34	€22,34	€22,34
Total with VAT	€182,24	€119,48	€119,48	€119,48	€119,48
Communications					
Sales Account Strategists	€1,00	€2,00	€3,00	€4,00	€4,00
Package Costs	€334,80	€477,60	€620,40	€763,20	€763,20
Total without VAT	€272,20	€388,29	€504,39	€620,49	€620,49
VAT	€62,60	€89,31	€116,01	€142,71	€142,71
Total with VAT	€334,80	€477,60	€620,40	€763,20	€763,20

Table 19 – Estimated costs (EUR) with all external services and supplies from 2017 to 2021.
Source: Author (2016).

12.5. Annex V – Financial Evaluation

12.5.1. Financial Statement Calculations

12.5.1.1. Working Capital

Working Capital					
	2017	2018	2019	2020	2021
Needs for Exploration					
Cash Reserves	€15 944,69	€26 692,99	€37 727,24	€40 982,96	€44 134,66
VAT to Receive	€1 874,86	€-	€-	€-	€-
Total Needs	€17 819,55	€26 692,99	€37 727,24	€40 982,96	€44 134,66
Resources for Exploration					
VAT to Pay	€-	€2 741,35	€17 788,15	€20 518,47	€23 272,72
Personal Income Tax Retention	€236,83	€394,92	€513,33	€592,67	€632,33
Social Labour Charges - Company	€498,75	€858,96	€1 219,17	€1 330,00	€1 440,83
Total Resources	€735,58	€3 995,23	€19 520,65	€22 441,14	€25 345,89
WC	€17 083,97	€22 697,76	€18 206,59	€18 541,82	€18 788,77
ΔWC	€17 083,97	€5 613,79	-€4 491,17	€335,23	€246,95

Table 20 – Working Capital map from 2017 to 2021.

Source: Author (2016).

Average Periods of Payment/Receivment		
VAT payment	3	months
VAT receivment	12	months
Personal Income Tax Retention	0,5	months
Social Labour Charges	0,5	months
External Services and Supplies	Early payment	
Clients	Early receivment	
Cash Reserves Policy		
Personnel Costs	25%	
Specialized Services and Supplies	25%	

Table 21 – Supporting assumptions for the Working Capital map.

Source: Author (2016).

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State and other Public Entities					
VAT Assessment	2017	2018	2019	2020	2021
VAT from sales (23%)	€-	€13 455,00	€74 520,00	€85 560,00	€96 600,00
Total	€-	€13 455,00	€74 520,00	€85 560,00	€96 600,00
VAT of External Services and Supplies					
Specialized Services	€856,18	€860,09	€1 619,20	€1 619,20	€1 619,20
Advertising	€678,20	€1 287,87	€1 310,87	€1 333,87	€1 356,87
Office Supplies	€92,00	€92,00	€92,00	€92,00	€92,00
Product Development	€34,08	€22,34	€22,34	€22,34	€22,34
Communications	€62,60	€89,31	€116,01	€142,71	€142,71
Litigation	€82,80	€-	€-	€-	€-
Travel expenses	€69,00	€138,00	€207,00	€276,00	€276,00
Total	€1 874,86	€2 489,60	€3 367,42	€3 486,12	€3 509,12
VAT to pay	€-	€10 965,40	€71 152,58	€82 073,88	€93 090,88
VAT to receive	€1 874,86	€-	€-	€-	€-
Social Labour Charges					
Social Contribution (company)	€11 970,00	€20 615,00	€29 260,00	€31 920,00	€34 580,00
Social Contribution (employees')	€5 544,00	€9 548,00	€13 552,00	€14 784,00	€16 016,00
Total	€17 514,00	€30 163,00	€42 812,00	€46 704,00	€50 596,00
Personal Income Tax Retention					
Personal Income Tax Retention	€5 684,00	€9 478,00	€12 320,00	€14 224,00	€15 176,00
Personal Income Tax Retention (Dividends)					
Personal Income Tax Retention (Dividends)	€-	€-	€-	€-	€25 480,17
Corporate Income Tax					
Corporate Income Tax	€-	€-	€6 453,25	€48 380,06	€59 105,79

Table 22 – Supporting calculations for the Working Capital map.
Source: Author (2016).

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State and other Public Entities - Personnel Expenses					
	2017	2018	2019	2020	2021
Personal Income Tax Retention					
CEO (13,50%)	€-	€1 890,00	€1 890,00	€1 890,00	€1 890,00
Software Engineer (13,50%)	€3 780,00	€3 780,00	€5 670,00	€5 670,00	€5 670,00
Marketing Manager (8,50%)	€952,00	€1 904,00	€1 904,00	€1 904,00	€2 856,00
Sales Account Strategist (8,50%)	€952,00	€1 904,00	€2 856,00	€3 808,00	€3 808,00
People Operations Manager (8,50%)	€-	€-	€-	€952,00	€952,00
Sub-Total	€5 684,00	€9 478,00	€12 320,00	€14 224,00	€15 176,00
Social Contribution (employees)					
11%	€5 544,00	€9 548,00	€13 552,00	€14 784,00	€16 016,00
Total	€11 228,00	€19 026,00	€25 872,00	€29 008,00	€31 192,00

Table 23 – Supporting calculations for the State and other Public Entities’ map.
Source: Author (2016).

12.5.1.2. Financial Plan

Financial Plan					
	2017	2018	2019	2020	2021
Financial Needs					
Investment in Working Capital	€17 083,97	-€65 476,02	€-	-€176 506,51	-€400 187,55
Dividends payment	€-	€-	€-	€-	€65 520,43
Corporate Income Tax (21%)	€-	€-	€-	€6 453,25	€48 380,06
Personal Income Tax Retention (Dividends)	€-	€-	€-	€-	€25 480,17
Total Financial Needs	€17 083,97	-€65 476,02	€-	-€170 053,25	-€260 806,89
Financial Resources					
EBITDA	-€76 144,77	-€65 476,02	€172 350,57	€230 381,25	€281 456,14
Disinvestment in Working Capital	€-	€-	€4 491,17	€-	€-
Share Capital	€164 318,55		€-	€-	€-
Total Financial Resources	€88 173,78	-€65 476,02	€176 841,74	€230 381,25	€281 456,14
Annual Balance	€87 034,50	€26 692,99	€214 568,98	€441 417,46	€586 397,70
Cash Reserves - Planned	€15 944,69	€26 692,99	€37 727,24	€40 982,96	€44 134,66
Cash Reserves - Real	€87 034,50	€26 692,99	€214 568,98	€441 417,46	€586 397,70
Cash and Bank Deposits	€87 034,50	€26 692,99	€214 568,98	€441 417,46	€586 397,70

Table 24 – Financial Plan from 2017 to 2021.
Source: Author (2016).

12.5.1.3. Balance Supporting Calculations

Dividends payment, Legal Reserves and Retained Earnings - Method					
	2017	2018	2019	2020	2021
Net Income	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
Loss Coverage	€76 144,77	€141 620,79	€-	€-	€-
Payout Ratio	0%	0%	0%	50%	70%
Dividends to pay	€-	€-	€-	€91 000,59	€155 645,25
Legal Reserves to Retain (percentage)	0%	0%	5%	5%	5%
Legal Reserves to Retain (value)	€-	€-	€8 294,87	€9 100,06	€11 117,52
Legal Reserves (Accumulated value)	€-	€-	€8 294,87	€17 394,92	€28 512,44
Retained Earnings (percentage)	100%	100%	95%	45%	25%
Retained Earnings (value)	-€76 144,77	-€65 476,02	€157 602,45	€81 900,53	€55 587,59
Retained Earnings (Accumulated value)	-€76 144,77	-€141 620,79	€15 981,66	€97 882,20	€153 469,78
Personal Income Tax Retention (Dividends)	€-	€-	€-	€25 480,17	€43 580,67
28%					

Table 25 – Supporting calculations for the Balance Sheet.

Source: Author (2016).

12.5.2. Economic Viability

12.5.2.1. Cash Flows

Cash Flow Statement					
	2017	2018	2019	2020	2021
Financial Resources					
Operational Cash Flow	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
Total Financial Resources	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
Financial Needs					
Investment in Fixed Assets	€-	€-	€-	€-	€-
Investment in Working Capital	€17 083,97	€5 613,79	-€4 491,17	€335,23	€246,95
Total Financial Needs	€17 083,97	€5 613,79	-€4 491,17	€335,23	€246,95
Free Cash Flow for the Firm (FCFF)	-€93 228,74	-€71 089,81	€170 388,49	€181 665,95	€222 103,40
Net Income	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
ΔWC	€17 083,97	€5 613,79	-€4 491,17	€335,23	€246,95
Obtained Financing	€-	€-	€-	€-	€-
Payment of obtained financing	€-	€-	€-	€-	€-
Free Cash Flow for the Equity (FCFE)	-€93 228,74	-€71 089,81	€170 388,49	€181 665,95	€222 103,40

Table 26 – Cash Flows' map from 2017 to 2021.

Source: Author (2016).

12.5.3. Economic and Financial Indicators

Economic and Financial Indicators					
	2017	2018	2019	2020	2021
ROA	-85,64%	-245,29%	77,32%	41,23%	37,92%
Net Income	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
Total Assets	€88 909,36	€26 692,99	€214 568,98	€441 417,46	€586 397,70
ROE	-86,36%	-288,47%	87,96%	49,11%	44,30%
Net Income	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
Equity	€88 173,78	€22 697,76	€188 595,08	€370 596,26	€501 946,02
Financial Autonomy	99,17%	85,03%	87,89%	83,96%	85,60%
Equity	€88 173,78	€22 697,76	€188 595,08	€370 596,26	€501 946,02
Total Assets	€88 909,36	€26 692,99	€214 568,98	€441 417,46	€586 397,70
Growth Rates					
Sales Revenue	NA	NA	453,85%	14,81%	12,90%
Net Income	NA	-14,01%	-353,37%	9,71%	22,17%
Net Profit Margin		-111,92%	51,20%	48,93%	52,94%
Net income	-€76 144,77	-€65 476,02	€165 897,31	€182 001,18	€222 350,35
Sales Revenue	€-	€58 500,00	€324 000,00	€372 000,00	€420 000,00

Table 27 – Economic and Financial Indicators of the project.

Source: Author (2016).