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**BUILDING THE FOUNDATIONS FOR CRM
STRATEGY IN A COMPANY – THE CASE OF A TECH
START-UP**

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Project Work presented as partial requirement for obtaining
the Master's degree in Statistics and Information
Management

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by

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Project Work presented as partial requirement for obtaining the Master's degree in
Statistics and Information Management, with a specialization in Marketing Research and
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ABSTRACT

With its recent growth and continuous expansion to international markets, Landings.Jobs has increasing challenges that call for a deep understanding of the current talent userbase and its experience with the platform. The goal was to build the foundations for a Customer Relationship Management strategy, by identifying which steps should the start-up undertake in order to optimize the acquisition, management and retention of its talent userbase. Based on Peppers and Roger's IDIC Model, four research questions arise: "how can Landing.Jobs identify and characterize its current userbase?", "how can Landing.Jobs differentiate tech talent by value and needs?", "what is Landing.Jobs' current CRM capability and what Get, Keep, Grow strategies does it have in place?", and "what are the potential barriers for Landing.Jobs to have a successful CRM implementation?". The data collected was through Kotler's Marketing Information System, that consists of internal databases (including Data Studio and Google Analytics), marketing intelligence (publicly available and actionable information about the company's markets) and marketing research (both exploratory and conclusive). Descriptive statistics such as absolute/relative frequencies, Chi-square test and ANOVA analysis were able to provide relevant characterizing information: demographic, mainly location; psychographic, suchlike job search status, relationship with online tools and social networks; and behavioural, particularly users' engagement with the platform. Multivariate statistical analyses, including Structural Equation Modelling and Factor Analysis, used Bordieu's forms of capital and supported Cardoso's findings in associating social, economic and cultural capital with talent's perceived success. These conclusions helped differentiating tech talent by value and, alongside correlation analyses with perceived success, by needs.

After examining talent's journey in the Landing.Jobs' platform, the potential barriers identified for Landing.Jobs to have a successful CRM implementation were related to data quality, lack of automated differentiation and resistance from Management. The study's resulting tech talent's identification/characterization and differentiation findings enabled a set of actionable recommendations for the implementation of a CRM strategy, under the Business Requirement of a CRM system.

Keywords: Customer Relationship Management, CRM Systems, CRM Potential Constraints, Marketing Information Systems, Tech Start-Up, IT Talent

RESUMO

O recente crescimento da empresa e a expansão contínua para mercados internacionais apresentam à Landing.Jobs desafios crescentes, que exigem um profundo entendimento da atual base de utilizadores e da sua experiência com a plataforma. O objetivo foi criar as bases para uma estratégia de *Customer Relationship Management*, identificando as etapas que a start-up deveria executar para otimizar a aquisição, gestão e retenção da sua base de talento. Com base no modelo IDIC de Peppers e Roger, surgem quatro questões de pesquisa: “como pode a Landing.Jobs identificar e caracterizar sua base de utilizadores atual?”, “como pode a Landing.Jobs diferenciar o talento *tech* por valor e necessidades?”, “qual é a capacidade atual de CRM da Landing.Jobs e quais estratégias de *Get, Keep, Grow* existentes?”, e “quais são as possíveis barreiras para a Landing.Jobs ter uma implementação bem-sucedida de CRM”. Os dados foram coletados por meio do *Marketing Information System* de Kotler, que consiste em bases de dados internas (incluindo o *Data Studio* e o *Google Analytics*), inteligência de marketing (informações publicamente disponíveis e acionáveis sobre os mercados da empresa) e estudos de mercado (exploratório e conclusivo). Estatísticas descritivas, como frequências absolutas / relativas, teste *Chi-Square* e análise *ANOVA*, forneceram informações caracterizadoras relevantes: demográficas, principalmente localização; psicográficas, status de procura de emprego, relacionamento com ferramentas on-line e redes sociais; e comportamentais, principalmente o envolvimento dos utilizadores com a plataforma. Análises estatísticas multivariadas, incluindo modelagem por equações estruturais e análise fatorial, usaram as formas de capital de Bordieu e apoiaram as descobertas de Cardoso na associação de capital social, económico e cultural ao sucesso percebido pelo talento. Estas conclusões ajudaram a diferenciar o talento *tech* por valor e, juntamente com as análises de correlação com o sucesso percebido, por necessidades.

Após a examinação da jornada do talento na plataforma Landing.Jobs, as possíveis barreiras identificadas para que a Landing.Jobs tenha uma implementação bem-sucedida de CRM, estavam relacionadas com a qualidade dos dados, falta de diferenciação automatizada e resistência por parte da Administração. As conclusões de identificação / caracterização e diferenciação do talento *tech* resultante deste projeto permitiram um conjunto de recomendações acionáveis para a implementação de uma estratégia de CRM, sob o requisito de negócio de um sistema de CRM.

Palavras-Chave: Gestão de Relacionamento com o Cliente, Sistemas de CRM, Potenciais Condicionantes de CRM, Sistemas de Informação de Marketing, Start-Up Tecnológica, Talento TI

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LIST OF ABBREVIATIONS AND ACRONYMS

CLV – Customer Lifetime Value

CPA – Cost per Acquisition

CRM – Customer Relationship Management

DE – Landing.Jobs’ internal dimension of the User Region variable referred to users based in Germany

ES – Landing.Jobs’ internal dimension of the User Region variable referred to users based in Spain

IT – Information Technology

KPI – Key Performance Indicators

NL – Landing.Jobs’ internal dimension of the User Region variable referred to users based in the Netherlands

NPS – Net Promoter Score

Other – Landing.Jobs’ internal dimension of the User Region variable referred to users based in any other countries that are not included in the remaining User Regions.

OtherEU – Landing.Jobs’ internal dimension of the User Region variable referred to users based in Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Malta, Poland, Romania, Slovakia, Slovenia or Sweden

OtherEurope – Landing.Jobs’ internal dimension of the User Region variable referred to users based in Albania, Belarus, Bosnia and Herzegovina, Macedonia, Moldova, Montenegro, Russian Federation, Serbia, Turkey or Ukraine

OtherSA – Landing.Jobs’ internal dimension of the User Region variable referred to users based in Argentina, Bolivia, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Venezuela or Uruguay

PT – Landing.Jobs’ internal dimension of the User Region variable referred to users based in Portugal

SPC – Satisfaction-Loyalty-Profit Chain

URL – Uniform Resource Locator

UTM – Urchin Tracking Module

1. INTRODUCTION

This study regards a three-member group field project developed at Landing.Jobs, the company where I started working as a Junior Acquisition Specialist in August 2019, in the Marketing Department's performance team. It will focus on building the foundations for a CRM strategy, by understanding which steps should the start-up undertake in order to optimize the acquisition, management and retention of its talent userbase.

Landing.Jobs is an international online tech recruitment platform founded in 2014. It is a marketplace that allows companies who are looking to hire tech professionals (demand side) to align quantity and quality; and that enables tech talent (supply side) to be connected to top tech companies throughout Europe, whilst getting feedback and support from specialists. The company's business model differs from a regular recruiting company not only due to the fact that it is focused on the IT market, but specially on the grounds that it directs its efforts towards the needs of the candidates, rather than the companies'. Additionally, Landing is currently a vast tech community, which also provides other products within this field, from events, such as meetups, the Landing Festival and the Tech Hiring Conference, to the provision of content regarding recruitment, career and tech. The belief that individuals must take ownership of their professional careers in order to ensure their ability to keep-up with the future of work is what led to the foundation of this start-up ("About Us", 2019). The two co-founders, José Paiva and Pedro Oliveira, first noted this business opportunity due to the fact that tech professionals were being overwhelmed with job opportunities, having serious difficulties understanding which ones were indeed best for them. In fact, this unbalance between the demand and supply of tech talent is not only still verified, but presenting a growing trend. According to the Report on Talent for Europe (Leadership Skills, PwC, 2015), the high-tech skills' gap in Europe will reach 500.000 IT practitioners in 2025. Regarding tech talent's job plans, Spiceworks' Annual Report on IT Budgets and Tech Trends (2019) estimated that, in 2019, 26% of IT professionals planned to find a new employer, 8% planned to leave the IT field for a new career, 6% planned to move into IT consulting, and 5% planned to retire (even though this varies by region). In particular, the tech professionals planning to find a new employer, most (62%) were looking for a better salary, while about half hoped to advance their IT skills in a new challenge, and about a third were seeking better work/life balance. When considering the companies' side, the 2019 Harvey Nash/KPMG CIO Survey demonstrated that 65% of

technology leaders stated that the hiring challenges in this industry were hurting the business. Today, the success of a company in a competitive environment, is highly related to the ability of embracing IT – as Stone (2017) suggests, without technology, no company can make, deliver or market its product efficiently. Aside from the typical insourced means, a company can consider recruitment through agencies and online mediums. Recruitment agencies are outside firms who source candidates for employers, such as Kelly Services and Randstad. The online recruitment market, the opposite side, consists mainly in job boards that aggregate and display jobs posted by employers such as LinkedIn and Indeed, among others. On one hand, Landing’s value proposition for tech talent is the access to diverse opportunities, in terms of type of companies, tech stack and geographical options, as well as the promise of always getting an answer and feedback to their applications. On the other hand, the value proposition for employers is the promise of quality candidates, along with an access to platform tools specifically designed for employers such as candidate search, while also ensuring that their jobs are present in several different channels.

In the context of a marketplace with employers and tech talent users, market liquidity is referred to as a balance between the number of job positions that companies post and the number of applications that candidates make. This balance enables the achievement of the company’s revenue goals as they are based on the number of people that are hired through Landing.Jobs. In order to further understand this argument, it is important to acknowledge the distinct roles of the company’s four departments. Firstly, there is the Product Department which is responsible for keeping the platform running and optimizing the experience for both users and companies. Secondly, there is the Business Development Department, in charge of acquiring companies looking to hire tech professionals (also known as employers or clients), and of the respective account management tasks that assure delivery to the clients’ stock of jobs (internal term for job positions posted on the platform). As such, this is the department that brings in direct revenue to the company, through two different pricing models: Pay-per-Hire, as indicated by the name, it is a model in which companies pay a fixed fee per each person hired through Landing.Jobs; and Subscription, in which employers pay a certain value each month. The Marketing Department is then accountable not only for acquiring users for the platform, but also for making sure that they become candidates, *i.e.*, that these users apply to the job positions posted by employers. It is relevant to clarify that a candidate is a

platform user that applied to at least one job position in the platform within a specific data range (flexible to the scope of the analysis). Nevertheless, there is still a complex flow to be considered after this first step of a candidate making an application – the platform funnel. After an application is made, a group of curators will perform a first evaluation from a range of 1 to 5. While 1's are rejected, the remaining classifications will be an assessment of the candidate's fit with the specific job position he/she is applying to. All of these applications that are above 1, then proceed to the next phase – application delivered – which means that the application is delivered to the employer in question. After this, the application still must be seen by the employer and potentially engaged by both parties. By that moment it is possible to say that the recruitment process has begun, and its final aim is to reach the offer, that can be rejected or accepted by the candidate, which in turn would lead to a hire. When considering this complex process of the platform funnel is when the role of the Talent Department becomes crucial. The Talent Department consists of recruitment professionals that are responsible for accompanying the candidates throughout the process, providing valuable feedback and advice.

Up to this point, the main performance metrics were already covered – revenue, hires, applications, candidates and users. However, to understand Landing.Jobs' business model there is still one important aspect to be considered: the fact that it is an international venture. Although the users are from all around the world, Landing.Jobs operates in four different geographic markets – Portugal, Spain, Germany and, its most recent market entrance, the Netherlands, which means that the employers are exclusively from these locations. Being headquartered in Lisbon, Landing naturally has a strong upside in the Portuguese market and this makes it its most mature market. Therefore, the company has goals defined per market that are adjusted to each market's maturity. According to its needs and capacity, the business plan defines how many hires are necessary to have per market, hence determining the number of applications required to achieve them, following the platform funnel described previously. In other words, the conversion rates of each phase are calculated in order to make sure the right number of users is acquired, to have the necessary candidates, delivered and engaged applications and offers, to achieve the hires determined by the goals.

With a modest start of a small Portuguese start-up of 5 employees, Landing.Jobs is now an international platform used by around 160 companies, with more than 125.000 talent

users and around 430 job positions available. Moreover, not only is the company growing in dimension, but it is also expanding its scope. Landing is launching a new platform, currently live in the beta version, named Landing.Work – with the goal of matching the right contractors and companies – and investigating the creation of a new service related to career support. Facing this, how can Landing.Jobs make sure that all its users have a satisfying experience in the platform? Additionally, how will the organisation assure that quality candidates are being delivered to employers? This study argues that the described company growth, alongside an expansion to international markets, call for a deep understanding of the current talent userbase and its experience with the product. One justification given is that while start-ups tend to focus on providing products with good usability, the lack of a more comprehensive approach to customer experience can hinder their long-term value creation capabilities (Hokkanen et al., 2016). Facing the fact that most start-ups fail, Ries (2011) states that many of those failures are preventable and provides a new approach to these companies that is based on the idea of learning what customers really want. In line with this approach, this study proposes the creation of a Customer Relationship Management (CRM) strategy for Landing’s talent userbase, built from scratch, and with a Business Requirement of implementing a CRM system. One of the CRM systems’ main advantages is said to be the 360-degree overview of customers that helps improving customer experience, which is predicted to be the decisive brand differentiator in 2020 (Walker Information, 2013). While CRM strategies can increase customer retention by 26%, when implemented properly CRM Systems can yield a 245% return on investment (Oracle RightNow Cloud Service, n.d.; ReadyCloud Suite, 2019). In fact, CRM on the whole is expected to reach over \$80 billion revenue by 2025 (SupperOffice, 2019).

With respect to the most appropriate response to the challenge of building a Customer Relationship Management strategy, this project’s suggestion is to use the Peppers and Rogers’ IDIC Model (2004), a four-step framework that implies improved processes in Getting, Keeping and Growing customers. On these grounds, the research intentions are divided into developing a deep understanding of Landing’s userbase and tech professionals, as well as performing an internal analysis of Landing.Jobs current interactions with its userbase. With these analyses, the proposed steps for Landing.Jobs to take for optimizing the acquisition, management and retention of its talent userbase

were defined. Therefore, the study's goals are summarized into the following research questions:

- RQ1 – How can Landing.Jobs identify and characterize its current userbase?
- RQ2 – How can Landing.Jobs differentiate tech talent by value and needs?
- RQ3 – What is Landing.Jobs' current CRM capability and what Get, Keep, Grow strategies does it have in place?
- RQ4 – What are the potential barriers for Landing.Jobs to have a successful CRM implementation?

In order to answer these questions, this thesis is divided into five remaining chapters. The next chapter provides an overview of research on Customer Relationship Management and other relevant topics in the scope of the talent recruitment industry. In Chapter 3, the methodological approach adopted in this project is introduced. In particular, the use of the selected qualitative and quantitative approaches is justified, as well as the methods for data collection and analysis. In short, the data collection was based on internal databases, marketing intelligence and marketing research; and the analyses performed were based on descriptive statistics, structural equation modelling (SEM), factor analysis, analysis of variance and chi-square tests. A subsequent section presents the empirical study, describing the results of the several analyses performed and providing an answer to the different research questions. Therefore, it was possible to identify and characterize Landing.Jobs' userbase, differentiate tech talent, explore the organisations' current CRM capability and current strategies, as well as to identify potential barriers for a successful CRM implementation. Based on these conclusions, Chapter 5 consists of academic implications, where the findings are compared with previous research; managerial implications, in which a list of recommendations for a CRM implementation is developed for Landing.Jobs; and limitations, based on a reflection on what may have biased the research's results, with suggestions for further research, relying on what would make sense to investigate next. Finally, the last chapter provides the bibliography that was used to accomplish this study.

2. LITERATURE REVIEW

2.1. INTRODUCTION

This project incorporates concepts that are commonly covered in distinct contexts and brings a number of implications to consider for the context of Literature Review. As Landing.Jobs is a firm inserted in the recruitment industry, addressing this challenge involves understanding not only what Customer Relationship Management is truly about, but also the topics that are specific to this industry. This chapter will start by covering concepts around CRM such as its definition, historical evolution and several frameworks, from which the IDIC Model was selected for this specific study. Nevertheless, within this model, an overview over how the existing literature fits into each of its components will be given, which will also include addressing topics related to perceived career success and predictors of the same construct. The chapter will then move on to specific literature on CRM platforms and will end with the presentation of the research questions. Lastly, it is important to note that Landing.Jobs is a marketplace with both B2B and B2C target audiences. As this project is focused on the B2C market side, for the sake of coherency with the existing literature, during this chapter every subject addressed in the scope of “customer” will be referring to “talent”, and not to the company’s employers.

2.2. AN OVERVIEW OF CRM

Customer Relationship Management is defined as “an enterprise-wide approach to understanding and influencing customer behaviour through meaningful analysis and communications to improve customer acquisition, customer retention, and customer profitability” (Peppers & Rogers, 2004). This business strategy is also described as means to create and deliver value to targeted customers at a profit and to manage customer experiences at organizational touchpoints through three different dimensions: strategic, defined as a core customer-centric business strategy; operational, focused on automation of customer-facing processes; and analytical, encompassing the use of intelligent mining of customer-related data (Buttle & Maklan, 2015). CRM began receiving an increasing attention from organizations by consequence of the customer data boom in the early 1990s, as they were then facing enormous challenges in organising and analysing these data (Boulding et al., 2005). Early Sales Force Automation and Customer Service Support applications served to better respond to the customer data management needs. According

to Kumar and Reinartz (2018), there are four more generations that follow the CRM history. A second one, the Customer Facing Front-End Approach, in which the main goal was to create a single view of all interactions with customers, regardless their nature. From 2002 onwards, as concepts such as customer value are introduced, this business strategy started to gain a Strategic Approach, having an impact over the entire organization. By the time it was widely accepted, the fourth generation is marked by terms like agility, flexibility and low fixed costs. As of 2015, the authors state that the fifth generation, Social CRM, is led by the development of technological advances, mainly social media usage and channel multiplication, that allows companies to determine marketing strategies also based on customers' online behaviour.

Nowadays, firms face gradual but still seismic changes regarding not only these changes in consumer behaviour, but also with respect to the marketing function and marketplace. Today's refinement of marketing approaches such as the development of sophisticated ways of targeting customers, including one-to-one marketing (Peppers & Rogers, 1993), permission marketing (Godin, 1999), and mass customisation (Pine, 1993) has further increased customers' expectations than ever. Moreover, the marketplace's increasing global competition, induced by the fall of trade barriers and transaction costs decline (Baily et al., 2005) has led to highly demanding customers in terms of quality and value-driven products/services. These dimensions help explain why managing relationships is more critical than ever. Buttle and Maklan (2015), breakdown the reasons for which companies want relationships with customers into three main ones: 1) reduced marketing costs, 2) better customer insights and 3) increased customer lifetime value. In order to achieve this successfully, the authors propose the implementation of a CRM strategy and provide an overview of its five main frameworks. The QCI Customer Management Model describes a series of activities such as targeting, value development, managing dissatisfaction, and is supported by people carrying out processes through the use of technology, with the final goal of acquiring and retaining customers. Buttle's CRM Value Chain Model (2004) considers five primary stages – customer portfolio analysis, customer intimacy, network development, value proposition development and managing the customer lifecycle, maintained by four supporting conditions – leadership and culture, data and information technology, people and processes, that lead to customer profitability. Payne (2005), divides his Five-Process Model into two processes that represent strategic CRM – strategy development and value creation, and three that represent operational CRM –

multichannel integration, performance assessment and information management. Gartner Inc., a leading IT research and consultancy, developed the Competency Model that consists of five generic processes such as strategic development, value creation, multichannel integration, information management, and performance assessment. The final comprehensive model that Buttle and Maklan (2015) analyse is the Peppers and Rogers' IDIC Model (2004), that was selected for this study for its simplicity and for framing the multitude of CRM metrics and tactics.

2.3. PEPPERS AND ROGERS' IDIC MODEL

According to Peppers and Rogers' framework (2004), companies should take two steps of analysis and another two of action in order to build closer one-to-one relationships with customers: 1) identify customers, 2) differentiate customers, 3) interact with customers and 4) customize treatment. In the next section, all of these steps will be further explained and, whenever appropriate, in the context under study – the recruitment market.

2.3.1. Identify customers

Peppers & Rogers (2004) begin introducing the IDIC model with an analytical category, by emphasizing the importance of a company to know its customers as deeply as possible – integrating habits, preferences and other characteristics. In other words, a firm must be able to identify who the customers are and build a deep understanding of them individually. This ability to recognize the customers on an individual level supports Villas-Boas' theory (1999) that dynamic competition can be best achieved through the knowledge of customers' past choice behaviour. The author defends that this customer-information can lead enterprises to better target their market practices in respect to customers. David Shepard Associates (1999) summarize the fields in which customer-data is necessary in order to properly identify customers in 1) behavioural (clickstream data, interactions with the company), 2) attitudinal (brand preferences, satisfaction) and 3) demographic (age, income, education). However, there are some authors that also defend the importance of psychographic variables. Although demographic and purchase history information is often, and more easily, collected, companies tend to neglect potentially valuable psychographic data, such as customer lifestyles, values, beliefs, needs and motivations (Webster, 1998). Peltier et al. (2002) state that marketers should also understand the psychological factors that impact customers willingness to have a relationship with a certain company. The authors of the IDIC model propose this step of

customer identification as a mean to increase the availability of information, enabling customers' transactions to be simpler, faster and/or cheaper.

2.3.2. Differentiate customers

The second step of the IDIC (Peppers & Rogers, 2004) focuses on differentiating customers to sustain long-term profitable relationships tailoring its offerings to their individual needs, and under the assumption that they have different values to the enterprise. The link between CRM and profit is explained by the relationship between “value to the customer” and “value from the customer”, first represented by Rust et al. (1994) through the Satisfaction-Loyalty-Profit Chain (SPC), and further developed by Kumar and Reinartz (2018) and Anderson and Mitta (2000). In this conceptualization, service investments (“value to customer”) improve customer satisfaction, leading to Retention/Loyalty, which in turn can drive sales, revenues and profits (“value from customer”). Nonetheless, while Kumar and Reinartz (2018) confirm the relevance of increasing customer satisfaction levels, the authors also reveal the importance of identifying and nurturing these relationships with targeted, profitable customers – with higher customer-value. The customer-value concept is based on the assumption that not all prospects have similar potential, depending on factors such as estimated lifetime value, proportion of category spending and switching probability (Buttle & Maklan, 2015). By assessing the various links in the SPC, Kumor and Reinartz (2018) study that they are almost always nonlinear, asymmetric, and segment and industry-specific.

2.3.2.1. Differentiate customers by their value to the company

The value that firms derive from their customers has traditionally been referred to as Customer Lifetime Value (CLV) – “the present value of future profits generated from a customer over his or her life of business with the firm” (Kumar et al., 2010). Researchers and practitioners have traditionally used this future-oriented and business-specific perspective particularly for conversion incidents over the lifetime. Nevertheless, involved customers also yield other forms of value, usually indirect and latent such as Customer Influencer Value (CIV) – form of value that comprises word of mouth, and that comes from intrinsic motivation; Customer Referral Value (CRV) – similar to CIV as it englobes the referral of new customers, but works as a result of a program initiated and incentivized by the company; and Customer Knowledge Value (CKV) – “the value of the information that a customer provides a company with (contrary to information that a customer provides to

other customers or prospects which constitutes)" (Kumar et al., 2010). There are a number of existing customer-based value metrics that are used by managers and marketers around the world. In fact, in "Key Marketing Metrics" (Farris et al., 2017), the authors summarize some of the ones that are used to classify the value of an organization's customers: recency – length of time since a customer's last purchase; retention rate – ratio of customers retained to the number at risk; customer profit – difference between the revenues earned from and the costs associated with the customer relationship during a specified period; prospect lifetime value – response rate times the sum of the initial margin and the CLV of the acquired customer minus the cost of the prospecting effort; average acquisition cost – ratio of acquisition spending to the number of new customers acquired; average retention cost – ratio of retention spending to the number of customers retained.

As it is possible to verify and as mentioned previously, the estimation of the value of a customer is specific to a business' industry. Considering the case of Landing, the industry in question is tech recruitment, in which there are currently no metrics to determine a customer/prospect's value to the firm. Accordingly, in the absence of customer value metrics, the value of a customer is considered to be determined by his/her potential for professional success. Success has been associated to economic, cultural and social capital (Cardoso, 2019). Based on Bordieu's Forms of Capital (1986), who defines capital as "accumulated labour" that owns the potential to "produce profits and to reproduce itself in identical or expanded form", Cardoso demonstrated the impact of this construct on the perception of success. By economic capital, Bordieu considers either money or resources that can be convertible into it. Caro et al. (2014) and Møllegaard and Jæger (2015) support this definition by considering monetary assets such as income or assets. As to cultural capital, Bordieu sums up its dimensions into three: institutionalized – educational qualifications and certifications that represent expressed as knowledge and skills (Caro et al. 2014, Lomer et al. 2018); objectified – material goods such as paintings, instruments, cars or other form of material objects; and embodied – internalized culture transmitted over one's life (Edgerton & Roberts, 2014), through activities such as music classes, visiting museums or going to the theatre (Caro et al., 2014). Lastly, Bordieu (1986) defines social capital as "resources linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition". Additionally, and supported by different researchers, it is associated with an increased access to opportunities and benefits (Lin 1999; Bjørnskov 2006; Tomlinson, 2017). Along with other

authors such as Seibert et al. (2001), Bordieu (1986) states that career success can be a result of accumulated social and cultural capital. Friar and Eddleston (2007) expose the role of networking skills in career success and, according to Koss-Feder (1999), 70% to 80% job opportunities come from networking, revealing the impact of social capital. As to the effects of cultural capital on career success, while Becker (1993) showed that future success is associated with improved teaching quality, Vermeulen and Schmidt (2008) observed that having extra-curricular activities during college was also associated with career success. The link between the economic capital and career success is explained by Bordieu's theory that both social and cultural capital can be derived from economic capital. In fact, Arthur et al. (2005) demonstrate an underprivileged background as a predictor of career success. According to these studies, social, cultural and economic capital is seen as a predictor of career success, *i.e.*, a predictor of being recognized as valuable in the recruitment context.

2.3.2.2. Differentiate customers by their needs from the company

"To devise and implement customer-specific strategies designed to satisfy individually different customer needs" (Peppers & Rogers, 2004). This step englobes a deep understanding of the concept of "value to customer". According to Buttle and Maklan (2015), it is represented by a balance between the benefits received and the sacrifices made to experience a given service and/or product. The "value to customer" concept hence provides us a product/service-specific definition. In the context of the organization under study, its services are "dedicated to matchmaking great tech talent with great opportunities" ("About Us", 2019). This mission, given in the context of a professional perspective, brings to light a concept of extreme relevance – career success. Evidence suggests that definitions of career success have been changing (Cappelli, 1999). Until the 1980's, the definitions of career success integrated mostly measurable and objective factors (Judge et al., 1995). These factors rounded mostly around indicators such as career progression, position and salary (Gattiker & Larwood, 1986; Pfeffer, 1977; Judge et al., 1995). However, it is argued that in the late 20th century, career success began englobing more subjective factors related to the shift to a more agentic view of the concept (Ibarra, 1999; Ibarra & Barbulescu, 2010). Such factors can be one's feelings of accomplishment and satisfaction towards their professional careers (Judge et al., 1995), or relate to a more self-directed and values-driven view of career success (Hall, 2002). In fact, by entitling this concept as perceived career success, Shen et al. (2015), generated 11 major categories by

which it is represented: 1) achievement – financial achievements, promotions; 2) job/task characteristics – engagement in a job/task; 3) satisfaction – being pleased with how one’s career has turned out; 4) learning and development – continuous learning and development; 5) making a difference – contribution to other in a positive way; 6) work-life balance – successfully integrating work and nonwork dimensions; 7) survival and security – feeling secure as the result as one’s career; 8) social working environment – experience positive relationships at work; 9) recognition – being formally and explicitly recognized; 10) job performance – one’s degree of excellence in performing one’s job; and 11) self-actualization – becoming “better” or full person as a result of one’s career. This multitude of dimensions available to define the concept of career success exposes the complexity of, not only the concept itself, but also of the process that is to attempt to satisfy this need through a product/service. Furthermore, considering an international context, much research has established that one should also consider how the cultural differences may affect how individuals view work around the world (Gelfand et al., 2007; Tsui, 2007). One example is given by Lirio et al. (2007) that demonstrate that while women from Canada and Mexico placed significant value on recognition and appreciation for work, Argentinian women focused on collectivist outcomes. In a different study, Benson et al. (2013) show that a country’s high level of uncertainty avoidance is associated with greater relevance given to intrapersonal achievement rather than interpersonal achievement when defining career success. Therefore, it is possible to state that cultural differences can have a role on how stimuli in the workplace environment are perceived, interpreted and responded to (Klein, 2004). In fact, in order to differentiate these potential wants and needs across nations, Hofstede proposes a six-dimensions model that allows a cross-cultural comparative research (1993, 2015), further developed in Chapter 3.

2.3.3. Interact with customers

Moving to the first step of the action category of the IDIC model (Peppers and Rogers, 2004), the authors propose a focus on improving the effectiveness of all interactions an organization has with its customers. Peppers and Rogers (2004) start by invoking the relevance of maintaining a dialogue, enabling a relationship of collaboration with the customers and learning of their needs and potential value. In a different work (Peppers and Rogers, 1997), the researchers define that in order to engage in a dialogue it is necessary that 1) all parties at both ends must have been clearly identified, be able to participate in it and want to participate in it; 2) the dialogue with a customer can be

controlled by anyone in the exchange, will change an enterprise's behaviour toward that individual (and vice versa); and 3) it should pick up where it last left off. In fact, following the dialogue, Peppers & Rogers inside over the management of the touchpoint mapping. Touchpoints are the verbal or nonverbal incidents an individual perceives and consciously relates to a given firm or brand, *i.e.* "episodes of direct or indirect contact with the brand" (Duncan and Moriarty, 2006; Baxendale et al., 2015). These touchpoints integrate all channels and media encountered in a given customer journey (Baxendale et al., 2015), and they can take the form of online platforms, physical environments or personal interactions (Voorhees et al., 2017). On these grounds, enterprises must first define which are the possible touchpoints its customers might confront and some examples may be media, in-store, telephone, salesforce, catalogues, customer service, payments, returns, loyalty programs, digital, e-mail, paid and organic search, display ads, word-of-mouth and among others (Peltier et al., 2003; Zahay et al., 2004; Romaniuk et al., 2013; Li and Kannan, 2014; Baxendale et al., 2015; Wind and Hays, 2016;). Furthermore, companies still have to consider that not all touchpoints are controlled and managed by the company itself and the customers, some entities responsible for this may also be business partners of the company or external forces such as peers or environments (Lemon & Verhoef, 2016). As means to guarantee a seamless brand experience, Peppers and Rogers (2004) propose a dialogue laterally coordinated across the touchpoints and longitudinally coordinated over the individual customer's relationship with the firm. A final remark regarding the IDIC's interaction step worth mentioning is complaint management. Rather than viewing complaints as negative value, Peppers and Rogers (2004) propose that companies view them as an opportunity to adjust/fix the relationship, enable the enterprise to expand its scope of knowledge about the customer and to provide data points about the enterprise's products and services.

2.3.4. Customize relationship

In the final step of both the action category and the IDIC model itself, Peppers and Rogers (2004) suggest the use of information technology in order to "improve and streamline the manufacturing and service delivery processes, so that an enterprise can deliver individually different products or services to different individual customers cost-efficiently", *i.e.* mass customization. Pine (1993) has hypothesized four distinct approaches to mass customization: 1) adaptive customization – standard but customizable product customers alter themselves, 2) cosmetic customization – standard product presented

differently to different customers, 3) collaborative customization – customized product that results from individual customer dialogues, identifying which product offering best meets their needs and 4) transparent customization – customized product or service offered without the customer necessarily knowing about it. As Peppers and Rogers (2004) point out, although adaptive and cosmetic customization provide an easier approach for customers to get exactly what they want, collaborative and transparent customization integrate an approach that develops a relationship with the customer and remembers preferences, so the interaction always begins where it left off, leading to a greater competitive advantage. The benefits of customization can be illustrated by a research on user-created content services (UCC) – including blogs, wikis, social bookmarking, multimedia sharing, and podcasting – in which customization (based on customer preferences, customized services to each user and helpfulness for each of them), was positively associated with UCC usage through user satisfaction (Kim et al., 2012). Another example is the use of personalization and customization in email marketing through analytical tools that led to increasing click rates and better predictions of customer's behaviour (Singh & Chetty, 2015). As Anshari et al. (2019) recently studied, big data plays a significant role in an improved and effective product/service personalization and customization. Through a better understanding of customers' habits and behaviours, the authors explore how the big data analytics have "optimized process, growth, and generate aggressive marketing strategy and delivering value for each customer and potential customer". Needless to say, in the interest of properly extracting the value of big data, as an immense amount of data, hardly will traditional processing tools be effective (Ohlhorst, 2013). This fact goes in line with Peppers and Rogers (2004)' chapter covering how technology accelerates mass customization.

2.4. CRM SYSTEMS

Peppers and Rogers' IDIC Model implies the possession of a large amount of customer-related data that enables a proper identification and differentiation of the customer, an interaction with each one individually and a relationship customization. As such, this amount of data should not be handled by the traditional means, but rather through technology. The link between technology and Customer Relationship Management is a CRM system/software. CRM systems integrate customer service and support, and other activities that help companies to increase sales and profit through the organization and

automation of business processes for marketing and sales activities (Morgan & Hunt, 1994). It is stated that it can lead to improved customer profiles and product information, rapid responses, better predictions of customer needs, increased customer retention rates and reduced costs (Torkzadeh et al., 2006). Greenberg (2001) summarizes the aspects that a CRM system enables in three points: 1) possession of an integrated, single view of customers; 2) management of customer relationships in a single way, *i.e.*, regardless of the communication channel: telephone, website, personal visit, and so forth; and 3) improved effectiveness and efficiency of the processes involved in customer relationships. While previous research has demonstrated that the use of CRM systems significantly improves customer relationship management (Kim et al., 1992; Keramati et al., 2010), it cannot be denied that there are also some cases in which it has a negative or insignificant impact (Hillebrand et al., 2011; Li & Mao, 2012). According to Gartner Inc. (Reinhartz et al., 2004), this value represents around 70% of the CRM project implementation attempts. For this reason, it is extremely important to consider the motives that can lead a CRM implementation project to fail. Firstly, one must take into account a common misunderstanding about CRM mentioned by literature – that CRM is an IT issue and a mere software that manages customer relationships, instead of perceiving it as a global strategy that is empowered by a software (Payne & Frow, 2005; Buttle & Maklan, 2015). In fact, researchers emphasize the indispensability of a firm to have a clear strategy defined (Day, 2000; Kale, 2004; Buttle & Maklan, 2015) and well-defined business processes that match the CRM system (Erffmeyer & Johnson, 2001; Speier & Venkatesh, 2002), before implementing it. Chalmers (2006) implies that the very first step in a CRM project implementation should be analysing the company's objectives and culture. In "CRM failure and the seven deadly sins", Kale (2004) addresses a very important point which is the underestimation of the difficulties involved around data mining and data integration. This is of particular relevance given that previous research has already proven that data issues in CRM implementations are usually neglected as they only become apparent when the project is underway and represent big amounts of sunk cost (English, 1999; Thompson, 2003). Reid and Catterall (2005), summarize these issues into poor data quality such as inadequate data entry, missing data, lack of company-wide coding standards, multiple databases and obsolete data, and also low "actionability" of data, which consists on the company not being able to make sense of the available data. One last aspect to be considered is the resistance from employees (Payne & Frow, 2005), that can be due to the

lack of awareness of the system's benefits and advantages (Strauss & Frost, 2016), mostly caused by a poor communication of the project's purpose and vision (Payne & Frow, 2006; King & Burgess, 2008).

2.5. RESEARCH QUESTIONS

With this chapter, it becomes clear that, with some important precautionary measures taken into account, Customer Relationship Management can significantly improve a company's interaction with customers, increasing the effectiveness of the processes of keeping them satisfied and growing its value. In fact, one of the foundations of CRM is that acquiring a new customer is from five to twenty-five times more expensive than retaining an existing one (Harvard Business Review, 2014). Nevertheless, as Ang and Buttle (2006) state, customer acquisition is also important "even where customer retention is justified as the core strategy". The authors still add that it can be of particular interest for new business start-ups or for enterprises entering new geographic market segments. CRM technologies can provide tools that support customer acquisition (Buttle, 2004). For instance, operational tools such as campaign management allow companies to do experiments on subsets of customers and see how they respond to offers; with these results, the company can search for prospects that match the profiles of the subsets, using this as segmentation criteria in acquisition campaigns. This exercise can also be performed to test the messages to use in marketing campaigns. Research also supports the relevance of analytical CRM in customer acquisition, through customer profiling, segmentation, behaviour, as well as the storage of information related to reasons that led them to defect to or from competitors (Ang & Buttle, 2006; Xu & Walton, 2005). For these reasons, Peppers and Rogers (2004) state that Customer Relationship Management's success is explained by its role in defining strategies in the scope of all of the customer life-cycle, even before a prospect becomes a customer: 1) Get – using more cost-effective acquisition channels, better qualification of prospects and recruiting new customers matched to the profiles of current customers having a high CLV; 2) Keep – improve customer retention rate in the early years of the relationship; and 3) Grow – increase the profit earned per customer by reducing cost-to-serve and cross-selling or up-selling additional products and services. Therefore, based on the findings of identifying/characterizing and differentiating Landing's target, this study will aim to shed light on what additional Get, Keep and Grow strategies can the organization take, as well as the potential barriers for having a successful

CRM implementation. Based on the IDIC Model, the project can be structured in the following research questions:

- RQ1 – How can Landing.Jobs identify and characterize its current userbase?
- RQ2 – How can Landing.Jobs differentiate tech talent by value and needs?
- RQ3 – What is Landing.Jobs' current CRM capability and what Get, Keep, Grow strategies does it have in place?
- RQ4 – What are the potential barriers for Landing.Jobs to have a successful CRM implementation?

3. METHODOLOGY

3.1. RESEARCH PHILOSOPHY AND APPROACH

Johnson and Clark (2006) argue that more than guaranteeing that our research is philosophically informed, it is of utmost importance to be aware of our own philosophical choices that are consequence of how we view the world, as well as to have the ability to uphold them when comparing with other possible options. For this reason, this section explores the type of assumptions that were taken in the scope of Saunders et al.'s recommended stances (2016): epistemology (view regarding what constitutes acceptable knowledge), ontology (view of the nature of reality or being) and axiology (view of the role of values in research). In an epistemological perspective, this project embraces an interpretivist view. The methodical choices consist in a deep understanding of tech talent and how its distinct set of characteristics might affect both their value and needs in each of the talent journey's stages. Therefore, it is assumed that situations are a function of a specific set of circumstances and individuals at a particular time, consequently being complex and unique. Ontologically speaking, this is a pragmatic assessment as the used means will depend upon the research question. On one hand, subjective meanings will provide an overview of how talent perceives and interprets its journey at Landing.Jobs. On the other hand, observable and quantitative phenomena will be used to validate a talent valuation model, and internal data to increase customer intelligence. Lastly, in order to evaluate how my own set of values might influence the methodological choices, it is important to consider the axiology of why I chose this topic. After an internship that led to a permanent position at the company, Landing.Jobs challenged me to use my thesis as an opportunity to develop a project internally. Given my specialization in Marketing Research and Customer Relationship Management, the scope was settled to be in the purpose of CRM. However, Landing.Jobs is a marketplace with both employers and users, hence, we had to sort whether it would be best to do a B2B or B2C study. The decision of undertaking the B2C option was mainly related to the higher availability and bigger dimension of data, something that is of extreme importance to me as I believe in the power of data. Moreover, it was also due to one of the reasons why I was drawn to Landing.Jobs in the first place – the fact that Landing's services help change people's lives. As my goal as a professional has been to contribute towards the improvement of consumer's quality of life in a sustainable manner, the opportunity to join the B2C side of Landing turned out to

be the perfect opportunity to do so and directly feel its impact. Fortunately for me, Professor Elizabete Cardoso was about to develop a group project with Landing.Jobs regarding how different forms of capitals impact tech graduates' success, and how Landing could use that to optimize the acquisition, management and retention of this particular type of talent.

In terms of research approach, this study follows both inductive and deductive approaches: inductive, in the sense that it is intended to perceive what talent currently experiences in the platform, as well as to use internal bases in order to make sense of the available data; and deductive, in which a talent valuation model is tested.

3.2. RESEARCH DESIGN AND METHODS

This study follows a mixed-method research design, considering that it uses both quantitative and qualitative data collection techniques and analysis procedures. In terms of the methods used for userbase characterization, exploration of CRM strategies and identification of barriers for an implementation project, the study is cross-sectional as it regards a particular point in time. However, for the differentiation of tech talent's value and needs, this study intends to provide longitudinal research as it considers change and development.

This project's methodology began with business interviews, with the aim of performing a CRM diagnosis, that implied understanding where the company was on their CRM journey in terms of 1) current organizational situation and strategy, 2) marketing processes and campaigns, 3) data availability and 4) IT strategy and information architecture. In order to perform this, 8 people were interviewed within the company: one of the co-founders, the Heads of Business Development, Marketing and Operations, the Performance and Data Science Leads, the CRM Manager and the Product Owner of Landing.Careers. The interviews' script was adapted to the role of the interviewees and was flexible to the progression of the interviews. As mentioned previously, the CRM strategy proposal will be based on Peppers and Rogers IDIC Model (2004) and, as such, the following research design was divided into distinct phases, according to this model and, hence, the research questions. The first two phases – identify and differentiate talent, regard the stage of analysis, with the goal of gathering talent insights. In order to do so, this project makes use of the Marketing Information System (MIS) proposed by Kotler et al. (2013), that write

that through internal databases, marketing intelligence and marketing research, marketers can develop customers insights and use them to make marketing decisions and manage customer relationships. As regards to the action stage – phases of interaction and customization, or current CRM capability and Get, Keep, Grow strategies, it was conducted an investigation about what Landing.Jobs does in this regard, through means of mapping and analysing all touchpoints along the talent journey – awareness, consideration, conversion and retention. Throughout the following sections, the design and data collection and analysis methods for each of the IDIC’s Model will be further deepened.

3.2.1. Identify and characterize current userbase

For the first step of the IDIC Model, internal databases were used in order to develop quantitative research. Kotler et al. (2013) defines internal databases as “electronic collections of consumer and market information obtained from data sources within the company network” that can furnish information about customer demographics, psychographics, transactions and website visits. Accordingly, the aim of this sub-chapter is to identify and characterize Landing’s userbase, by gathering demographic, psychographic, behavioural and attitudinal data. Within Landing.Jobs, the main source used was BigQuery, where the platform data is stored, and the available tool to handle this data was Data Studio and MS Excel. Considering Landing’s business and the available data, the chosen variables to analyse were: 1) User_Region – discriminates the region where the user is based in according to Landing’s codes, as found in the Acronyms (PT, DE, ES, NL, OtherEU, OtherEurope, BR, OtherSA, Other); 2) Profile_Updated_At – date in which the user last updated his/her profile (date); Experience_Level – number of years the user has in working experience (years); Availability – user’s job search status (looking for a job to start immediately, currently employed but looking for a new challenge, not right now); Relocation – user’s willingness to relocate (TRUE, FALSE); Newsletter_Subscribed – if the user has subscription to the weekly newsletter or not (TRUE, FALSE); Talent_Advocate – if the user is being/was followed by a member of the Talent Team (Null or Name of Advocate). At the time of the analysis, Landing.Jobs had 117.102 users and all of these were taken into account for the analysis of the platform data warehouse. The data analyses in this stage were predominantly descriptive such as absolute frequency, relative frequency and variable patterns.

Another source used was Google Analytics, mainly for the extraction of data regarding tracking and reporting of website traffic. One of the drawbacks of this tool is that the type of behavioural data provided holds a focus on the beginning of the funnel, *i.e.*, acquisition. Therefore, regarding website behaviour in particular, Analytics has a maximum of 93 days for a time frame. This analysis considered the last trimester of 2019, but was compared throughout the year to assure the coherency of values. Google Analytics also provided some demographic data that was missing in the internal databases (such as gender and age), as well as psychographic information (namely affinity and in-market categories). It is important to consider that the demographic and psychographic information analysed from Google Analytics is from sampled data, meaning that it can only provide estimates regarding demographic and psychographic data. The time frame considered for the extraction of data was from January 1st to December 31st of 2019, and respecting multi-session users – individuals that visited the platform at least more than one time.

Moreover, in the development of the questionnaire of this project's marketing research, that is going to be deepened in the following sub-chapter, it was decided to add two questions with the goal of making inferences regarding how tech professionals spend their free time, that could be relevant for marketing efforts. On one hand, the respondents were asked about the type of channels they use to keep up with the news, which was then analysed through a Chi-Square test to detect associations. On the other hand, they were also asked about their social media platform preferences, which were further investigated through an analysis of variance (ANOVA). In the exploratory phase, the marketing research was also used to take the interviews as an opportunity to have an understanding of how the brand is perceived by its users.

Lastly, in order to gather additional attitudinal data, the Net Promoter Score (NPS) results of the company were analysed. The NPS is a customer loyalty score, ranging from -100 to 100, calculated by asking customers the following question: "On a scale from 0 to 10, how likely are you to recommend this product/company to a friend or colleague?". By categorizing respondents into promoters (respondents giving a 9 or 10 score), passives (giving a 7 or 8 score) or detractors (between 0 and 6 scores), the NPS is calculated by the difference between the percentage of promoters and detractors and then expressed as an absolute number (F. Reichheld, 2003).

3.2.2. Differentiate tech talent by value

In order to attempt to differentiate tech talent by value, a marketing research based on Cardoso's study (2019) was conducted, with an adaptation to the Portuguese and tech context. By means of investigating the role of universities, Cardoso assessed the effects of social, cultural and economic capital of recent graduates on career success, by using the Student Capital and Success scale. The findings validated Bordieu's Forms of Capital (1986) and, hence, confirmed that one type or a combination of economic, social and cultural capital impact the chances of being professionally successful. Therefore, the main objective of this marketing research is to use the ground bases established by Cardoso (2019) applied to the tech context, and validate if social, cultural and economic capitals are predictors of career success in this field, *i.e.*, predictors of being recognized as valuable in the recruitment market. It is important to consider that this reproduction also implies the study of the role and support of universities in the tech field, which is relevant for this project once it can represent a window of opportunity for Landing.Jobs to eventually replace universities in this topic. That is to say that, after investigating how an IT professional's background might impact his/her preposition to success, it was also explored how a third party has a role in influencing the professional to have a successful career path. For a more profound interpretation on Bordieu's Forms of Capital (1986) in the Portuguese tech context and the role of universities, it is possible to consult Hortas da Silva's dissertation (2020), the group member that deepened the understanding of this topic.

When considering this marketing research's design, there are also some secondary objectives to take into account such as to contribute to the tech talent's differentiation of needs (further deepened in the next section), and to gather insights regarding tech talent's psychographics and experience with Landing.Jobs, as explained in the previous sub-chapter. Although Landing.Jobs is an international marketplace, it was considered that, due to its advantageous presence in the Portuguese market, the model would be tested in Portugal in order to be able to have a statistically significant sample, but would accept responses from every country to serve the secondary purposes. Hence, this marketing research's target population was: working tech professionals – employed individuals that work in manufacturing of electronics, creation of software, computers or products and services related to information technology; with a bachelor's or master's degree; and that

are recent graduates – with a maximum of five years of working experience. According to PORDATA (2020), in 2018 there were 6.264 graduates in higher education in information and communication technologies in Portugal, which was used as an estimation of the size of the tech valuation model's target population. In the absence of a sampling frame, Landing.Jobs' userbase was used to reach the target population. In terms of data collection, both qualitative and quantitative methods were carried through, as the investigation began with an exploratory research, that was followed by a conclusive one, with the intention of following Malhotra and Birks' approach to market research (2006). While the exploratory results provided insights on how the constructs impact IT professionals, as well as on what the sample said about what they lacked in terms of career support, the quantitative findings then provided statistically significant conclusions regarding the theories developed.

The exploratory research had the goal of better understanding the phenomenon under study and consider the particularities of the tech context. On these grounds, a direct technique was used and, given the sensitiveness and complexity of the topic, individual in-depth interviews were chosen. In order to develop the topic guide (found in Appendix 1), it was performed a reproduction of Cardoso's interview guidelines (2019) – the first group of questions attempted to measure the social, cultural and economic capital of interviewees; the following section was characterized by university experience and support; in third place, a set of questions regarding career success and how to measure it; and, lastly, a section regarding job search, including experience with Landing.Jobs. The topic guide was conducted by three different interviewers, the members of this project field, through an approach of non-directivity and discovery – looking to provide positive attention but non-involvement, while also being fully opened to the interviewees' perspectives. In order to reach potential interviewees, the group used Landing's userbase search options by selecting users that possessed a tech job category in their current job status, and that were working and had a superior education, both in Portugal. Afterwards, several phone calls were made to these individuals through Landing.Jobs, briefly explaining the scope of the study that was in collaboration with *Universidade Nova de Lisboa*. Fifteen semi-structured interviews were conducted via-Skype in Portuguese language, audio-recorded and with an average duration of 45 minutes. After being transcribed, the respondents' answers were analysed through a matrix of content analysis and summarized by its various statements.

For the Conclusive Research, a descriptive study was conducted with the goal of testing a tech talent valuation model that would help in characterizing and differentiating this population. On these grounds, interviews were also selected, however, the method used was an electronic questionnaire sent via email. Also based on Cardoso's guidelines (2019) and after being adjusted to the conclusions of the exploratory research, the questions were direct and, hence, simpler to apply through this method, while also reducing the variability of the results and exponentializing the analysis. The questionnaire (found in Appendix 2) was built on Qualtrics and was divided into seven different sections: 1) a first group of qualification questions, qualifying if the respondents belonged to the target population; 2) next, a small section with basic information regarding the respondents' current professional situation; 3), 4), 5) and 6) sections directly reflected the research questions, concerning respondents' social, economic and cultural capital and perceived career success by asking for agreement or relatability on a scale of 0 to 10 (10 being the highest level of agreement/relatability); 7) lastly, respondents were requested to provide some classification information, such as socio-economic and demographic characteristics. In order to achieve accurate conclusions, the filters used to extract the list of emails of the sample were based on the characteristics of the target population: users that 1) possessed a tech job category in their profile, 2) were currently working and 3) had superior education. These individuals then received an email from Landing.Jobs asking for their help and collaboration in a study with both NOVA IMS and NOVA SBE, aiming to better understand the characteristics and needs of the tech community. Although this convenience sampling was the main sampling method, there was also a certain amount of snowball sampling. Due to the fact that not all members of the target population had the same probability of answering the questionnaire, this study has a non-probabilistic sampling. With these strategies, 237 qualified answers were achieved, 102 of which were working and had a superior education, both in Portugal. In terms of data analysis, the main goal of the questionnaire was to perform a structural equation modelling (SEM) analysis on SmartPLS, with perceived career success as the outcome variable.

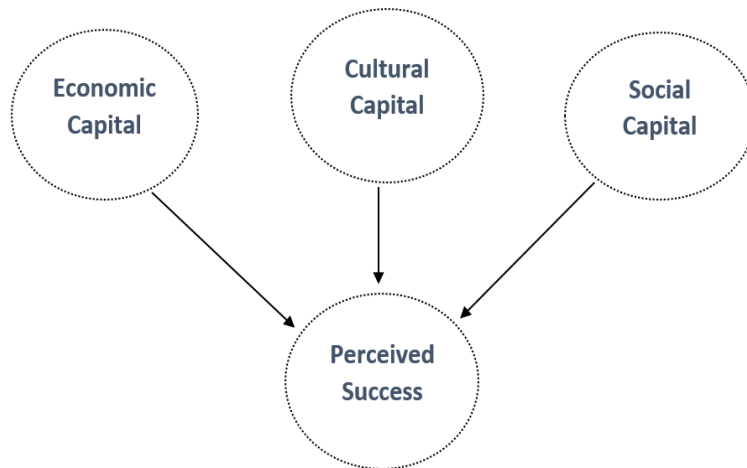


Figure 1 - Structural model relating the different forms of capital with perceived success.

The latent variables responsible for the fluctuations in this construct are the social, economic and cultural capitals, each measured by a group of indicators represented in the questionnaire. In order to have an additional validation of the latent variables' measurement, an exploratory factor analysis was conducted by exploring the underlying structure of the questionnaire data. Lastly, a replication of Portugal's tech valuation model was done to the international responses from the questionnaire with the aim of testing whether the model is applicable on an international level.

3.2.3. Differentiate tech talent by needs

As covered in Chapter 2, when considering the needs of tech talent in terms of career, it is necessary not only to assert the factors influencing the perception of career success, but also to determine how these may vary across different locations. In order to achieve this, marketing research, internal databases and marketing intelligence methods were used. One of the secondary objectives of the marketing research presented in the previous section, was to contribute to the differentiation of the needs of tech talent. In fact, the questionnaire's set of questions that considered career success was, indeed, intended to determine how the respondents define this concept. Accordingly, statistical data analysis such as relative frequencies and correlation breakdown was performed on this set of questions through SAS, aiming to detect the most valued indicators amongst the tech community. However, it was still necessary to oversee how these needs may vary

geographically. The first step was to introduce a new question in the onboarding calls. Onboarding calls are the calls made by the Talent Team, in which they onboard new candidates to the platform and attempt to assert their profiles, expectations and needs, so that they can provide personalized support. In order to get direct talent insights, it was proposed that, after asking if the candidate is willing to relocate and where to, the following question was introduced “Why do you want to move to this (these) country(ies)?”. This first approach was purposely qualitative and open-ended, to provide an opportunity of having a wider variety of responses in which the respondents were able to freely express themselves. Additionally, the lesser amount of bias in responses compared to close-ended answers enabled a validation of the quantitative approaches that followed. With the intention of exploring how the answers differ across the region but also to gather more insights regarding the tech professionals’ needs as a whole, all of the questions from the onboarding calls were analysed, of which the full script can be found in Appendix 4. In the light of this new information, statistical data analysis was performed to emphasize the factors that influence individuals to be willing to relocate to a certain destination, which in turn enlightens their needs.

To complement these results, marketing intelligence techniques were also applied. Marketing intelligence is considered to be the collection of publicly available information related to consumers or developments in the marketplace, for instance (Kotler et al., 2013). In this regard, this project intends to fill in a gap of information regarding talent (consumers) in each of Landing’s User Regions. Hofstede's cultural dimensions theory is a framework for cross-cultural comparison (Hofstede et al., 2010). As stated by the author in a different work, “societal cultures reside in values” (Hofstede, 2001), which will in turn determine individuals’ preferences and, consequently, their needs. By means of factor analysis, Hofstede shows the effects of a society's culture on the values, that can be summarized into six different dimensions: 1) Power Distance Index (PDI) – “extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally”; 2) Individualism vs. collectivism (IDV) – “degree to which people in a society are integrated into groups”; 3) Uncertainty avoidance (UAI) – “a society's tolerance for ambiguity”; 4) Masculinity vs. femininity (MAS) – “distribution of values between the genders”; 5) Long-term orientation vs. short-term orientation (LTO) – “connection of the past with the current and future actions/challenges”; 6) Indulgence vs. restraint (IND) – “degree of freedom that societal norms give to citizens in fulfilling their

human desires” (Hofstede, 2010). In the authors’ book in 2010, these indexes are calculated for 76 countries, providing scores for each one of them, which will be used in this study to characterize Landing’s User Regions. This analysis would be the first step in the development of marketing personas – one per each User Region. The first four Hofstede’s dimensions were developed in 1980, while the fifth and sixth were added posteriorly, in 1991 and 2010, respectively. Nevertheless, this framework has been replicated throughout time and proven to be valid and enduring. In fact, as emphasized by the author in 2010, a good reason for this is that the country scores on the dimensions provide positions relative to the other countries in the set, rather than absolute country positions. Moreover, further research has assured the representativeness of the dimensions: power distance and individualism are correlated with wealth (Hofstede et al., 2010), uncertainty avoidance and masculinity are linked to personality dimensions (Hofstede & McCrae, 2004); long-term orientation with economic growth and indulgence with happiness research (Minkov, 2007). Lastly, the final measurement that was used to characterize the User Region’s needs were Numbeo’s national statistics related to quality of life such as purchasing power, safety, health care, cost of living, property price to income ratio, traffic, commute time, pollution and climate indexes.

3.2.4. Interact and customize relationship

The action steps of Peppers & Rogers’ IDIC Model (2004) is where a CRM strategy is built, based on the results of the steps of analysis – identification and differentiation of customers. However, before using the analyses’ results to define interaction and customization strategies, it is first necessary to consider what efforts in this regard are already being done. Therefore, this section is about the methodology undertaken in order to identify what was currently being done by Landing.Jobs in terms of interaction with talent and relationship customization, enabling the provision of proper recommendations. For that, the entire talent journey has to be taken into consideration. As individuals tend to switch between channels when moving through the funnel (Ahuja et al., 2003), the first step was to consider all the channels that talent may encounter during the journey – touchpoint mapping, found in figure 2. For the talent journey, four stages were considered: 1) awareness – when talent learns that Landing.Jobs exists; 2) consideration – talent registers at the Landing.Jobs platform and considers to make an application; 3) conversion – talent makes an application and becomes a candidate; and 4) retention –

talent stays an active member in the Landing.Jobs community. Parallel to the IDIC Model, awareness and consideration were considered to be a part of the first step of Peppers and Roger’s model – Get. Following the same line of reasoning, the conversion and retention stages were considered to belong to the Keep and Grow steps, respectively. This journey was investigated “as is” in order to detect any potential pains that the talent may find in each of the stages. With this, an overview of the role and performance of each channel in the respective stages was made.

	Awareness Talent learns that LJ exists	Consideration Talent registers at LJ platform and considers to make an application	Conversion Talent makes an application and proceeds to become a candidate	Retention Talent stays an active member in the LJ community
	Touchpoint Map			
Social Media	x	x		x
Job Boards	x		x	
Blog	x	x		x
Events	x			x
Google/Third Party Sites	x	x		
Landing Page		x	x	x
Platform			x	
Platform Notifications			x	x
Talent Advocate			x	
Employers			x	
Email			x	x

Figure 2 - Talent journey and touchpoint map.

4. ANALYSIS AND DISCUSSION

In this section, the answer to the research questions is formulated throughout the analysis and discussion of this project's findings. With the goal of providing a more in depth overview of Landing.Jobs' operations, it begins with the business interviews, and then follows to the identification and characterization of Landing's users base, the differentiation of tech talent, the organization's current CRM capability and, lastly, the potential barriers in a CRM project implementation.

4.1. INTRODUCTION TO LANDING.JOBS' OPERATIONS - BUSINESS INTERVIEWS

With the interview with the co-founder, the insights gathered were mainly regarding the current organizational situation and strategy. The co-founder started by stating the organization's vision, that is to deliver the right tools for candidates to take ownership of their careers, and mission:

"Landing's mission is to transform career development and hiring to reshape the future of work." (Co-founder)

Both the mission and vision are oriented towards an ongoing trend that continues to gain relevance – the fact that career management is now of an individual's responsibility, rather than the companies'. However, Landing.Jobs is a marketplace and, as such, one of its core values is to make tech recruitment a rewarding experience for everyone involved. In fact, the Head of Business Development explained Landing's positioning in the tech HR industry. On one side, one can find recruitment agencies. These provide a service, not uniquely dedicated to tech, that consists of manually sourcing talent, usually implying less transparent and more expensive solutions. On the opposite extreme, one can find job boards. That is however a product, in which there is no human part; companies place job advertisements and wait for applications to arise. According to Landing's clients, around 95% of these applications end up being rejected, leading to inefficient processes caused by the time spent by the companies screening these applications with no fit. The Head of Business Development then stated that Landing.Jobs is positioned somewhere in between these two opposite sides.

“Not only we help companies to attract, but also to evaluate. There is currently no player doing this. And this is where Landing.Jobs is aiming to thrive” (Head of Business Development)

Through the use of algorithms, Landing.Jobs is able to provide a good level of automation in the evaluation process by automatically rejecting basic unfit profiles, for example a marketing professional applying to an IT position or any professional with no tech background. Nevertheless, there are subjective components that the algorithm does not detect. In this regard, Landing has the Talent Department involved in the evaluation process. These factors save work and time to the companies, which provides a clear definition of the value proposition to the clients. When considering the marketplace as a whole, the Head of Business Development covered the fact that Landing verifies many of the key success factors of a marketplace such as being 1) very fragmented, with high levels of supply (job seekers) and demand (companies looking to hire tech professionals), 2) polygamy, low loyalty levels of supply towards the demand (job seekers are looking for jobs in new companies, 3) big market size, many companies and many job seekers and 4) capacity to grow, considering that the tech market is booming, and that there are more and more companies looking to hire tech professionals. However, as stated, one key success factor missing was the frequency rate – ideally, the candidates would come to the platform every day. The issue is that job changes occur around every two years, so, how can Landing increase the frequency?

“This is the biggest challenge. Because when a person gets a new job, it takes a long time for them to need the platform again” (CRM Manager)

In the aforementioned quote, it is possible to see that the length of the talent’s lifecycle is a challenge felt across the organization. According to the Head of Business Development, this is the reason why the portfolio expansion began, with the organization now providing career-oriented products/services, such as the events, and currently investing on a new service related to coaching, mentoring and training. By assessing the company’s competitive edge, some of the organization’s strategic goals were already framed: increase the length of the talent’s lifecycle in the platform with a new product portfolio and define a proper structure for it, while assuring that it doesn’t harm the brand equity. Nevertheless, when asked about the key performance indicators (KPIs) used to keep track

of success on the talent side, the interviewees mentioned mainly the numbers of users, applications and quality of candidates. Additionally, considering Landing's geographic expansion, the importance of analysing how these metrics behave in the four different markets was also mentioned, revealing the objective to strengthen its presence in each one of them.

“The main metric is the number of hires per market, which is in line with the candidate's success metric – that is to be hired” (Head of Operations)

From the point of view of the Head of Operations, this objective represents the delivery of Landing's business and is represented in the Talent Team's work – to consider the market's needs and align the candidates accordingly. Facing the fact that Landing has around 2.500 candidates per month, it was covered some of the criteria used to select the candidates to whom the team should provide support to, that is directly associated with an application's fit. This is a manual exercise performed by the Talent Team, based on metrics such as experience level, availability type (looking for a job right now, just curious, etc.), level of skills' rarity and match with Landing's positions, English proficiency, among others. Considering the significant number of candidates, it is clear that only a percentage of these can in fact be followed by the Talent Team. However, the challenge is deciding, in an efficient and effective way, which ones to reach out to.

“There are no resources to talk to everyone. The main difficulty is talking to the right people” (Head of Operations)

The term “right candidates” is associated with the ones with higher fit with the job positions and, consequently, more likely to succeed in a recruitment process. In terms of the core business delivery, it is possible to note the need of automating the differentiation of talent, optimizing the segmentation process being done. It seems that the acquisition of talent is not so much of a concern for Landing, but rather the management of its current userbase in order to assure delivery. It is clear that this is a subject of vital importance for the organization, considering that its positioning in the market is directly correlated with its ability of selecting and evaluating talent, as stated by the Head of Business Development. With regard to segmentation by needs, the Head of Operations mentioned the use of seven different candidate personas by the Talent Team: international (candidates that want to move abroad); passive (not actively looking for a job or very often

already employed and not very engaged with the idea of changing); challenge driven (run by projects/ideas/culture of the companies and highly enthusiastic); quality of life seekers (more interested in schedule and flexibility of the company); upgraders/movers (such as senior professionals that wants to change technologies and would have to embrace a junior position); money driven (run by salary and money opportunities); and students/recent graduates). It was also stated that a study is being conducted in order to review, and possibly adjust, these candidates' personas. However, these are only used by the Talent Team given the specificity of the characteristics that differentiate the candidates' needs.

Regarding the marketing processes and campaigns, the Head of Marketing began by stating, in respect to the performance team – responsible for the acquisition of users and candidates –, that the goals of the current campaigns were either awareness, registration, application and reactivation. The Performance Lead then described the channels used by the team. In regards to acquisition of talent, there are: 1) Free channels – places where it is possible to advertise job positions without paying (Facebook groups, blogs, participation in certain events and other specific channels); 2) Paid Channels – aggregators, that are job boards that post Landing's job offers, and through which people have to register at Landing.Jobs to proceed with the application; and 3) Digital Ads – mainly Facebook and Instagram, with only a certain of Twitter and Reddit, and now testing Google. Regarding reactivation, the mechanisms used involve email and the platform notifications. When asked about the priorities in communicating with talent, the Performance Lead made clear that they have one priority: increase the number of applications. Although the Head of Marketing had named four different campaign goals (awareness, registration, application and reactivation), it appeared that the operational focus was conversion.

“We want to maximize the applications number and increase the conversion rates of users and candidates” (Performance Lead)

In line with this reasoning, the metrics used to measure the results of the campaigns are the number of users and the number of applications per market, as well as the cost per user/candidate (CPA). In order to do so, the tracking tools are Google Analytics, UTMs (or Urchin Tracking Modules, codes that can be attached to any URL) and the particular platforms of the ads. Moreover, it was important to understand how campaigns are

chosen, if there are any efforts tailored to acquire “quality candidates” and how these prospects are segmented. In this regard, the Performance Lead informed that the segmentation variables are mainly geography (location) and age, in terms of tech stack fit, the strategies used are the Lookalike audiences and/or based on interests, when considering digital ads. As for the aggregators, the targeting is done in an organic manner: the people that use these products are assuredly looking for a new job and the several job categories are clearly organized by the job boards. Considering the metrics used to qualify the channels and the targeting strategies used for acquisition, it was possible to note that the quality of the prospects neglected to be mentioned. This goes in line with the Head of Marketing’s statement regarding the difficulty in measuring the marketing results.

“It is difficult to measure the results because the efforts only show who is registering or applying directly, not who is hired because of that advertisement. The conversion funnel is online and offline” (Head of Marketing)

More in particular to CRM strategies, the CRM Manager stated that it consists mainly in email marketing: 1) Talent Job Pushes – personal approach, in which an email is sent by a member of the Talent Team with 3-5 job openings that match the profile of the candidate (twice a month); 2) Branded Job Push – branded email campaign, for new companies in the platform or strategic companies with several job offers (once a month); 3) profile update campaigns – for individuals who haven’t applied to any job position in 3 months, for instance (no specific rule, as it is a manual analysis). With the main goal of increasing the number of applications in mind, the CRM Manager highlighted the lack of automation and the great need of having a CRM platform.

“CRM is not developed at Landing. It is necessary to automate” (CRM Manager)

When asked about the reasons for not having a CRM Platform, it was claimed that the request had been done and that there was a certain disbelief from the upper Management that the benefits would surpass the costs. From the point of view of the CRM Manager, and in agreement with the Head of Marketing, ideally the campaigns would be launched based on the user’s stage of the loyalty loop, but there is currently no capacity for this. The lack of usable data was one of the obstacles in the development of CRM mentioned, as well as the manual management of the campaigns. Nevertheless, the Head of Marketing still added that CRM should show users that they gain value by being a part of the

Landing.Jobs community, emphasizing the importance of discovering how to be relevant to these people until they need Landing again.

The last questions of the interviews were related to data availability and IT information architecture. Google Analytics (visits, bounce rates on the website), Data Studio (connected to BigQuery, where all the business data is stored) and the platform’s Backoffice (for data of users/applications) were found to be the main places where the relevant data sits. In terms of data quality to be used by the Marketing Team, the Performance Lead pointed out some challenging variables such as the “skills”, that are not filled by every user or are sometimes outdated and “years of experience”, given that it does not update automatically, being dependent on the user to do so.

4.2. RQ1 – HOW CAN LANDING.JOBS IDENTIFY AND CHARACTERIZE ITS CURRENT USERBASE?

4.2.1. Demographic Findings

The first type of information gathered was demographic, beginning with data accessed from Landing’s data warehouse. In terms of User Region distribution, PT was the most common location with around 21,00% of users. 17,70% belongs to Other, which can be explained by the fact that it is the User Region that contains the largest number of countries – it considers the remaining countries worldwide, that do not belong to the other User Regions. Next, BR represents around 15,53%. For this, it is important to consider the Geographies Mapping criteria (Figure 3), that represents the allocation of goals according to the user’s region; which, for Portugal, means that its goals are mainly for PT and BR users.

Audiences / Markets	PT	DE	ES	NL	OtherEU	OtherEurope	BR	OtherSA	Other
PT	x						x		
DE		x			x	x			x
ES			x					x	
NL				x	x	x			x

Figure 3 - Geographies mapping: allocation of User Region goals per market.

The fact that PT and BR are the top represented regions, excluding Other, and considering this criterion it is clearly demonstrated that Landing's userbase responds best to the PT market's needs. OtherEU (12,03%), DE (4,39%), OtherEurope (4,17%), ES (3,80%), OtherSA (3,70%) are the regions represented next, with NL being positioned last with only 0,99% of the userbase. These percentages also reveal the need to strengthen the market presence in the other markets in which Landing is inserted (DE, ES and NL). In this variable, it was found 16,40% of nulls, *i.e.*, with no information, which is a substantial percentage considering the degree to which this specific business depends on the users' location. As regards to the Experience Level, the business interviews led to the conclusion that this variable would not bring viable inferences considering that it informs the number of years of working experience the user has at the point in time in which he/she created or updated his/her profile, not being updated automatically. To overcome this problem, this variable was transformed to Real Experience Level – the number of working years the user has, added to the difference between the current year and the year in which the user last updated the profile. After this attempt to access a more accurate value, the experience category was attributed: junior (less than 3 years), intermediate (between 3 and 5 years) and senior (more than 6 years). 43,70% of the userbase are seniors, followed by intermediates and juniors, and 39,34% does not have information on at least one of the variables (Experience Level and Profile Updated At). After comparing the variable across the User Regions, it was concluded that it follows the same ranking in all regions. Concerning the data provided by Google Analytics, 75,00% of the website visitors are male, and 25-34 is the most common age frame, with around 63,00% of visitors, 65+ being the least common one. In terms of the language settings in visitors' browsers, Google Analytics estimates that around 50,00% of them use English (both from US and United Kingdom) and around 25,00% use Portuguese (from Portugal and Brazil).

4.2.2. Psychographic Findings

Secondly, psychographic data was collected. Concerning Availability, 36,74% of users are currently employed, but looking for a new challenge, 31,46% looking for a job to start immediately and 21,60% not looking for a job right now (10,20% of the userbase does not share their availability status). For users that are not looking for a job right now, 21,60% is a considerable percentage and, as such, it is important to understand the specific needs and wants of these users when creating a profile at Landing.Jobs.

When analysed with experience category, it was noted that juniors are mostly looking for a job to start immediately (65,58%), whereas seniors are mostly employed, but looking for a challenge (54,90%). While 44,48% of the “looking for a job to start immediately” and 51,57% of the “currently employed but looking for a new challenge” are open to relocation, only 8,24% of the “not looking right now” are willing to do it. The “not looking right now” users are also the least active, 52,56% of them having updated their profile for the last time in the first semester of 2016. On the contrary, 37,71% of the “looking for a job to start immediately” and 32,65% of the “currently employed but looking for a new challenge” updated their profile in the previous year (from the second semester of 2018 to the second semester of 2019). In terms of relocation alone, around two thirds (34,72%) of the users are open to relocate to a different country. While of those who do not wish to relocate, PT has the highest weight (39,78%), of those who do wish to relocate, BR leads the ranking (26,74%). It was also possible to note that, although the majority of users from OtherEU, OtherEurope, OtherSA, BR and Other are willing to relocate, there is a percentage of these that are not open to it. Considering that they cannot find local opportunities at Landing.Jobs, this raises the question of what approach should they receive – are they low value users, or are they a good fit for other products/services? In Chapter 5, a set of recommendations is proposed, directed to the retention of users that may not be interested in finding a job for the time being. Nevertheless, it is important to consider that almost half (45,69%) of the userbase did not provide information for this variable.

Stepping into the Affinity Categories provided by Google Analytics, an idea of the visitors' lifestyle was estimated. Shoppers/Value Shoppers, Media & Entertainment/Movie Lovers and Technology/Technophiles were the top three categories of the multi-session visitors in 2019. Regarding In-market Categories, these identify groups of visitors who are in the market for specific product categories, and are more likely to convert as in the case of Landing's top three categories: not only Employment and Employment/IT & Technical Jobs, but also Employment/Career Consulting Services.

With the marketing research's questionnaire, it was possible to obtain information regarding the places where users spend some of their free time. As to the means used to keep up with news, the respondents were able to choose more than one option, and claimed to use mainly Social Media (23,86%), Online Newspapers (23,86%), Blogs/Online

Communities (18,56%) and Other internet media such as Buzzfeed news, Google news, among others (16,29%). For the Chi-Square analysis, these channels were divided into three categories: Traditional – TV, Radio and Newspapers; Online – Online Newspapers, Blogs/Online Communities, Social Media, and Other Internet Media; or Both – Traditional and Online. According to the results, there was a strong association between the media categories and the country of residence ($\chi^2(2, n=237)=12,52, p<0,05$). While 70,90% of people living outside Portugal keep up with the news only through online mediums, only 48,54% of the ones living in Portugal use this media category exclusively. To some extent, although it should be highlighted that the results are not compared with other countries in specific, it would seem that the organization's online presence in the foreign markets is even more significant. Surprisingly, as to experience category, whereas 20,00% of the respondents that use traditional means only are intermediates, 80,00% were juniors. Even so, it should be mentioned that seniors were not represented in this sample, in addition to the fact that the association of experience category had only a moderate strength ($\chi^2(2, n=237)= 4,83; p<0,10$). In terms of feeling successful or not, no association with the media channel usage was detected ($\chi^2(2, n=237)=0,51; p>0,10$). However, the fact that income level demonstrated a very strong association with the same construct ($\chi^2(2, n=237)= 31,46; p<0,05$) contradicts the idea that success is unrelated to the media usage in any way, considering that income can be considered an objective measure of success (Judge et al., 1995). These results demonstrated that around 93,00% of the respondents with higher income levels, used exclusively online tools to keep up with the news. Regarding social media usage, the network in which respondents spend more time is YouTube, with an average of 27,66 minutes out of 100 minutes available to use on social media; followed by LinkedIn (19,36 minutes), Instagram (18,53 minutes) and Facebook (13,03 minutes). According to the ANOVA results, there were no statistically significant differences between the means of the different experience categories among the social media networks. With respect to the country of residence, on the contrary, as it is possible to see on table 1, there were statistically significant differences between the means of the country of Portugal compared to foreign, in all social media networks.

	Mean Square	F	Pr > F
EXP_CAT * YOUTUBE	331,96	0,60	0,44
EXP_CAT * FACEBOOK	44,63	0,19	0,66
EXP_CAT * REDDIT	373,73	0,87	0,35
EXP_CAT * LINKEDIN	0,01	0,00	1,00
RESI_REG * YOUTUBE	1.603,79	2,91	0,09*
RESI_REG * FACEBOOK	1.336,84	5,86	0,02**
RESI_REG * REDDIT	4.938,88	12,11	0,00**
RESI_REG * LINKEDIN	1.302,78	4,21	0,04**
SUCCESS * YOUTUBE	906,46	1,63	0,20
SUCCESS * FACEBOOK	41,66	0,18	0,67
SUCCESS * REDDIT	0,06	0,00	0,99
SUCCESS * LINKEDIN	1.014,28	3,26	0,07*
INC_LEVEL * YOUTUBE	475,28	0,85	0,58
INC_LEVEL * FACEBOOK	300,02	1,30	0,23
INC_LEVEL * REDDIT	764,60	1,85	0,05*
INC_LEVEL * LINKEDIN	499,12	1,63	0,09*

Table 1 - ANOVA results from YouTube, Facebook, Reddit and LinkedIn usage with Experience Category, Region of Residence, Success and Income Level. Significant relationships are marked with * for p-value < 0,1 and ** for p-value < 0,05 (n=237).

Considering the example of Reddit, one of the social media platforms that it is used by Landing for advertising purposes – while Portugal has an average of 16,19 minutes spent out of 100 ($SD=25,41$), the remaining countries have an average of 6,99 minutes ($SD=15,02$). Naturally, in order to reach audiences in different countries, it is necessary to consider how the different populations differ in terms of social media usage. As to feeling successful or not, there were significant differences between the means of the two groups in particular to the use of LinkedIn ($F(1, 237)=3,26; p<0,10$). Moreover, when considering the continuous variable of success – perceived success rated on a scale of 0 to 10 – the association is even stronger ($F(1, 237)=3,25; p<0,00$). Whilst the responses with 0 have the highest mean of time spent on LinkedIn, which can be explained by the people that are looking for a new job and to improve their careers, the means decrease from that point onwards, and then, they start increasing again on greater feelings of success (from 7 onwards). In fact, higher income levels also demonstrated statistically significant different means on LinkedIn ($F(1, 237)=1,63; p<0,10$), as well as on Reddit ($F(1, 237)=1,85; p<0,10$).

4.2.3. Behavioural Findings

Thirdly, some behavioural data was analysed. As for the platform's userbase analysis, it was concluded that only around 25,00% of the users updated their profile between the second semesters of 2018 and 2019; and for 20,50% of the users, the first semester of 2016 was the last time they made changes to their profile. As regards the most appropriate response to this, it is important to investigate what other reactivation campaigns can Landing have in place in order to make its users more involved (found in Chapter 4.4). As to the Talent Advocate variable, it was disregarded from the analysis due to the fact that it was outdated, which led to the lack of information regarding a factor that could be relevant in Landing's business. Nevertheless, there were still a few important business metrics that were analysed within the platform data warehouse – number of new users and applications throughout the year, with the goal of exploring the existence of a pattern. Only the years of 2018 and 2019 were considered due to the changing maturity of the organization, as well as of the data structure, that revealed that some of the variables of choice were not yet in use before 2018. In terms of new users, the following common events were detected as shown in figures 4 and 5: a particular increase after the month of June, as well as in August, verified until October, this one being the pique of new users; after this, a decrease in November is verified, followed by a new increase in December. Regarding applications, as seen in figures 6 and 7, an increase after August until October was also verified, this being its pique, followed by a decrease in November.

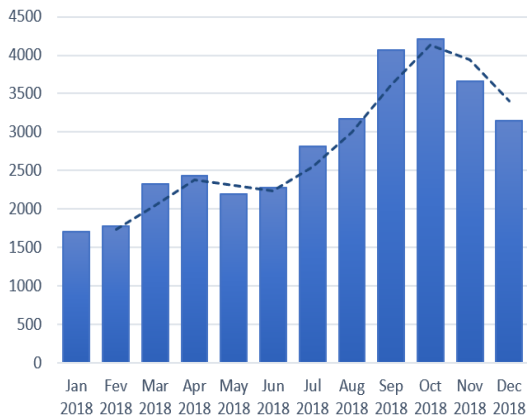


Figure 4 - Landing.Jobs' new users per month in 2018.

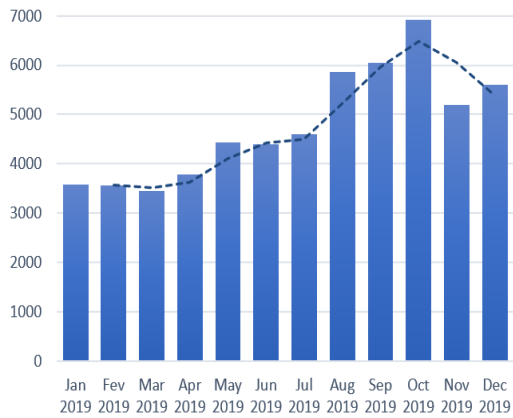


Figure 5 - Landing.Jobs' new users per month in 2019.

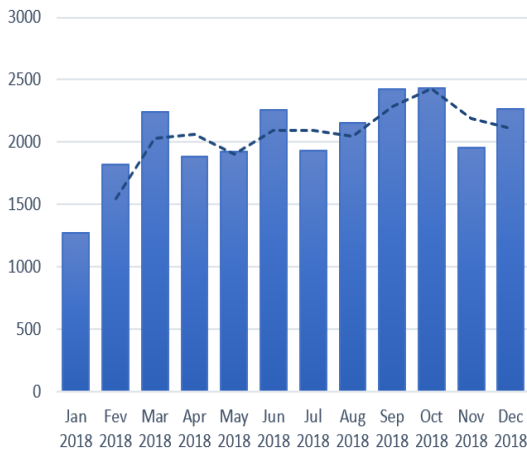


Figure 6 - Landing.Jobs' applications per month in 2018.

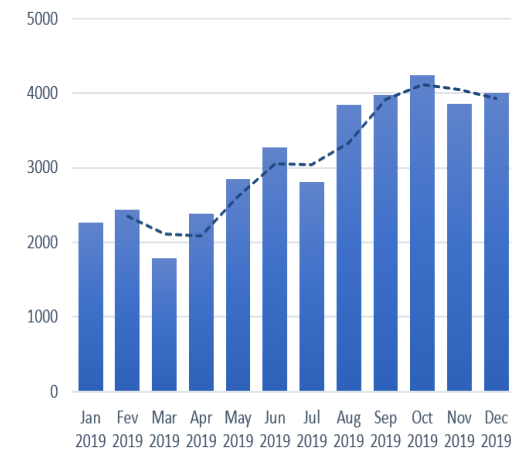


Figure 7 - Landing.Jobs' applications per month in 2019.

With regards to information related to what is considered to be conversion in Landing's business, some relevant data was not possible to collect: number of applications per user, average rating of applications, number of applications engaged/offers received/hires through landing, date of last application, job regions to which the candidate has applied and previous events attendance. This type of missing data is one of the main obstacles in knowing the loyalty loop stage in which the user is inserted. More behavioural data was also intended to be analysed such as number of weeks that have passed since a user last visited the platform, the number of sessions the user has in the last three months or the session minutes the user has in the last three months, giving an idea of the user's level of

engagement with the company. As this data was also not available or accessible by the Marketing Team in the internal data sources, Google Analytics was used with the goal of further collecting behavioural data.

In figure 8, it is possible to see that the main acquisition channel is Paid Advertising, which means that around 31,20% of visitors are acquired from digital advertising. After Direct Search – the ones that navigate directly to the URL – with 19,80%, are Aggregators as the third channel, bringing 14,30% of visitors. Aggregators are then followed by Organic Search (11,20%), and then Email, accountable for 8,10% of the visitors. Interestingly, when compared to the platform data warehouse in 2019, it was possible to conclude that the numbers are somewhat different: while in terms of new users, digital advertising was accountable for 43,70% and the aggregators for 30,30%, in terms of applications, digital advertising was only accountable for 12,70%, and the aggregators for 30,00%. In other words, while digital advertising appears to be the main channel for acquisition of new users, aggregators seem to have a more important role in conversion – number of applications.

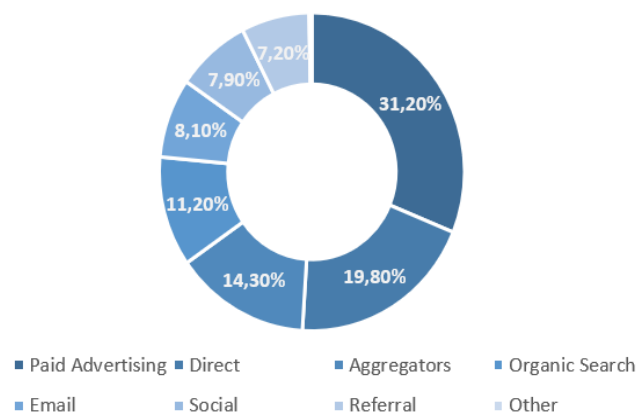


Figure 8 - Main acquisition channels of website users.

The website visitors have an average bounce rate of 50,87%, which according to Analytics' benchmarking is 5,71 p.p. above the average of the Jobs industry – this means that it is 5,71 p.p. below average performance, as bounce rate represents a rejection rate. The average pages visited by visitors is in line with the industry average, 3,51, and the visitors' average session duration is above average, with 12m06sec against 02m46sec. According to Google Analytics, the majority of visitors lands directly in the job search page. It is

worthy noticing that while only 9,41% exit the platform in the application pages, around 40,00% of visitors that go to the jobs page, exit the platform. In view of the considerable percentage, it was important to further deepen this topic in order to investigate whether LandingJobs is bringing the right people to the platform. As Landing's main paid acquisition channels are digital advertising and aggregators, two separate segments were created. When considering sessions, the period of time a visitor is actively engaged with the website, digital advertising is responsible for 23,70% and aggregators for 12,50% of the sessions. By looking at Analytics' metrics for acquisition behaviour, it is possible to see that aggregators perform better in terms of average pages visited per session – 2,25 vs. 2,03 – and average session duration – 05m41sec vs. 03m16sec – of visitors –, while digital advertising performs slightly better in the bounce rate – 67,90% vs. 68,19%. Moreover, these records indicated that the visitors coming from Landing's paid channels have in fact a lower performance in terms of pages visited, session duration and bounce rate, than the average of the website. It was indispensable to investigate the reasons behind this. While it can be explained by the fact that Direct searches have, on average, better performance, it is important to exclude the possibility of being an issue of the channels itself. That is to say, each channel has its particularities and, with the intention of truly asserting its performance, they should be analysed individually, as it cannot always be compared among others. A striking example of this can be the sign-up page, in which no alarming differences were detected: while 28,63% of the visitors that came from aggregators exit the platform in this page, 34,37% of the visitors coming from digital advertising do the same. One justification often given for the better performance of aggregators is that it targets individuals that are actively looking for a job, giving them the possibility of selecting specific job positions and, hence, it could be expected a more direct conversion path. Needless to say, in the Direct search channel, this would be even more evident. Since there was a need to oversee the mediums, the specific sources of each channel were also analysed, in order to explore whether there is one jeopardizing the channels' performance. Regarding digital advertising, although only Facebook and Google have statistically representative samples, no particular source was performing below this medium's average. Therefore, the unanswered question is whether the overall average of this medium is indeed high. However, when considering aggregators, it was possible to note that the visitors coming from JobsInNetwork, jobrapido and Jobtome had particularly high bounce rates and low number of sessions in contrast to the medium's average. This

indicates that rather than being an issue of the visitors of this medium, it is an issue particular to the ones coming from three specific aggregators. With this in mind and reinforcing the fact that aggregators have a more important role in the users' applications, the question of whether paid advertising is a channel that needs to be optimized in order to bring more qualified users, *i.e.*, users that make applications, is raised.

4.2.4. Attitudinal Findings

Lastly, attitudinal information was gathered. In particular to the userbase's newsletter subscription, 68,31% of Landing's users are subscribed to the weekly newsletter. Next, the company's NPS was analysed. However, not much data was available. The information accessible was that Landing.Jobs, during the year of 2019, had an NPS score of 69,51, with 1.639 promoters (from 9 to 10), 424 passives (from 7 to 8) and 121 detractors (from 1 to 6). It was not possible to investigate the breakdown of how many respondents gave each score, nor to explore any possible segments within the responses. When benchmarking with the industry, it was difficult to find values for the particular industry of Landing.Jobs. Nevertheless, according to Hotjar, a score of 60 or higher is generally a very good NPS in any industry ("NPS® Benchmarks: What is a Good Net Promoter Score? | Hotjar," n.d.).

With regards to the marketing research, out of the ten people interviewed in the exploratory research that had a Landing.Jobs' profile, two had negative experiences with the platform, stating that they never received feedback from their applications, one of them also mentioning that he could not find opportunities for his specific technology. For the remaining interviewees, it was either a neutral experience, in the sense that they created the account only to explore the Portuguese IT job market, or positive, as they participated in recruitment processes or even landed a job thanks to it.

4.3. RQ2 - HOW CAN LANDING.JOBS DIFFERENTIATE TECH TALENT BY VALUE AND NEEDS?

4.3.1. Differentiation by Value

4.3.1.1. Exploratory research

From the sample of 15 people interviewed in the exploratory stage of the marketing research, 5 held a bachelor degree in information technologies from Instituto Superior Técnico (IST), 3 in other Lisbon-based universities, 4 in Oporto-based universities and 3 in

universities in Portugal, outside Lisbon and Oporto. In terms of industry, 9 worked in Consulting and Outsourcing firms, 5 in IT and software companies and 1 in a Fashion company. Regarding cultural capital, it was found that, while growing up, the majority of the interviewees had participated in cultural (10) and/or sport (13) activities. Similarly, 8 had attended organized activities during the summer school holidays, primarily summer camps or volunteering. While at university, 9 were part of a club or society. Although the ones that were part of societies of music or sports felt that belonging to these student groups did not benefit them on a professional level, the remaining respondents mentioned having more learning opportunities, getting to apply what they were learning in lectures and networking. In comparison to their university peers, 5 stated that they felt they had more cultural capital, explaining that they perceived that many of their colleagues were not as intellectually stimulated. Whereas 7 were neutral, the 3 that alleged having less cultural capital than their peers mentioned the lack of artistic experiences.

As regards to economic capital, one-third of the interviewees claimed going through financial difficulties while growing up. Later on in their lives, 4 of these graduates had to work while taking their bachelor's degree, whether through part-time or during the summer, to be able to financially sustain their studies. Likewise, 4 out of these 5 graduates that claimed going through financial difficulties while growing up started working right after their bachelor's, and the one that extended his studies to a master's degree had to work in order to sustain it. There were also 5 graduates that witnessed colleagues abandoning university or further developing themselves, for instance through online courses, due to financial distress. In fact, concerning their current career, one interviewee mentioned that the financial difficulties impacted him through less accessibility to computers and, hence, lack of previous knowledge in computing or experiment in learning programming languages.

Lastly, respecting social capital, only 3 claimed to be a part of a professional group within their line of work. With the exception of 1, all interviewees use LinkedIn, but only 3 interviewees said that they found their first job by using their social capital. This highly contrasts Ambrósio (2019), whose study on business students showed that half of the interviewees claimed to have used their own contacts to get their first job, which suggests the particular gap between demand and supply in Portugal's IT job market mentioned in

Chapter 1. In fact, most of the graduates mentioned receiving contact attempts from other companies on LinkedIn almost daily.

After starting to have an idea over how cultural, economic and social capital predict career success, the role of the universities, or potentially another entity, in filling in the gaps there might be in these potential value-predictors was addressed. Except for 2 interviewees, the foremost opinion was that university was positive to them and specially succeeded in providing them with the resources to learn any type of technology. The provision of soft skills courses, career fairs and partnerships with companies were also mentioned as positive outcomes of attending university. Nonetheless, many interviewees referred having resorted to a great deal of self-learning and that they were aware that there are companies that hire IT professionals straight from high school. As to the masters' degrees, its perceived worth seems to be rather inferior. The interviewees who did not pursue it trust that they are in a more advantageous position than their peers who did, and those who did, felt like it was not well-invested time. In view of what universities could do to increase the probabilities of their students becoming successful, the continuous update of the programs and higher focus on the application of the theoretical frameworks were considered crucial, while facing the IT market's fast paced evolution. As means to provide students a greater awareness of what the job market is about and what are the implications of working on a project, 1 of the interviewees also mentioned the increased connection to companies. Lastly, when questioned about their current needs for career coaching, most of the interviews (14) confessed never having thought about such service. Although they did not show a particular interest in it, they also mentioned not having a personalized career support during their university experience.

4.3.1.2. Conclusive research

After analysing the interviews, Cardoso's questionnaire (2019) was adjusted to be appropriated to the IT universe and, hence, obtain quantitative data that could have statistical significance. For Portugal's tech valuation model, both economic and cultural capital proved to have statistically significant effects. A total of 102 valid responses from IT graduates living and having studied in Portugal, with 5 years maximum years of professional experience were analysed. They were between 21 and 32 years old, around 93,00% were currently employed and they had an average of 1,92 years of working experience. In terms of the area of study, 12,00% held a Bachelor's degree in Information

Systems or Technologies, another 12,00% in Data Science, 15,00% in Computer Science and 61,00% in Computer Engineering. Regarding the universities, 32,40% were from Instituto Superior Técnico, 16,70% from *Universidade NOVA de Lisboa*, 8,80% from Universities in Porto and 45,00% from Other Universities in Portugal.

Several formative indicators were analysed for each of the constructs and validated through internal consistency, indicator reliability, convergent validity and discriminant validity. As for the structural model, according to the path coefficients' analysis, it was concluded that, considering the impact of Bordieu's forms of capital on IT graduates' perceived success, economic capital has the strongest effect. With a bootstrapping of 1.500 subsamples on the model, this impact evidenced statistical significance through a p-value of 0,00 ($t(102)=3,60$). Naturally, having an individual computer while growing up had a moderate correlation with being financially well off during the same period ($r=0,58$; $p<0,01$). In turn, being financially well off while growing up had a moderately-high correlation of 0,65 ($p<0,01$) with feeling financially comfortable for the time being. This suggests that the level of economic capital an IT professional has while growing up can positively influence the same construct in his/her future. Cultural capital had the second-largest impact on IT graduates' success, with a path coefficient of 0,273, also statistically significant ($t(102)=1,99$; $p<0,05$). The respondents' involvement in cultural activities was statistically associated with the variables relating their parents' cultural capital. Moreover, there was a feeling that the values instilled by the graduates' parents before university better prepared them for their degrees than most of their colleagues ($M=6,74$; $SD=2,56$). Therefore, it seems to be indicated that tech graduates with parents of higher cultural capital have greater probabilities of participating in this type of activities and, consequently, better succeed as tech professionals. Lastly, social capital had the lowest path coefficient out of the three types of human capital analysed and it was not proven to be statistically significant ($t(102)=1,54$; $p>0,10$). For example, of those that are currently working, only 12,7% claimed to have used social networks to obtain their current position, which is an even lower percentage than the one obtained in the interview stage. Once again, the significant gap between demand and supply in Portugal's IT job market is demonstrated. In the end, the resulting SEM model explained 66,20% of the variation of IT graduates' perceived success. Therefore, it is possible to say that one's cultural, economic and social capital substantially predicts an IT talent's professional success in Portugal.

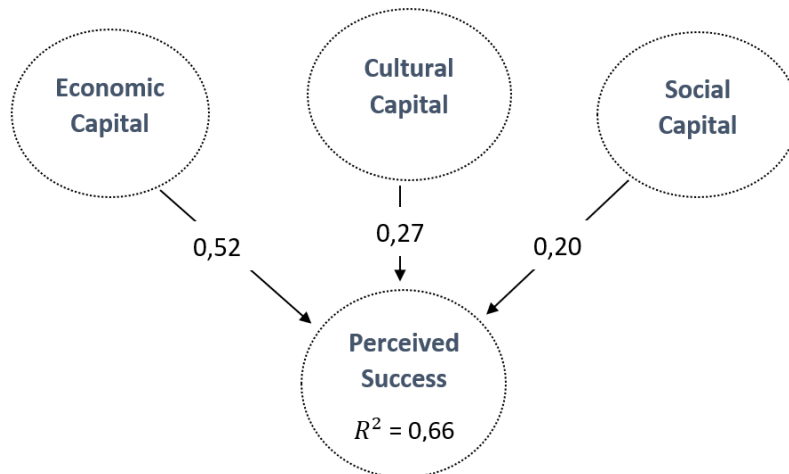


Figure 9 - SEM Model's structural estimates.

When questioned about what was missing in their professional profiles after they completed their studies that may have prevented them from greater success, the answers with higher average were insights on the job market – namely types of jobs and what they entail ($M=5,74$; $SD=2,96$), and a comprehensive view on how they could convert what they had learned in university into marketable skills ($M=6,54$; $SD=3,09$). Although doing an internship during their programs had an average of only 4,23 ($SD=3,61$), its standing could be more substantial given that, analysing the distribution of values from the answers of this question, it is possible to detect many “0” responses. From these, 55,6% had done an internship, which represents a possibility that they responded 0 because, as they have done it, they could not feel that was lacking them. In addition to this, the high standard deviation of this indicator may also suggest that internships could be an interesting opportunity for some tech graduates.

4.3.1.3. Validating the SEM Model

With the previous results, the SEM Model was validated through SmartPLS, analysing how the different set of indicators of social, economic and cultural capital impacted perceived success. From the point of view of the factor analysis, the results were able to validate the constructs used in the model in question. Firstly, the Kaiser-Meyer-Olkin index (KMO), a measure of sampling adequacy, had a value close to 1 ($KMO=0,91$), which, according to Kaiser and Rice (1974), provides an excellent recommendation for the proceeding of a factor analysis. Regarding the appropriate number of factors, the Kaiser Criterion and the Scree Plot were used. On one hand, the Kaiser Criterion – a measure proposed by Kaiser

(1960) that states that, unless a factor extracts at least as much as the equivalent of an original variable, it should be disregarded – 5 different factors were to be considered. On the other hand, with regards to the Scree Plot, Cattell (1966) suggests looking for the point at which the last significant fall or break occurs - in other words, where the line begins to stabilize. In this case, it can be said that this fall occurs after the fifth component and that, consequently, 5 factors must be retained. However, it can be argued that there is a first considerable fall with a less pronounced slope after the fourth factor. Given that both options could be considered appropriate and based on the goal of this analysis, 4 factors were used. Regarding rotation method, both an Orthogonal Varimax and an Oblique Promax rotation were analysed, as an aid in comparing results. While the oblique rotation allows the factors to correlate to each other, the orthogonal rotation does not. Considering that the results between the two rotations were considerably different, there is little doubt that the factors of the model are correlated; a fact also confirmed by the inter-factor correlation matrix. In fact, the factors were mostly correlated with the factor that represents the dimension of perceived success, which is also, naturally, aligned with the conclusions from the SEM Model. In order to characterize these dimensions for each factor, the Factor Pattern table (Table 2) was analysed. As it is possible to observe, all the variables related to perceived success have evident higher factor loadings on factor 1 – which can, hence, be considered as the perceived success dimension. Respecting factor 2, it appears to be representing the construct of social capital. However, there are a few variables of social capital that have higher factor loadings with factor 4: SC_7 – “I stay in touch with professors to whom I know I can ask for career advice”, SC_9 – “I am a member of one or more organizations that I believe can support me in achieving my goals”, SC_11 – “I have a mentor who gives me professional advice and that I got through my university’s career services” and SC_12 – “I actively manage my relationship with people from my network that I believe can represent job opportunities in the future through themselves or their own connections”. It is also important to note that the mentioned variables have communalities below 0,5. These values reveal the part of the variance of a variable that is being explained by the factors presented, which if below 0,5, its removal from the construct should be considered (Hair et al, 2014). Yet, the factor to which the variables in question seem to be more related to, appears to represent cultural capital, although this construct is less well represented, as it only had two quantitative variables. Lastly, factor 3 represents the dimension of economic capital, as all the variables from this construct

have higher factor loadings with this factor. With this set of variables and factors, 92,39% of the variance of this data set is explained. Another quality indicative is the fact that the Square Root of the Mean Square Residual (RMSR) is below 0,05 – an index that measures the differences between the original correlations and those reproduced by the factorial solution.

	Factor Loadings				Communalities
	Factor1	Factor2	Factor3	Factor4	
Q33_EC_1	0,082	-0,013	0,712	0,079	0,576
Q33_EC_2	-0,044	0,015	0,663	0,010	0,418
Q33_EC_3	-0,017	0,069	0,427	-0,072	0,193
Q33_EC_4	-0,073	0,070	0,822	-0,078	0,652
Q33_EC_5	0,223	0,145	0,685	-0,081	0,743
Q17_SC_2	-0,009	0,398	0,089	0,210	0,260
Q17_SC_3	0,016	0,686	0,115	0,003	0,530
Q17_SC_4	-0,020	0,702	0,098	0,011	0,520
Q17_SC_5	0,047	0,759	0,026	-0,051	0,605
Q17_SC_6	-0,008	0,728	-0,002	0,097	0,565
Q18_SC_7	-0,071	0,223	-0,107	0,489	0,321
Q18_SC_8	0,072	0,542	-0,075	0,270	0,465
Q18_SC_9	0,046	0,288	-0,033	0,493	0,409
Q18_SC_10	0,084	0,675	-0,056	0,188	0,597
Q18_SC_11	-0,050	0,234	-0,007	0,515	0,356
Q18_SC_12	0,124	0,250	-0,171	0,267	0,211
Q24_CC_5	0,044	-0,243	0,514	0,429	0,442
Q24_CC_6	0,033	-0,087	0,396	0,462	0,374
Q29_Suc_1	0,812	0,030	0,029	-0,002	0,705
Q29_Suc_2	0,746	0,042	-0,005	0,003	0,585
Q29_Suc_3	0,569	0,075	-0,071	0,058	0,352
Q29_Suc_4	0,654	0,123	0,062	-0,089	0,539
Q29_Suc_5	0,896	-0,070	-0,038	-0,036	0,710
Q29_Suc_6	0,572	0,117	-0,058	0,064	0,393
Q30_Suc_7	0,616	0,182	0,155	-0,178	0,608
Q30_Suc_8	0,494	0,071	0,138	-0,046	0,358
Q30_Suc_9	0,862	-0,096	-0,064	0,019	0,639
Q30_Suc_10	0,723	-0,011	0,071	0,042	0,583
Q30_Suc_11	0,859	-0,061	-0,052	0,026	0,666
Q30_Suc_12	0,767	0,027	0,081	0,021	0,682
Q30_Suc_13	0,874	-0,065	-0,031	0,060	0,718

Table 2 - Factor loadings and communalities of factorial solution.

With the measurement of the constructs newly validated, there is little doubt that social, economic and cultural capitals seem to be predictors of a tech talent's perceived success in Portugal. Nonetheless, it is still important to study how applicable this model is on an international level. When applied only to internationals, a few relevant changes were detected. Contrary to what happens with the Portuguese, social capital appears to be significant for international talent ($t(135)=3,39; p<0,05$). Having a strong network that can help both in the job search and in career advice, seems to have an impact on perceived success. In some regions, this might be explained by the great number of international tech companies of larger dimension than in Portugal (eurostat, 2019), making it easier for them to attract and hire local and international talent. Also unlike what happens in Portugal, cultural capital does not appear to be significant ($t(135)= 1,51; p>0,10$), as having participated or had parents participating in cultural activities, gone to summer schools or studied abroad, did not have an impact on perceived success. However, likewise to Portugal, the effect of economic capital was statistically significant ($t(135)= 2,37; p<0,05$), influenced by having a PC and feeling well-off in financial terms while growing up. With these differences, it is possible to conclude that the proposed tech talent' evaluation model is only applicable for Portugal, and cannot be used on an international level.

4.3.2. Differentiation by Needs

4.3.2.1. What does tech talent value in a job?

The marketing research also served to explore the factors that influence the sample's perception of career success. From the sample of 15 people interviewed in the exploratory stage, every graduate felt more or at least as successful as their university peers. It was also common agreement that, whereas the ones working in consulting firms had better salaries, they lacked work-life balance, revealing the significance placed on these factors. When questioned directly about the meaning of success, being recognized for the work they do and having a good work-life balance were the most spoken factors. Some of the interviewees also contemplated aspects such as achieving a good financial situation, getting to work with the technologies they enjoy, continuously learning and climbing the job hierarchy. Regarding this study's quantitative research, on average, 6,73 ($SD=2,33$) of the tech professionals claimed feeling successful respecting their careers so far. In fact, the majority of the answers lied between 6 and 10, and most of them rated their success

as a 7 or an 8. The question used to measure this extent to which the sample felt successful was Suc_12.: “I consider myself to be successful”. The following correlation analysis had the goal of exploring the factors that might influence one’s perceived success, *i.e.*, the needs of a person that aims to be professionally successful. As it is possible to observe in table 3, sorted by descending order, the first three questions, Suc_3., Suc_1. and Suc_10., are representations of Suc_12., asked in a different manner, naturally being the ones with highest correlation with the construct.

Question (1-10 scale)	Corr. with Suc_12
Suc_12. I consider myself to be successful.	-
Suc_3. I feel positive about my future.	0,729
Suc_1. I am satisfied with my career so far.	0,692
Suc_10. I feel happy with the life I have.	0,671
Suc_13. I feel engaged with the tasks I have to perform at my current job.	0,662
Suc_5. I feel recognized for what I accomplish at my job.	0,641
Suc_7. I think I am earning more money than the average person in my situation.	0,635
Suc_2. I feel I am currently enjoying more success than the colleagues that graduated with me.	0,562
Suc_6. I am able to have a better performance at my job in comparison with my peers.	0,538
Suc_4. I have achieved all the career related goals I had defined for me so far.	0,528
Suc_9. I have a meaningful job where I feel I make a difference in my organization or in society.	0,512
Suc_11. I have a lot of learning opportunities in my job.	0,501
Suc_8. I have a good work-life balance.	0,401

Table 3 - Statistical correlations between Suc_12. and the remaining success indicators.

The factor that was most correlated with one’s feelings of success was “I feel engaged with the tasks I have to perform at my current job” ($r=0,66$; $p<0,05$), which can demonstrate the relevance that IT professionals on working with technologies that stimulate them. Feelings of recognition towards the accomplishments at the job was also the other factor with correlation above 0,60 ($r=0,64$; $p<0,05$). Still with a large association with feelings of success, there were factors such as feelings of enjoying more success ($r=0,56$; $p<0,05$) and being able to have a better performance than the peers ($r=0,54$; $p<0,05$), having achieved all the career related goals that had been defined to that point ($r=0,53$; $p<0,05$), the meaningfulness of the job ($r=0,51$; $p<0,05$) and also the learning opportunities provided ($r=0,50$; $p<0,05$). Interestingly enough, contrary to the exploratory stage, having a good work-life balance was the factor least correlated with feelings of success, with only a

medium association with the construct ($r=0,40$; $p<0,05$). As regards the questions that were done on the candidates' onboarding calls, the reasons that led them to pursue a new job also provided some insights about their needs as tech professionals. By the date of the analysis, 92 responses had been collected, of which 61,95% was willing to relocate. Regarding the User Region of the respondents, unfortunately for the relevance of the analysis, more than half (52,63%) belonged to Other – User Region that is not represented in the company's goals. BR then represented 12,28% of the sample, followed by PT (12,28%), OtherEurope (7,02%), and lastly OtherEU and OtherSA with only 3 responses each (5,26%). Nevertheless, considering the qualitative nature of this approach, it was still possible to perceive the type of needs that were most commonly mentioned. When asked the reasons that made the candidate decide to start actively looking for new opportunities, 37,63% of the reasons mentioned were regarding the wish to relocate, which is in line with the User Region's distribution. As it is possible to verify in table 4, no other reason particularly stood out, with 32,26% of the answers related to: better salaries, wanting to improve career/to work on a different project, trying a new area, led by feelings of not being moving forward with 9,68%.

Job Search Reason	Count of Job Search Reason	Percentage Job Search Reason
Wants to relocate	35	37,63%
Feels stuck and not moving forward	9	9,68%
Specific circumstances (Contract finished, New country, Family reasons, Visa...)	8	8,60%
Not actively looking – Just seeing what is out there	7	7,53%
Better salary	6	6,45%
Wants to improve career	6	6,45%
Wants to work remote/Freelance	6	6,45%
Work on a different project	5	5,38%
Try a new area	4	4,30%
Issues with current job	3	3,23%
Start career	2	2,15%
Establish position	2	2,15%
Grand Total	93	100%

Table 4 - Job search reasons of interviewed candidates.

Interestingly, only 2,15% of the answers concerned matters related to starting off the career, which may demonstrate that tech professionals resort to Landing.Jobs mainly with the expectation to change a specific aspect of their careers. In fact, when the candidates were asked how they feel about learning a new technology, 83,70% said that they like to keep up with the market trends, rather than working with their current tech stack. Clearly, this fact is in agreement with the marketing research's quantitative findings, that suggested the importance that IT professionals place on working with technologies that motivate them. Regarding the job in particular, there is still one question asked that is worth mentioning – "What's your deal maker and deal breaker?". According to the Talent Team, this question is performed with the goal of detecting if there is a feature/characteristic that a candidate would attribute such relevance that it would be able to define the decision, positively or negatively, regardless of the other deal's features/characteristics. Visa support was the main factor mentioned with 18,72%, which is due to the sample's User Region distribution; a deal without this feature, would be enough for these candidates to disregard a job position. Next, and alongside with the work environment, tech stack appears with 17,73% mentions. This means that these characteristics could be enough for a candidate to consider a certain job position. Once again, the importance that tech professionals place on the tech stack is demonstrated. Work-life balance and salary were also highly mentioned, with, respectively, 16,26% and 13,79%. However, contrary to the quantitative findings from the marketing research, while salary was mentioned 13,79% of the times, work-life balance was mentioned 2,47 p.p. more. On balance the conclusion to be drawn is that these factors highly depend on the context and sample, not having a fixed role in the tech population. The fact of the matter is that, as found in the business interviews, Landing.Jobs uses candidate-personas that each value different aspects of the job (international experience, project/culture of the companies, possible quality of life, etc.). Nevertheless, there was one factor that demonstrated to be universal – a tech stack that leads the tech professional to feel challenged.

4.3.2.2. How do tech talents' needs vary across regions?

One of the goals of this sub-chapter was to develop user-personas based on needs – a persona for each User Region that could be used for marketing efforts. While the marketing research's findings provided inferences only for Portugal, as mentioned

previously, the onboarding calls' sample was not adjusted to Landing's User Region distribution. Moreover, after attempting to analyse Hofstede's cultural dimensions for cross-cultural comparison (Hofstede et al., 2010) and the region's national statistics, it was concluded that it would not be possible to draw actionable personas for Landing's User Regions. The fact that regions such as OtherSA, OtherEurope and, mainly, OtherEU include a wide variety of countries, makes an analysis as particular as the needs arising from the conditions and characteristics of a country extremely uncertain to group. This is clearly illustrated by the significant standard deviations of the User Regions, possible to verify in tables 7.5.1 and 7.5.2 of the Appendix 5, that represent the differences of the Hofstede's dimensions and the national indexes of the countries within each region. For this reason, in order to make the personas less speculative, it was decided that they would be developed according to what can be called Landing.Jobs' products: local opportunities, for PT, DE, ES and NL, and each of the respective job regions for internationals. For the individuals looking for local opportunities, it was used in the previous analyses, along with Landing's value proposition. As a result, the locals' persona is made of IT professionals that are motivated to work with technologies that stimulate them and that are eager to keep up with the market trends. They are looking for a change in their careers, or even starting it, and taking ownership of it. They are interested in an evolving full service (Landing.Work, Landing.Careers), and in the community experience – with meetups and events that make them feel connected and inspired by the tech market.

Concerning the job regions' personas, it was important to analyse the reasons why those who were willing to relocate wanted to do so, and attempt to see how these reasons were associated with a country in specific. In terms of reasons why do the candidates want to move to the country(ies) they mentioned, it was possible to note the existence of two different categories: 1) motives related to the conditions of the countries themselves such as culture, lifestyle, weather, multiculturalism, socio-economic situation and quality of life; and 2) motives with respect to how one's personal career could evolve in that country: grow professionally, find a new challenge, salary, tech stack, good companies (regarding projects or vision) and have an international experience. With respect to the conditions of the countries, culture was the reason most mentioned, 21,74% times, followed by the country's lifestyle/weather with 9,78%. Career-wise, growing professionally/new opportunity/challenge was mentioned 20,65% times and, not surprisingly, was followed by tech stack with 10,87%. As to the countries where people would be willing to relocate,

35,00% of the answers mentioned that they wanted DE, 26,43% NL, 21,43% PT and 17,14% ES.

When compared with the other countries, Portugal had the highest percentages of responses related to relocating due to socio-economic conditions of their home country and to improving their quality of life (11,54%). While the percentage of responses associated with the country's culture was surprisingly below average, wanting to relocate to Portugal due to the country's language was one of the highest amongst the four job regions. These results are aligned with the fact that almost 40,00% of the foreign applications to Portugal arise from Brazil. Portugal appears to be a country where individuals want to relocate when coming from worse economic conditions in their home countries, while having the advantage of being familiar with the language in the case of Brazilians. In fact, in terms of national statistics (Numbeo, 2020), among the four job regions, Portugal holds one of the highest safety indexes (70,37 against 72,38 in the Netherlands). This is clearly illustrated by the fact that, in Brazil, the same index has a value of 31,36. One of the indexes in which Portugal scores best was cost of living (49,52), however, it also scores worst in the property price to income ratio and purchasing power indexes, meaning that the salaries do not follow the population's economic needs. The other with the best position in Portugal was, naturally, climate (97,31), as it is the region with more sun hours (Numbeo, 2020).

For Germany, the responses about relocation were certainly different. The motives that stood out in this country were tech stack and good companies (in terms of projects or vision), accounting for, respectively, 10,34% and 6,90% of the responses. It appears that Germany responds to a different type of needs, being perceived as a centre for high technology and innovation, a tech hub. Regarding motives particular to the country, the only one that demonstrated a percentage significantly below the average was the lifestyle and/or the weather of the country, with 6,90% of responses. When analysing the national statistics by Numbeo ("Europe: Quality of Life Index by Country 2020", 2020), the conclusions are aligned. Not only among the four job regions, but among Europe, Germany presents the highest score in the purchasing power index – 102,36. Therefore, Germany presents itself as an economy offering highly competitive salaries, with attractive tech hubs located in many of its cities such as Berlin, Hamburg, Frankfurt, Munich, and Cologne. The other indexes are aligned with the trend of the respective averages, with quality of

life being also positively distinguished among Europe, and with a cost of living rather above the average as well.

On the contrary, the scenario for Spain is entirely different. Spain was the country in which salary was mentioned the least times as a reason for relocating (2,38%). However, the country received more mentions to factors such as lifestyle/weather and stability. Moreover, international opportunity and language were also presented as the motives with more mentions in Spain with 7,14% and 4,76% of the responses, respectively. One factor that may lead to this is the fact that 13,41% of the foreign applications to Spain come from OtherSA – countries with Spanish languages, having a higher weight than in the other markets. By analysing the national statistics, it is possible to state that Spain's selling point is the health care, as it holds the best position amongst the four markets and third in Europe ("Europe: Quality of Life Index by Country 2020," 2020). While it is true to say that the numbers were tight with the Netherlands, in fact, Spain is the country that scores highest in the traffic/commute time index, with 29,10. In terms of the other indexes, the country does not negatively stand out. On these grounds, for expats, Spain can be considered an attractive place for its particular culture and lifestyle, with special perks that make it good for settling down such as an outstanding health care system and easily accessible public transportation.

Lastly, the Netherlands that, within the answers of the reasons for wanting to relocate to this country, the only motives that particularly stood out were multiculturalism and visa support. It is important to note that, during the year of 2019, only 29,99% of this market's stock of jobs provided visa support, contrasting to Germany's 72,30%. If visa support were to be used as a selling point, it should be, not for the Netherlands, but for Germany. As for the Dutch country's national statistics among the four job regions, it was the one with the best position in the quality of life index. In fact, it was the third in Europe with 183,67 ("Europe: Quality of Life Index by Country 2020," 2020). Consequently, it was also ahead of the other three regions in safety, property price to income ratio and pollution indexes. Moreover, it was also considered the best country in Europe for work-life balance (OECD, n.d.). The Netherlands hence presents itself as a country with significant quality of life due to its safe, unpolluted conditions in which residents can easily use a bicycle as a transport saving a lot of time of commuting, and its work-life balance; as well as a great home for

expats, being the first country in the world for English proficiency as a second language (EPI, 2019), with more than 180 nationalities.

4.4. RQ3 - WHAT IS LANDING.JOBS' CURRENT CRM CAPABILITY AND WHAT GET, KEEP, GROW STRATEGIES DOES IT HAVE IN PLACE?

Operationally speaking, the main takeaway from the business interviews regarding Landing.Jobs' current CRM landscape was the lack of automated processes. In terms of strategy, it was stated that Landing's current Customer Relationship Management consists exclusively of email marketing. With this in mind and considering the remaining insights shared, it was possible to conclude that acquisition, or Get, strategies are not contemplated as a part of CRM. Additionally, although retention, or Grow, strategies were discussed, it was claimed that there is currently no capability to develop strategies targeted to the stage of the funnel in which the user is inserted, leading to an internal focus on conversion. The next analysis will provide an overview of the talent journey at Landing.Jobs to deepen the knowledge of the organization's current CRM capability and its Get (awareness and consideration), Keep (conversion) and Grow (retention) strategies, based on identified pain points.

4.4.1. Awareness stage

In the awareness stage, talent becomes conscious of Landing.Jobs' existence. Although the pain points analysed were in the acquisition's main channels – aggregators, digital advertising and free channels – it is also possible to consider social media, blogs, events, Google search or word-of-mouth. In terms of aggregators, as it is possible to observe in figure 10, the majority of Landing.Jobs' job board partners reach mainly specific User Regions, such as Portugal and Spain. Needless to say, this could also be explained by the budget allocated to each of the regions. However, as one of Landing's main goals is to acquire locals in its job regions, this means that the company could potentially be neglecting other regions that have, consequently, less access to job positions in the platform. For this reason, it is of utmost importance to have knowledge over the job boards that are, indeed, used by the individuals in these regions.

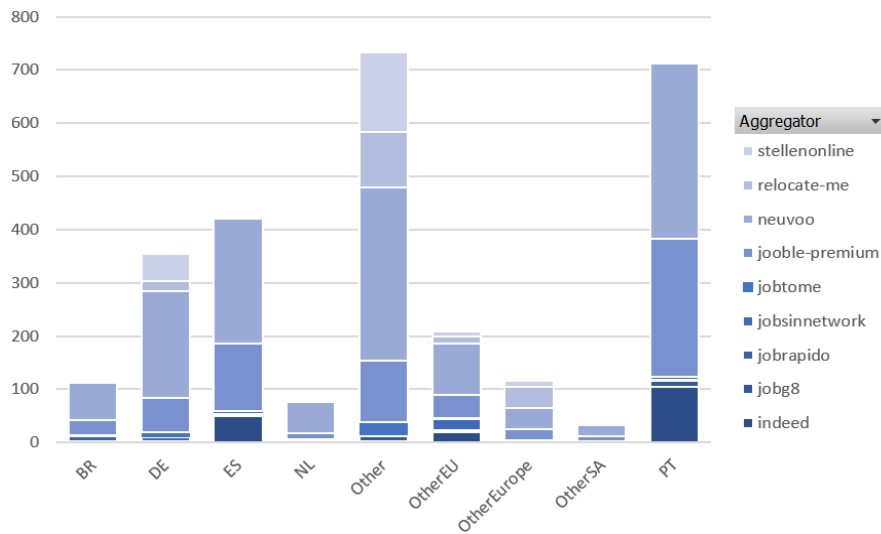


Figure 10 - Users acquired by aggregators per User Region.

With respect to digital advertising, the foremost conclusions were that, currently, the campaigns are mainly focused on conversion, consisting in a mass approach, as they are equal and not customized among the different User Regions. It is possible to observe in figures 11 and 12 that the tone of voice is somewhat bold, as well as identical among two User Regions that greatly differ in terms of characteristics. To some extent, this is aligned with the findings in the business interviews, in which the Performance Lead stated, when asked about the priorities in communicating with talent, that they have one priority: more applications. One of the drawbacks of a non-customized and personalized approach can be, as seen in Chapter 2 regarding Literature Review, the lack of interest of the prospects that are targeted by those campaigns. In fact, one of the questions that arose in the analysis and discussions was whether the performance of the paid channels could be improved, given the website behaviour of the users that were acquired from those.

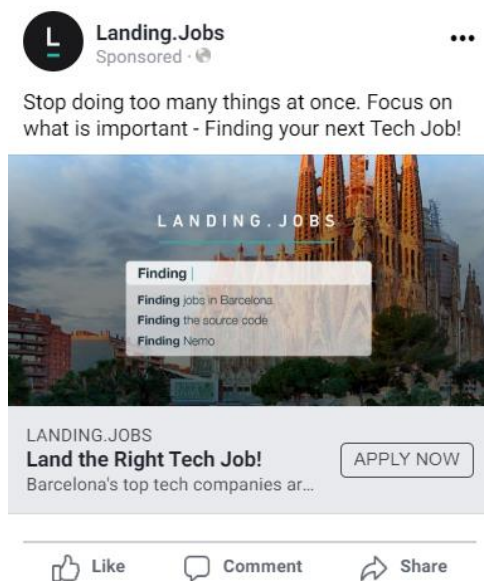


Figure 11 - Facebook ad from Landing.Jobs targeted to local talent in Spain (example of a focus in the city of Barcelona).

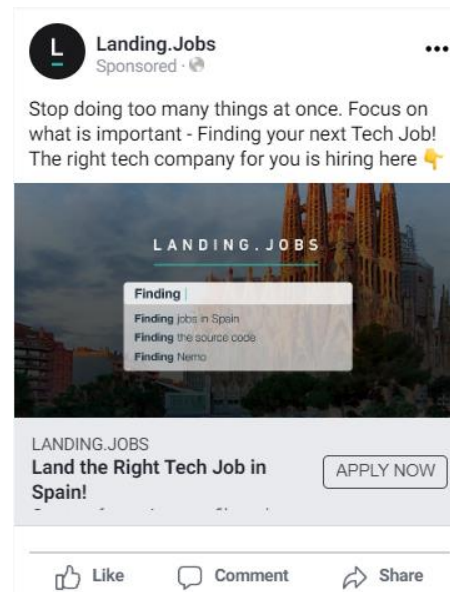


Figure 12 - Facebook ad from Landing.Jobs targeted to talent in OtherEU looking to relocate (example of a focus in the ES market).

Free channels consist of word-of-mouth, media influence, presence at tech-related events and online communities, among others. As previously mentioned, Landing.Jobs already has a strong brand presence in the Portuguese market, which means that the organization takes great advantage in being recognized in this type of means. A few examples can be the several referrals by the Portuguese media such as Observador and ECO Economia Online, the participation of relevant events in the tech universe like the Web Summit, among others. The fact of the matter is that, facing the four markets, while 21% of the userbase is Portuguese, only 4% is Spanish, another 4% is German and 1% is Dutch. That is to say that these other regions have less access to the brand and, therefore, this could be an important mean for them. However, likewise to the aggregators, it is firstly important to have knowledge over which channels would indeed be a good access to the local communities; something that, with a network and physical presence as in Landing's headquarters, is facilitated.

4.4.2. Consideration stage

For the consideration stage, when talent registers at the Landing.Jobs platform and considers to make an application, while the pain points identified were located in the website, one can still consider social media, blogs and Google search. On one hand, one of

the concerns raised was the fact that non-tech talent may not understand Landing.Jobs' specific target, considering the following excerpts

"Connecting you with right tech companies throughout Europe" (Home Page)

"Everyone is free to join our platform but our main target is digital talent." (FAQ)

Both the expression "tech companies" and "digital talent" can be unclear for individuals that are not part of the tech world. While "tech companies" can be interpreted as companies that are eager for technology, or that simply work in that field, "digital talent" can be referred to a variety of roles that are not necessarily related to IT, such as digital marketers or business analysts with a few programming skills, for instance. In effect, it is estimated that 16,00% of Landing's userbase has non-tech profiles. On the other hand, for the tech professionals, one of the perceived selling points in the website is the support and feedback factor, which, as pointed out by the Head of Operations in the business interviews, does not always apply to reality.

"Always get feedback and support at light speed" (Home Page)

"You'll always hear back from us, and you'll always get honest feedback." (About Us)

"We match to the best opportunities on Landing.jobs and help you along the way by offering advice, content and support (yes, even the feedback part)." (FAQ)

With the current dimension of the company, there is no capacity to reach out to every candidate in the platform, as highly promised in this phase. This represents an expectation management issue as there is a record of candidates claiming that Landing.Jobs did not fulfil their expectations, on the account of not receiving feedback nor support, as seen in the marketing research's interviews.

4.4.3. Conversion stage

Regarding conversion – when talent makes an application and becomes a candidate –, the channels that will be discussed are email marketing (in particular to the Job Pushes campaigns) and platform notifications. Nevertheless, it is important to consider job boards that also serve a significant role in this stage considering the users that convert

automatically, direct visits to the website or contacts made inside the platform made by the Talent Team or even the employers.

Job Pushes are email marketing campaigns either company-branded or with specific job positions, both tailored to the user's profile. However, the first pain point that was found was the inaccuracy or absence of specific fields. Firstly, one of the questions that is asked when a user is creating an account is "What are your areas of interest?". The issue here is that this variable is then used to segment the audience of the Job Pushes. A user's areas of interest may not correspond to his/her current set of skills, in this case leading the user to receive suggestions for job positions he/she is not qualified for. Secondly, the fact that most of the registration questions are not mandatory causes a significant amount of null information regarding variables that are also of great importance for the Job Pushes' segmentation. This is illustrated by the following variables: location – with no data regarding 16% of the userbase, experience level – with 28%, job category – 33% and job search availability – 10%. This raises the issue of whether potentially qualified candidates fail to receive communication from Landing.Jobs, once they do not have enough information to be a part of the segmented strategies.

Another pain point found in the Job Pushes, was the incoherent communication that can be released due to the lack of variables that can tailor more properly the user's job search history in the platform. A few striking examples of this are the fact that a candidate that already applied to a certain position may receive a Job Push for the same position; a candidate that was recently hired through Landing.Jobs and that continues to receive Job Pushes; or a candidate rejected recently by a certain employer can be receive a Job Push for the same position/employer to which he was rejected recently. This absence of consideration for the users' history with the platform may harm the relationship users have with Landing.Jobs. This situation can be exacerbated by the existent significant gap of information regarding the platform's automated communication. There are nine categories in which the user can personalize its notifications, however, some specific incidents includes: a user receiving notifications from a company contact only two weeks after the company sent it; a user receiving a rejection notification after being hired by the company; and, according to the Talent Team, the majority of candidates do not receive feedback about the applications. After an attempt to draw a map of the communication released by the automated notifications, it was concluded that there is currently no

information that fully portrays the communications that the users receive from this feature. According to the Product Team, the notifications are triggered by programming codes that have been lost track of, given that they were developed in the very early days of the company.

4.4.4. Retention stage

Lastly, there is retention – when talent stays an active member in the Landing.Jobs community. This brings back the talent’s lifecycle issue which implies that, after getting a job, a user would no longer have incentives to continue his/her relationship with Landing.Jobs – should this be through events, tech/career-related content, among other retention mechanisms. In this stage, the channels that can be considered are social media, blogs, events, platform notifications and email. As found in the business interviews, Landing’s communication is not tailored to the funnel stage, which means that the users in the retention stage may feel unmotivated to stay active members, as they continue to receive communication as any other user, receiving content related to job positions through email and platform notifications. Another factor identified was the events’ promotion, in particular, Landing Festival (Landing’s biggest event). While it is true to say that Landing.Jobs keeps track of the people that attended the previous editions, it is not on the same database. One consequence of having several different spreadsheets is that can result in human error and, hence, some users possibly receiving the same type promotion for the same event twice, for instance. Moreover, there is a low capacity to personalize the follow-up campaigns based on contact activity, which may decrease the prospects’ interest. Although Landing.Jobs has an email marketing platform that, given a contact list, enables the Marketing Team to reach users quickly and easily, it does not have a system that manages all the users’ interactions with the organization.

4.5. RQ4 -WHAT ARE THE POTENTIAL BARRIERS FOR LANDING.JOBS TO HAVE A SUCCESSFUL CRM IMPLEMENTATION?

Throughout the analyses, some potential barriers for Landing.Jobs to have a successful CRM implementation were detected. The nature of these were low data quality, lack of automated differentiation of users and resistance from Management.

1. Data Quality – one of the main challenges detected was the quality of data. Firstly, there is a strong dependence on data that is actively provided by the users. The type of data used in Landing’s marketing efforts is mainly declarative and not

behavioural. While the advantages of the data the users actively provide are clear, there are a number of important metrics that could help in detecting a user’s level of engagement with the organization: number of applications per user, number of applications engaged/offers received/hires through landing, date of last application, job regions to which the candidate has applied, previous events attendance, number of weeks that have passed since a user last visited the platform, number of sessions the user has in the last three months or the session minutes the user has in the last three months, among others. This type of information would assist in the development of strategies that are accurately targeted to the stage of the funnel in which the user is inserted. More drawbacks can arise with a high dependence on active data, if data that is crucial to the organization’s business is not mandatorily provided by the user. As it is possible to see in table 6, there is also an issue of null information.

Variable	% Of Nulls
Location	16%
Experience Level	28%
Job Category	33%
Availability	10%
Relocation	47%

Table 5 - Percentage of missing data of variables that are required for the Job Pushes.

Lastly, there is lack of information regarding certain types of dialogues with the users that are not tracked and are also of extreme relevance. In particular, the unawareness of the fact that a user is/was followed by a Talent Advocate, as well as the inexistence of a map of communication regarding the platform communications.

2. Lack of Automated Differentiation – the conclusions from the business interviews were that, in terms of value, the organisation currently differentiates tech talent on a manual basis, using criteria such as experience level, availability type (“looking for a job right now”, “just curious”, among others), level of skills’ rarity and match with Landing’s job positions, English proficiency, and so forth. Considering Landing’s continuously growing dimension, this manual exercise can

be ineffective. Moreover, with respect to users' needs, the existing personas are for differentiating candidates, very specific to the processes of the Talent Team, and not applicable to marketing efforts. As one of the ground bases of CRM is the differentiation of value, in order to have a successful project implementation, Landing would benefit from having more automated criteria for this purpose.

3. Resistance from Management – in the business interviews, it was possible to detect a certain amount of resistance from the upper Management, related with the benefits of a CRM platform, that would in fact supersede the costs. There is a concern that a software would take too much time to be adjusted to Landing's business and function as expected, presenting a preference over traditional means. As seen in the body of knowledge, this resistance could hold a significant obstacle in a thriving CRM implementation.

Before considering to implement a CRM project, it would be of utmost importance for Landing to first tackle these barriers. In addition to this, the organization must also address the pain points identified in the talent journey, and optimize its current Get, Keep and Grow strategies. With this in mind, a set of recommendations will be proposed in Chapter 5.

5. CONCLUSIONS AND RECOMMENDATIONS

This chapter starts by providing a number of academic implications, in which this project's findings are compared with the body of knowledge previously analysed. Next, the managerial implications are presented, consisting of a set of recommendations for Landing.Jobs to have a successful CRM implementation. In the final section, it is possible to find the limitations, demonstrating a reflection on what may have biased the research's results, along with suggestions for further research in light of the new findings.

5.1. ACADEMIC IMPLICATIONS

This project incorporated concepts that are commonly covered in distinct contexts. For a CRM implementation challenge to be met, it was necessary not only to understand the concept of CRM and to provide a diagnosis of Landing's current landscape, but also to deepen the organization's talent intelligence, which involved studying topics such as perceived career success and predictors of the same construct. On this matter, it was provided some contribution to the body of knowledge of Bordieu's Forms of Capital (1986), who defines capital as "accumulated labour" that owns the potential to "produce profits and to reproduce itself in identical or expanded form". Alongside with Bordieu, much research has associated capital with career success (Lin 1999; Seibert et al., 2001; Bjørnskov 2006; Tomlinson, 2017). In effect, this project was based on Cardoso's ground bases (2019), that studied the impact of economic, cultural and social capital on business students' perceived success. By using the Student Capital and Success scale, a factor analysis was able to additionally validate the indicators used to measure the constructs under study. Indeed, the SEM model results of this project were able to indicate that a tech professional's economic, social and cultural capital is able to predict his/her perceived success. Even though this seems to indicate that Bordieu's Forms of Capital can also be associated with success in the IT context, there are some relevant differences to be considered. In spite of the studies that link social capital with career success (Koss-Feder, 1999; Friar and Eddleston, 2007), the results from the SEM model demonstrated that the effect of this type of human capital on perceived success was not statistically significant. This can be explained by the unique scenario of the IT field, in which there is a significant gap between demand and supply (Leadership Skills, PwC, 2015). Regardless of this distinction, the results were able to demonstrate that the three types of human capital statistically predict perceived success, as well as to validate the research on the impact of

cultural (Becker, 1993; Vermeulen and Schmidt, 2008) and economic (Arthur, 2005) capital. A final remark regarding career is in the literature with respect to the fact that one's definition of career success currently englobes more subjective factors (Ibarra, 1999; Ibarra & Barbulescu, 2010). According to this project's marketing research, factors such as feeling engaged with the tasks, revealing the importance of personal satisfaction (Judge et al., 1995), feelings of recognition (Shen et al., 2015) and meaningfulness of the job, relating to a values-driven view of career success (Hall, 2002), play, indeed, a great role in one's perception of career success.

In what concerns CRM, several academic implications are also to be considered. While Peppers and Rogers (2004) use David Shepard Associates' summarization (1999) of behavioural, attitudinal and demographic fields in which customer-data is necessary in order to properly identify customers, this project took a great benefit in gathering psychographic data as well. Not only a number of relevant conclusions were drawn from this type of data, but also many of the recommendations proposed in the next sub-chapter were based on those. This validates Webster (1998) and Peltier et al. (2002)'s view on the importance of psychographic data in identifying and characterizing customers – the first step in Peppers and Rogers' IDIC Model (2004). For this model, it was also confirmed that, for extracting big data's value, as a great amount of data that it is, it is hardly processed with traditional processing tools (Ohlhorst, 2013). The challenges in Landing's talent journey of current strategies that are being harmed by inaccuracy or even absence of certain data, were a striking demonstration of that fact. Moreover, these challenges also proved how can technology accelerate customization (Peppers & Rogers, 2004) and the important role of CRM systems (Morgan & Hunt, 1994; Torkzadeh et al., 2006), as it was seen by the obstacles and limitations caused by the lack of automation and by not having all the user data integrated in one place. In fact, poor data quality and low actionability of data were considered one of the main potential barriers in a successful CRM implementation for Landing. This is aligned with the research that indicates that this factor frequently prevents successful CRM implementations (Kale, 2004; Reid and Catterall, 2005). Furthermore, two additional potential reasons of failure mentioned in the Literature Review were detected in this project. On one hand, it was possible to verify the resistance from employees (Payne & Frow, 2005), that is being caused by the lack of awareness of the system's benefits and advantages (Strauss & Frost, 2016). On the other hand, as it will be demonstrated in following sub-chapter, the indispensability of a firm to

have a clear strategy defined (Day, 2000; Kale, 2004; Buttle & Maklan, 2015) was also authenticated, as it generates the specific business requirements that must be taken into account before an implementation. Lastly, it will also be possible to verify how CRM technologies can assist in customer acquisition (Buttle, 2004), through the insights that were already able to be gathered, simply by beginning to apply a CRM model (Xu & Walton, 2005; Ang & Buttle, 2006), in this case, the IDIC.

5.2. MANAGERIAL IMPLICATIONS

For a set of recommendations to be defined for Landing.Jobs, it is pertinent to take into consideration the organization's goals. In this regard, it was possible to conclude from the interviews that Landing.Jobs needs to consolidate its current business scope. In 2019, the company achieved the landmark of 100.000 users and now offers a complex product portfolio. Get (awareness and consideration), Keep (conversion), Grow (retention) strategies need to help Landing not necessarily to acquire vast amounts of new users, but to optimize this process to **get** valuable candidates by understanding their needs; it needs to provide means to **keep** users active in the Landing.Jobs community and increase their life cycle length; and it needs to find a structure for this new product portfolio in order to **grow** the value of these users. The final aim of the Get, Keep, Grow strategies must be to provide market liquidity in the four different markets. Accordingly, the recommendations that follow are separated by stage on the funnel and are based on all the findings from this project, holding the underlying Business Requirement of acquiring a CRM platform.

5.2.1. Awareness Stage

In the awareness stage, some of the challenges referred to the majority of Landing.jobs' aggregators reaching mainly specific User Regions, potentially neglecting other regions that have, consequently, less access to job positions in the platform. The same situation was verified in the free channels, also having a stronger presence in the Portuguese market, leading to the fact that talent from other regions has less brand exposure. This is particularly relevant considering that, as seen in the business interviews, one of the organization's goals is to strengthen the presence in its other markets – Germany, Spain and the Netherlands, which was supported by the analysis of the current User Region distribution. To begin to tackle this situation Landing needs to first have knowledge over the job boards, blogs and online communities that are, indeed, used by the individuals in these regions and that can help in increasing brand awareness. According to the findings

of this project, it can be estimated that more than 80,00% of tech professionals keep up with the news by online means. In fact, based on the results of the Chi-Square, there is a very strong association between income level and the type of media channels – around 93% of the respondents with higher income levels, used exclusively online means to keep up with the news. This may indicate that, if objective success (associated with salary, as seen in the body of knowledge) is considered, success is related to the media usage. Additionally, there was a strong association between the type of channels and the location, estimating that international individuals more promptly use exclusively online mediums to keep up with the news. These indicators reveal the importance of being present in these types of channels, especially on an international level. As Ang and Buttle (2006) and Xu and Walton (2005) demonstrated, CRM can also assist in the acquisition of prospects. Indeed, by tracking all user interactions with the organization, a CRM platform could help Landing.Jobs to learn about their current users and use that information in the acquisition of others. Jeffery (2010) suggests the use of surveys as a proxy for customer data, with the idea of selecting groups of customers to capture important consumer information. Based on a set of behavioural variables outlined in table 6, Landing would have the opportunity to gain real-time insights from users that are proven to be engaged with the brand by asking questions such as “Are you using or did you use any other job recruitment platforms to help you in the job search? Which ones?” and “Do you follow any tech-related blog/communities/events/influencers? Which ones?”.

Behavioural Variables	Active_Candidate	has applied in the last 30 days
	Contact_Activity	opened last 5 newsletters
	Talent_Advocate	is being followed by a Talent Team member

Table 6 - Set of behavioural variables that could be used to identify engaged users.

Regarding Landing’s digital campaigns, it was concluded that they are currently mainly focused on conversion – increase number of applications – and with little room for customization among the different User Regions, an aspect that the authors of the IDIC model highly recommend (2004). Moreover, research has indicated that one of the key success factors in acquisition is the development of clear value propositions (Ang and Buttle, 2010). As regards the most appropriate response to these facts, one suggestion

would be the use of personas based on Landing’s products – personas as in different groups of people with common unmet needs, each with separate key messages based on the value proposition of each product (in this case, market), be it the first thing prospects see they interact with Landing.Jobs online. In table 7, it is possible to find a suggestion for those personas, based on the findings from the analysis.

Wants Local Opportunities	Wants to Relocate to Portugal	Wants to Relocate to Germany	Wants to Relocate to Spain	Wants to Relocate to the Netherlands
Looking for a change in their careers, or starting it, and, most importantly, having ownership of it.	Looking for more safety and better quality of life, coming from poorer conditions in their home countries.	Looking for a strong economy offering highly competitive salaries.	Looking for stability through a solid health care system and easily accessible public transportation.	Looking for high work-life balance, safety and a culture that is welcoming to foreign.
Attracted to working with technologies that motivate them and eager to keep up with the market trends.	Attracted to good weather and may take advantage of being familiar with the language (possibly Brazilians).	Attracted to centres of high technology and innovation, known as tech hubs with big companies.	Attracted to good weather, lifestyle and culture.	Attracted to unpolluted conditions in which residents can easily use a bicycle as a transport and save a lot of time on commuting.
Interested in a full service, and in the community experience – with meetups and events that make them feel connected and inspired by the tech market. Not interested in relocating.	Interested in relocating.	Interested in relocating.	Interested in relocating.	Interested in relocating.

Table 7 - Definition of marketing personas based on Landing.Jobs' prospects' needs.

For general brand awareness campaigns, talent should also be able to understand what is the Landing.Jobs product as a whole, including the provision of tech and career related content, and how it can help solving a certain pain they have now or in the future. Indeed, many researchers now claim that the best approach to digital strategies is inbound marketing – rather than pursuing prospects to convert, “getting found by potential, existing and aspirational consumers” (Opreana & Vinerean, 2015; Patrutiu-Baltes, 2015). The underlying assumption of this argument is the digital content marketing (Rowley, 2008; Patrutiu-Baltes, 2015). That is to say that Landing.Jobs can do a great deal to acquire new prospects by focusing on the provision of topics they care about, and attracting them in a more organic way by “getting found” rather than populating via auction systems. For example, considering that it was estimated that YouTube is the tech professionals’ favourite social media platform, it is of highest importance to Landing to increase its presence in this channel, potentially through content marketing such as webinars, viral videos, among others. Moreover, it is relevant to consider that, through the ANOVA, it was possible to conclude that higher levels of both perceived success and income are associated with the use of LinkedIn. Therefore, Landing.Jobs should also focus on increasing its presence in this platform in order to reach to valuable prospects – may it be through LinkedIn articles, text and photo posts or videos. Regarding the right topics and themes to create content about, more suggestions will be provided further in this chapter. Nevertheless, it is relevant to bear in mind that all social media platforms were associated with the location. Naturally, in order to reach audiences in different countries, it is necessary to consider how the different populations differ in terms of social media usage.

Lastly, the findings from the research of how an IT professional’s background might impact his/her preposition to success, and how can a third party have a role in influencing the professional to have a successful career path, provide a brand awareness opportunity for Landing.Jobs by engaging more with students during their studies. Were Landing to provide them workshops or real-life case studies, tech students would certainly better understand how can they use their skills in the job market – something they mentioned in the marketing research that they thought lacked them. Some of them mentioned that there were a lot of cases in which they were hired straight out of high school, which in this case makes them even less aware of how their skills can be used in the market. Given the gap of supply and demand, students are overwhelmed with job opportunities and their lack of knowledge might lead them to career paths with which they do not identify

themselves later on. Landing.Jobs could take this opportunity to start positioning itself as a career development organization, leading the way of their careers and providing them ownership of their career. In the same line of reasoning, Landing could offer internship opportunities as a way of empowering them and have better judgment. These types of initiatives could tremendously increase Landing.Jobs' brand awareness in the IT academic community and translate to potential candidates as they graduate.

5.2.2. Consideration Stage

Regarding the consideration stage, what is proposed is a revamp of the value proposition placed on Landing.Jobs' website. Instead of relying on the feedback and support as selling points, the organization should use other factors that are more applicable to its current capacity. One of the findings about tech professional's needs was the importance placed on working with technologies that motivate them and on keeping up with the market trends, rather than working with their current tech stack. In fact, it was suggested that Landing's users resort to its services mainly with the expectation of changing a specific aspect of their careers. For this reason, it seems that the focus should be on the ownership of careers, the variety of tech stacks that one can find on the platform's job positions and the fact that several companies are there assuredly looking to hire tech professionals. As a matter of fact, alongside the value proposition, it is recommended that a clear statement of the following concepts is defined: mission – informing its users and prospects what Landing.Jobs is, what it intends to accomplish and who intends to serve; vision – a portrait of what the organizations wishes to be and, in broad terms, of what it aims to accomplish; and values – the guiding principles that cause identification in people who relate to the brand. These concepts could be extremely helpful in developing closer linkages and better communication with the target audience, creating a clear brand message in the stage in which potential users are looking to get to know Landing.Jobs.

5.2.3. Conversion Stage

As to the conversion stage, the first pain point was related to the incoherent communication that can be released due to the lack of variables that can tailor more properly the user's job search status and neglecting his/her activity with the platform. As Peppers and Rogers (1997) claim, a dialogue with a customer should pick up where it has last left off. It is important to consider that with analytical CRM, the essential of acquiring user knowledge is to know not only who they are but also how they behave and engage

with the organization (Xu & Walton, 2005). For this reason, the creation of new variables that can take into account the user's platform history is suggested. In this case, variables that could account for the fact that a user had already applied to or been rejected for a certain job position/company and the tracking of hires on a user level, would address some of the challenges of the Job Pushes communications. This type of information could be easily integrated through talent (account) management, which in Landing's business would be used and managed by the Talent Team. Regarding inaccuracy or absence of certain fields that are used to segment the audience in these campaigns, it is vital to guarantee that users fill all the fields in the registration form in an accurate way. The first step to be taken would be to change the wording of the question – "What are your areas of interest?" – to – "Which job category(ies) currently describes you best?" –, assuring precise information about the users' current tech stack, and not the intended one. Secondly, the impossibility of creating an account at Landing.jobs without having filled the mandatory fields – location, experience level, job category and job search availability.

Regarding the platform notifications, in order to improve the user experience, it is crucial to map all the current communication that users are receiving from the platform to be able to know who is receiving the communications, when are they receiving them, what do they receive and what are the triggers. This can only be dealt with if a revamp of the communication map is performed, with the goal of optimizing the current one and developing strategies that can assure that the majority of candidates receives any type of feedback, suchlike a forthright rejection, if the case is for the recruitment process not to proceed. In addition, Landing ought to beware of other CRM strategies and guarantee that there is no overlap of communications. One of the operational tools in which a CRM platform could assist in this regard is the "channel integration", integrating customer activities across all channels, as well as to define an automated maximum number of communications that a user can receive per a certain period of time.

With a CRM platform and a new set of variables, a number of neglected audiences could be reached through "event-based marketing". Considering that almost half of the users does not provide information about the willingness to relocate, one possibility could be to develop Relocation Campaigns – a candidate applies to a job region different from the one he is located in, which is an alert that he/she is interested in relocation, even if that information is not actively provided or updated by the user on the profile. Additionally,

since it was also found that for 20,50% of the users, the first semester of 2016 was the last time they made changes to their profile, some suggestions for reactivation campaigns are: “Finish Your Profile” Campaigns – new user starts creating a profile but has a lot of missing information; “Apply Before It’s Gone” Campaigns – user starts an applications but does not finish it; and Similar Jobs Campaigns – candidate receives announcement of job position similar to the ones he/she has been applying to.

Lastly, as concluded in the business interviews, one of Landing.Jobs’ main selling points for companies is the provision of some of the evaluation process which, as also was found, is mostly a manual exercise done by the Talent Team, that has the challenge of reaching out to the right candidates. To alleviate this situation, Landing could make use of a feature that some CRM platforms offer – “LinkedIn integration”. Since it is based on metrics such as experience level, type of skills and match with the positions, English proficiency, and so forth, it would do a great deal to cease the dependence on the data provided by users for all those fields on the platform, but on the data that could be automatically extracted from the LinkedIn profiles, which links would be provided by themselves. This information would be associated with the users’ profile on Landing.Jobs and, hence, could be easily accessed by the Talent Team through the use of filters.

5.2.4. Retention Stage

For the retention stage, one of the detected points of improvement was the events’ promotion, that currently implies the use of several spreadsheets to attempt to properly communicate with users. Once again, a need to guarantee that a dialogue with a user picks up where it has last left off arises (Peppers & Rogers, 1997). A holistic view over the users provided by a CRM platform would certainly ameliorate this situation and save a lot of time to the teams involved. Through CRM’s customization tools, not only would the past events’ attendance be automatically identified, as it would provide several options of creating segments combining contact activity (opened/not opened and clicked/not clicked specific or any emails) and purchase activity (purchased/did not purchase ticket).

Lastly, and most importantly, as found in the business interviews and in the talent journey analysis, there is no differentiation of communication for users in this stage. One of the concerns raised by the stakeholders was also the length of the talent’s lifecycle – fearing that when a person gets a new job, it would take them a long time to need the platform

again. This is the reason why the Head of Marketing stated that Landing.Jobs' CRM should show users the value they gain also by merely belonging to the community. It is also important to bear in mind that, according to the Head of Business Development, this is where Landing is heading with its expansion portfolio. Not only has the organization been positioning itself as community oriented but also will lead towards a career development direction. According to the stakeholders, the idea is to focus on the talent journey experience for a full service coverage: Landing.Jobs for when they want to find a job, the events for when they want to get inspired and keep up with the market trends, Landing.Work for when they want to find projects and future Landing.Careers for when they are looking for a change and need more personalized advice. In fact, it was found in this project that 21,60% of users are admittedly not looking for a job right now. While it is true to say that some of these users might have updated their job search status in the meantime, it cannot be denied that there are some users that create a profile even if they are not looking for a specific service at the moment. It was also possible to note that there is a percentage of users from OtherEU, OtherEurope, OtherSA, BR and Other that are not open to relocate, regions in which this marketplace does not have job positions. As such, how can Landing add value to these particular set of users, as well as to the ones that have already found a new job? Nowadays, companies have to focus on creating value for individual consumers beyond conversion-focus advertising (Halligan et al., 2009). This project proposes content marketing – “the creation of content that is relevant, compelling, entertaining and valuable and this content must be consistently provided to maintain or change the behaviour of customers” (Mandloys Digital Agency, 2013). According to Mandloys Digital Agency (2013), content marketing is essential to retain customers. Pulizzi and Barrett (2009) state that businesses must understand their customers first, and suggest a list of questions organizations should use as a starting point:

- **Behavioural**
 - How do we want our customers to feel?
 - What effect must we achieve with them?
 - What action do we want them to take?
 - How will we measure their behaviour?
 - How will we put them on the path to purchase?
- **Essential**
 - What do our buyers really need to know?

- What will provide them with the most benefit, personally or professionally?
- How can we present the content so that it has maximum positive impact?
- What are the mandatory elements of the campaign?
- What media types must we include?
- **Strategic**
 - Does this content marketing effort help us achieve our strategic goals?
 - Does it integrate with our other strategic initiatives?
- **Targeted**
 - Have we precisely identified the prospects we want to target?
 - Do we really understand what motivates them?
 - Do we understand their professional roles?
 - Do we understand how they view the product or service we offer?

The authors of this list named this the B.E.S.T. (Behavioural, Essential, Strategic, Targeted) formula for content marketing (2009). There's much research that provides guidelines for content marketing (Tucker, 2013; Leibtag, 2013 Senic, 2013). It is worthy of mention that Binh (2013), suggests using a combination of 1) random content – entertainment news that are easily forgotten, 2) branded content – contents that are relevant to the company or the industry and 3) contents customers want to hear – contents that solve problems. There are also several options suggested for the mediums to use such as social media, email, blogs, online videos, podcasts, webinars, case studies, wikis, e-learning/online training, visual information (charts, diagrams, infographics) among others (Lieb, 2012). Nevertheless, there is at least one common aspect in all research about content marketing – the need to understand what customers are interested in. Peppers and Rogers (2004) suggest that CRM helps in learning customers' needs. In practice, CRM has also been described as "information-enabled relationship marketing" (Glazer, 2002). The fact of the matter is that, with this project, some insights about what might interest Landing's users were already gathered. Firstly, with the psychographic analysis, it was possible to estimate that users are in market employment/career consulting services. Besides providing a great deal of information about tech professionals' perceptions and opinions, the marketing research also highlights the fact that these individuals enjoy keeping up with the market trends, as well as to know how their skills are applicable and valuable. The motivation to learn new technologies, and the high mention of self-learning, are insights that can also

be used for content marketing. Naturally, Google Analytics also estimated a characterizing affinity for technology/technophiles.

Regardless of the specific content marketing strategies that Landing decides to adopt, there is still the issue of how can the organization detect the users that, indeed, are not likely to convert soon. To overcome this matter, once again, a new set of variables is proposed as in table 9.

1. Adjusted RFM Model	User_Recency	number of weeks since the user last visited the platform in the last 3 months
	User_Frequency	number of sessions the user has in the last 3 months
	Average_Session_Duration	average session duration of the user in the last 3 months
2. Behavioural Variables	Lapsed_User	no applications in the last 90 days
	Contact_Activity	did not open any of the last 5 Job Pushes
	Recently_Hired	candidates recently hired through Landing

Table 8 - Adjusted RFM model and set of behavioural variables that could be used to identify users in the retention stage.

These data mining features would allow Landing to have a particular strategy to retain users and foster loyalty by delighting subscribers with helpful and tailored content, and possibly encouraging other conversions in the future.

5.2.5. Overcoming the barriers – final remarks

It would be grave error if the recommendations made were considered to be the first elements of a CRM strategy. In practice, a CRM implementation is the last step. Firstly, it is important to ensure that the organization has a CRM vision. As mentioned in Chapter 2 regarding Literature Review, the aim of CRM is to create and deliver value to targeted customers at a profit and to manage customer experiences (Buttle & Maklan, 2015). In other words, the goal of acquiring and retaining the most important users and developing, communicating and delivering good value propositions must be a part of Landing’s vision.

Secondly, a culture of customer orientation must exist on an organisation-wide level. This implies that this particular set of values and actions that allow the implementation of strategic CRM is recognized by all stakeholders (Kohli & Jaworski, 1990; Ruekert, 1992). The burden of responsibility begins in the hands of top Management that should deliver leadership, motivation, and supervision of every step of the strategy development, especially if it involves significant changes to business processes, organizational structures, and/or roles and responsibilities. Without the belief of top Management, hardly will Landing be able to gain commitment, in particular, of the CRM project team, that may involve several departments. On one hand, a CRM implementation would greatly depend on the Product Team, once it requires a comprehensive analysis of the firm's current and envisioned information systems. On the other hand, the final users of CRM, which would be the Talent and Marketing Teams, will ultimately "decide" if the CRM strategy is successful. Thus, they should be involved in the development of the CRM strategy in order to evaluate the potential system's usability from a user perspective. Considering that LandingJobs is a marketplace, it is also relevant to consider the role of the Business Development Team and to communicate the potential added value of a CRM implementation, so that they can also collaborate and provide pertinent feedback. In some cases, external CRM experts (consultants or vendors) can also be considered, as they can be very helpful for developing a CRM strategy, especially if the firm lacks sufficient expertise, experience, and/or technology. Thirdly, it is necessary to contemplate the integration and alignment of organizational processes. This involves the creation and synchronization, at organizational level, of processes and systems that allow CRM implementation (Reinartz et al., 2004). Thus, a candidate-driven mindset needs to be brought deeper into the functional areas of the company, and cannot be isolated to the Talent and Marketing Teams.

Lastly, it is vitally important to consider the data and technology support. Data and technology support have a meaningful role as a CRM driver (Jayachandran et al., 2005). As it is possible to conclude from the recommendations proposed, strategic CRM needs specialized capabilities to leverage data and turn it into valuable and actionable information. On a first phase, the major analytical activities involved would involve: 1) capturing all relevant user information – data sourcing such as real-time update of user information, incorporation of external sources of information and evaluation of user-related back office data and 2) user data transformation – data integration, which includes

building a data warehouse and assuring that the input data from the various sources are in right format. As some authors claim, there is often a tense relationship between Marketing and IT departments (Shaw & Shaw, 1998; Jeffery, 2010). In Data-Driven Marketing (Jeffery, 2010), the author suggests that the marketing business requirements should be clearly defined – the objectives, what is intended to do with the data, among others. Therefore, one of the outcomes of this project was the development of a Business Requirement, which can be found in Appendix 7.6; it follows the guidelines mentioned and is based on the set of recommendations proposed. Whereas the Product Team should prescribe the solution and be responsible to meet requirements, the Marketing and Talent Teams would then be responsible for the business returns of the system.

5.3. LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

On balance, this study has a few potential limitations that can make room for further research. It should not be forgotten that the work and information shared were valid at the time of the facts, but the nature of the company, the sector, and the market means that the analyses, and even recommendations, may not be applicable in new circumstances.

Firstly, it is pertinent to note that the marketing research's target population consisted of recent graduates, which means that the sample was composed of young workers. It might be relevant to consider the possibility of the fact that the insights gathered regarding the definition of success are somewhat specific to this niche of particular characteristics. This may suggest a need of expanding the research to different age and professional groups. Additionally, it can be argued that the talent journey analysis was, to some extent, hypothetical, as it was done by the point of view of a user, but not by one precisely. In both cases, it is proposed an optimization of these analyses by a CRM system. On one hand, there is a substantial amount of insights that the Talent Team receives that would start being registered and, hence, would assuredly allow reports on the talents' needs. On the other hand, another tool that is offered by a CRM system is the tracking of the talent journey, either through direct input or through data integration with other channels, enabling a more accurate overview of the journey of a user in the platform.

It is yet worthy to emphasize that the tech talent's valuation model based on the human forms of capital was developed for Portugal. While it provided valuable insights and

increased the knowledge of tech professionals, it is important to keep in mind that the differences among other locations were proven and, hence, assumptions on an international level cannot be taken. In fact, the differences between Portugal and other countries were demonstrated across all the analyses that were taken in this study. Therefore, it is recommended that, in order to obtain an identical level of knowledge over the individuals that belong to the other markets, the model is tested in other countries and cultures. Another aspect of the tech talent's valuation model worth mentioning is that it does not allow the automated differentiation of talent that this project initially aimed for. Even though the intelligence over a prospect's propensity to success is amplified, it is not based on criteria that can be detected on a user's profile. Landing's data restrictions were detected on an early stage and, consequently, limited any complex investigations that could be done based on the users' behaviour. For this reason, after a proper implementation of the proposed data modifications, a new analytical activity is suggested – user knowledge discovery. This implies established data processes that would enable more advanced analysis on the users' demographics, psychographics (based on surveys, satisfaction/loyalty assessments and attitudes) and actual behaviour on the platform (applications history or talent advocacy records). In the light of this new information, Landing.Jobs should explore the prediction of future job search behaviour, by models of behaviour pattern for specific users, and, as a result, do an automated user value assessment.

Lastly, the fact that this project was based on the framework of Peppers and Rogers' IDIC Model (2004) is to be underlined. That is to say that, with the aim of further investigation potential outcomes and/or requirements, the application of other CRM frameworks could be contemplated.

6.

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7. APPENDICES

7.1. APPENDIX 1 – MARKETING RESEARCH: TOPIC GUIDE

WARM UP

Good morning / good afternoon / good evening. My name is XXX and I'm a master's student at Nova SBE/IMS, currently researching the effects of human capital on management, finance or economics graduates' early career success and self-perceived success. To carry out this research, I'm conducting interviews such as this one, in which I ask several questions. There are no right or wrong answers to these questions. You are free to say absolutely everything that comes to your mind.

For the purpose of analysing these interviews, I will record them in audio format. When I transcribe them, though, all data will be anonymised, meaning no one will be able to track any answers to you. That being said, I'll ask one introductory question to register your consent.

Do you consent to recording this interview?

- Yes
- No (finish the interview)

Thank you very much! Let's get started:

CURRENT SITUATION AND GRADUATION DATA

1. Can you tell me what program did you graduate from? (University of Msc; XXX specific course)
2. And what made you choose that program and university?
3. In what year did you graduate? (2014-2019 only)
4. Can you tell me about what you currently do, professionally?
5. How long have you been in this position? And how long have you been working full time?
6. Can you tell me about the recruitment process that got you your first job? (take your time)
7. How about your university friends and colleagues that graduated at the same time – did all of them find jobs through regular recruitment processes? Or did they mostly use their contacts to find a position?

CULTURAL CAPITAL

The next set of questions focus a bit on your background before university:

8. What sort of schools did you go to for your primary and secondary education?
9. Did you enrol in any cultural activities in those schools or outside of them? What activities were these? (Music? Drama? Plastic arts? Relation to ethnicity?)
10. How about sports – did you practice any sports growing up? What kind? (individual vs. collective; federated vs non-fed)
11. During the summer, did you take part of any organised activities? What kind? (domestic vs. abroad)
12. Which ethnicities are represented in your family (parents and grandparents only)?
13. Were any of them not originally born in this country? Can you tell me about their nationalities?
14. How do you feel your ethnical heritage influenced your education?
15. Can you tell me the highest level of formal education any of your grandparents achieved?
16. Can you tell me about your parents' education as well?

ECONOMIC CAPITAL

17. Financially speaking, from your perspective, how comfortable was your family when you were growing up?
18. [IF NOT DISCLOSED YET] Did both your parents work?
19. What is/was their professional occupation?
20. Did you work while studying?
 - a. Why did you decide to work?
 - b. What challenges and advantages did it bring you?

SOCIAL CAPITAL

21. Were you a member of any group / community / society, growing up? (scouts, rotary, sports, church, etc)
22. Was your family affiliated with any such groups / communities / societies?
23. Are you currently affiliated with any professional networks related to your line of work?

24. Which ones? Why did you choose those?

25. Do you use professional networks on social media, like LinkedIn? Which ones?

THE UNI EXPERIENCE

26. Now that we have talked about cultural capital and see it as the various types of education you may have gotten from your family, the school you went to, and the activities you had growing up. When you got to the university, did you feel you came in with more or less cultural capital than your peers?

27. Do you feel that difference affected you in any way, like in terms of grades, connecting to colleagues or staff, or by any other means?

28. Do you recall cases of colleagues for whom the difference in cultural capital made a difference, either for better or worse? Can you tell me about that?

29. Now going back to financial resources: did you feel constrained in terms of how much money you could spend while at university? (Going out with friends, travelling or any other things)

30. [ONLY IF "YES" IN PREVIOUS QUESTION] Do you feel that lack of money held you back in any significant way, i.e. in things that could benefit your future? (Study Trips, paid conferences, Erasmus)

31. Thinking about your friends and colleagues, do you recall seeing anyone held back from professional and personal development due to lack of money? Can you tell me about that?

32. Were you part of any groups or societies at your university?

a. Which ones?

b. Why did you join?

c. Can you tell me about your role in that / those groups / societies?

33. In what ways do you feel belonging to those groups or societies provided you with opportunities for professional and / or personal development?

EVALUATION OF OWN SUCCESS

34. Reflecting on your own experience, how do you think the university helped you to get where you are now, professionally? (Mentoring? Company Presentations? CV Workshops? Etc.)

35. Comparing to people you know from other universities and studying different subjects, do you believe that they receive more career support than you did? Do you think you lacked career support?
36. Do you also feel the university helped you shape your personal self? In what ways?
37. How do you compare where you are – in terms of job and life in general – to the rest of your colleagues? Better or worse? In what ways?
38. To which extent do you feel you have accomplished the goals you had when you graduated, in terms of...
- d. Earnings?
 - e. Work life balance?
 - f. Being happy?
 - g. Having a meaningful life?
 - h. Being successful?
39. And what does success mean to you?
40. In your opinion, what contributes to success?
41. And how much of that do you think is directly related to the education, training and opportunities provided by a graduate's university?
42. Based on your own experience and knowledge of how the world works so far, what do you think universities can do more to enhance their alumni's chances of being more successful, both as a person and as a professional?

JOB SEARCH

43. Imagine you had to go job hunting right now. How would you start?
- [IF INTERVIEWEE BELONGS TO LANDING.JOBS - A]
44. (A) Could you describe your experience with Landing.Jobs?
45. (A) Have you ever used other recruitment website/platforms? Which ones?
- [IF INTERVIEWEE DOES NOT BELONG TO LANDING.JOBS - B]
44. (B) Have you ever heard of Landing.Jobs?
45. (B) Have you ever used a recruitment website/platform? Which ones?
46. What do you think of the idea of a service associated with Landing.Jobs that would include CV Reviews, help writing cover letters and preparing interviews, while also identifying potential employers and opportunities for you?

47. How much do you think a service like this would cost per month?
48. For that value, would you be willing to pay?
49. [ONLY IF "NO" IN PREVIOUS QUESTION] How much would you be willing to pay?
50. When you are looking for a job, what kind of career management news and information do you look for? Training? Networking events?
51. What websites do you use for that?
52. Concerning your career, have you thought about where you'd like to be in 10 years or so? Do you set long term goals for yourself? If so, have you considered coaching to support your career development towards those goals?
53. What do you think is involved in coaching for people to manage their careers towards medium- or long-term goals?
54. Finally, what kind of features would you consider useful in a professional counselling service?

It has been very interesting to listen to you sharing your experience and views on this subject – and incredibly helpful for the purpose of my research. Thank You!

7.2. APPENDIX 2 – MARKETING RESEARCH: QUESTIONNAIRE

This questionnaire is about the effects of different types of capital on early graduate success, with the goal of better understanding the current needs of an IT professional. This is a joint study between Landing.Jobs, NOVA SBE and NOVA IMS. You will be presented with different types of questions about these topics. Please be assured that your responses will be kept completely confidential.

This questionnaire should take you around 9 minutes to complete. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice. If you have any further questions, please feel free to email me at 33652@novasbe.pt.

By clicking the button below, you acknowledge that your participation in the study is voluntary and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

- I consent - begin the study
- I do not consent - I do not wish to participate

Skip To: End of Survey If Welcome! This questionnaire is about the effects of different types of capital on earl... = I do not consent - I do not wish to participate



Q03 What is your age?

Skip To: Q85 If Condition: What is your age? Is Greater Than 32. Skip To: Do you want to provide your email, an....

Skip To: Q85 If Condition: What is your age? Is Less Than 21. Skip To: Do you want to provide your email, an....



Q04 In which country are you currently living?

▼ Afghanistan ... Zimbabwe

Skip To: Q07 If In which country are you currently living? != Portugal

Q05 Did you attend 3rd level education (bachelors or masters) in Portugal?

- Yes
- No

Skip To: Q07 If Did you attend 3rd level education (bachelors or masters) in Portugal? = No

Q06 Which university did you graduate from?

- Instituto Superior Técnico
 - Universidade de Aveiro
 - Universidade de Coimbra
 - Universidade Europeia
 - Universidade de Lisboa, Faculdade de Ciências
 - Universidade Lusíada
 - Universidade NOVA de Lisboa
 - Universidade do Porto
 - Instituto Politécnico do Cávado e do Ave
 - Instituto Politécnico de Setúbal
 - Instituto Superior de Engenharia de Coimbra
 - Instituto Superior de Engenharia de Lisboa
 - Instituto Superior de Engenharia do Porto
 - Other
-

Q07 What area did you study?

- Computer Engineering or related
- Computer Science or related
- Information Systems or Technologies or related
- Data Science or related
- Science
- Arts
- Other _____

Skip To: Q85 If What area did you study? = Science

Skip To: Q85 If What area did you study? = Arts

Q08 Thank you! Let's get started! When did you graduate from your last tech-related program (Bachelors or Masters)?

- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- Another year

Skip To: Q85 If Thank you! Let's get started! When did you graduate from your last tech-related program (bachelor... = Another year



Q09 How many years of total full-time professional experience do you have?

Skip To: Q85 If Condition: How many years of nbsp;... Is Greater Than 5. Skip To: Do you want to provide your email, an....

Q10 Alright! Moving on to your current situation. Which type of degree was your last?

- Bachelors
- Masters
- Other

Skip To: Q85 If Alright! Moving on to your current situation. Which type of degree was your last? = Other

Q11 Are you currently employed, either part-time or full-time?

- Yes
- No

Skip To: Q17 If Are you currently employed, either part-time or full-time? = No



Q12 In which country are you currently working?

▼ Portugal ... Zimbabwe

Q13 Which of the following most resembles the industry you're working in or your line of work?

▼ Accountancy, banking and finance ... Transport and logistics

Q14 How many people report to you in your current position?

- None
 - One
 - More than one
-



Q15 How long have you been in this position? (in number of months, e.g. 3)

Q16 Which of the following best describes how you got your current job?

- I applied to a job opportunity posted by the Career Services of my university
- Someone I knew in this company told me about this opportunity
- I applied to a job opportunity I found online
- The opportunity stemmed from an internship I did there
- A head-hunting company contacted me about it
- Through a Career Fair or other type of networking event
- I was contacted by the company and invited to the recruitment process





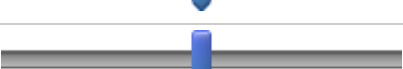

Q17 This section is about Social Capital, meaning questions focusing on your social network. To which extent do you agree with the following sentences, from 0 – Completely disagree to 10 – Completely agree:

0 1 2 3 4 5 6 7 8 9 10

I know someone who can help me get a new job.	
The career services at my university can support me in finding a new job.	
I know someone who can support me in how to search for new job.	
I know someone on a first-name basis who can sometimes employ people.	
I know someone on a first-name basis who can advise me on money issues.	
I know someone on a first-name basis who can advise me about problems at work.	

Q18 Now consider these sentences. To which extent do you agree with them, from 0 – Completely disagree to 10 – Completely agree:

0 1 2 3 4 5 6 7 8 9 10

I stay in touch with professors to whom I know I can ask for career advice.	
I know someone on a first-name basis who can give me a job reference.	
I am a member of one or more organisations that I believe can support me in achieving my goals.	
I know someone on a first-name basis who can advise me about my career.	
I have a mentor who gives me professional advice and that I got through my university's career services.	
I actively manage my relationship with people from my network that I believe can represent job opportunities in the future through themselves or their own connections.	

Q19 This section is about Cultural Capital, focusing on aspects related to your formal and informal education.

Q20 Did you go to private schools for most of your pre-university education?

Yes

No

Q21 Were two or more languages spoken in your home while you were growing up?

Yes

No

Q22 What was the highest level of education attained by your mother?

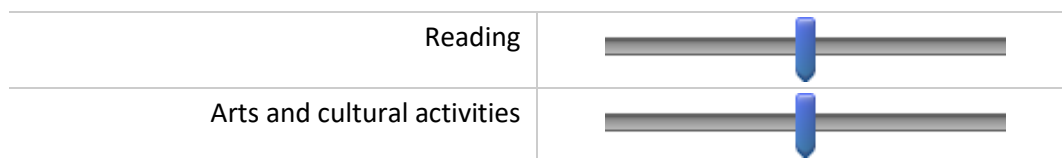
- Doctorate
 - Masters
 - Bachelors
 - High school
 - Did not complete high school
 - Primary school
 - Did not complete primary school
-

Q23 What was the highest level of education attained by your father?

- Doctorate
 - Masters
 - Bachelors
 - High school
 - Did not complete high school
 - Primary school
 - Did not complete primary school
-

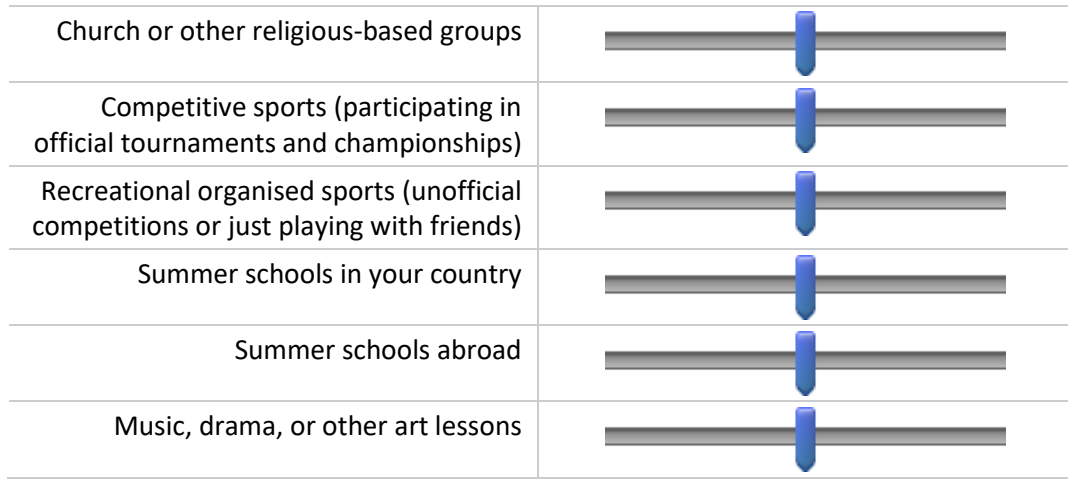
Q24 How would you rate your parents' engagement in the following activities while you were growing up, from 0 – not engaged at all, to 10 – very much engaged?

0 1 2 3 4 5 6 7 8 9 10



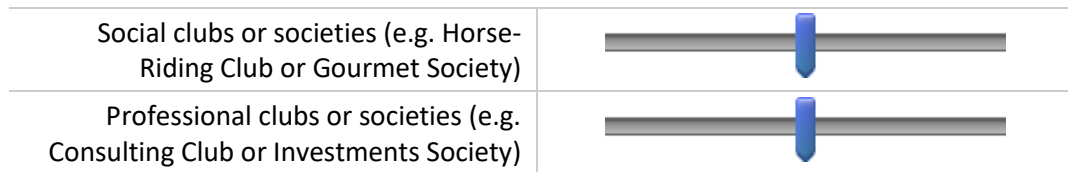
Q25 How involved were you with each of the following activities before university, from 0 – not involved at all, to 10 – very much involved?

0 1 2 3 4 5 6 7 8 9 10



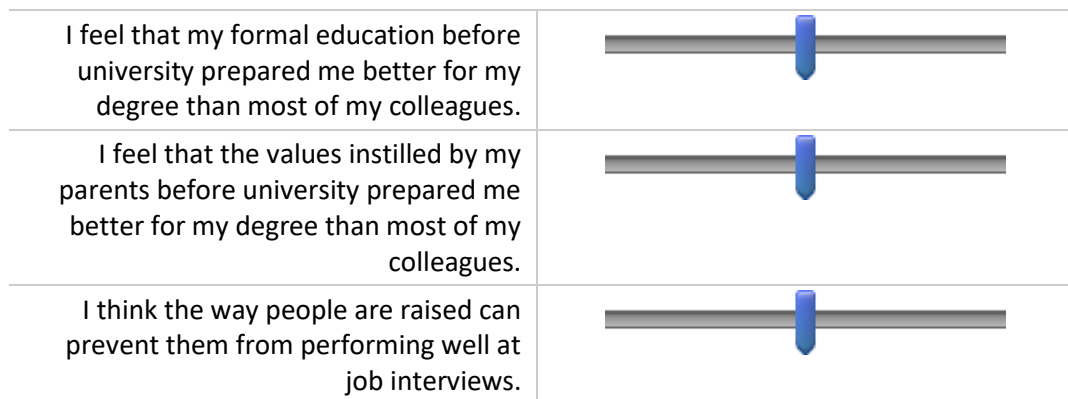
Q26 How involved were you with each of the following activities during your time at university, from 0 – not involved at all, to 10 – very much involved?

0 1 2 3 4 5 6 7 8 9 10



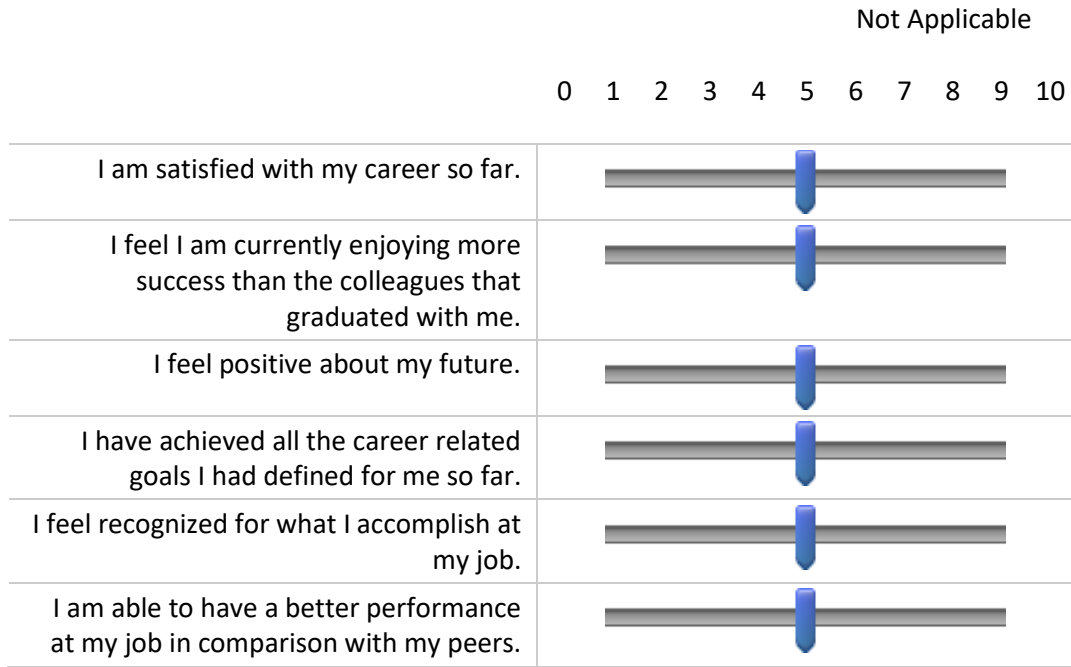
Q27 To which extent do you agree with the following sentences, from 0 – Completely disagree to 10 – Completely agree:

0 1 2 3 4 5 6 7 8 9 10

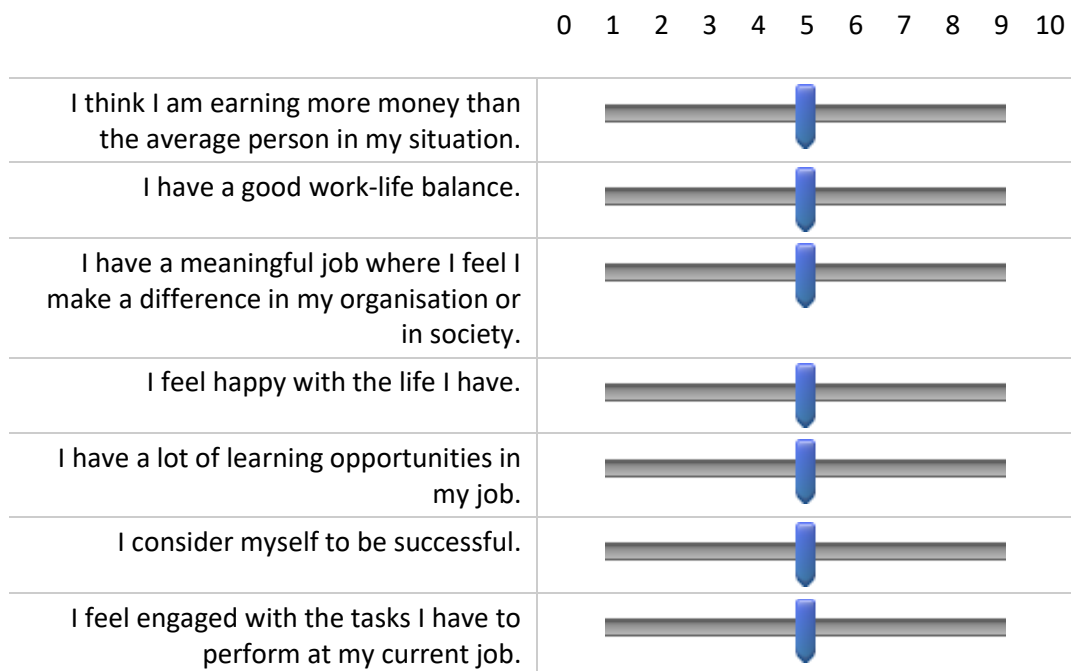


Q28 Well done! Now these questions have to do with your opinion about success and what might improve it.

Q29 To which extent do you agree with each of the following sentences, from 0 – completely disagree to 10 – completely agree?



Q30 To which extent do you agree with each of the following sentences, from 0 – completely disagree to 10 – completely agree?



Q31 Looking back on your overall experience and considering where you are at now, what do you think was lacking in your profile that may have prevented you from greater success? Rate each factor from 0 – not lacking at all, to 10 – lacking very significantly.

0 1 2 3 4 5 6 7 8 9 10

Information on the job market, namely types of jobs and what they entail.	
Talking about jobs in my field with my inner circle of family and friends.	
Knowing the “rules of the game” about recruitment, namely how to prepare for interviews in specific companies.	
Understanding exactly how what I was studying could translate into marketable skills.	
Achieving better marks / grades.	
Studying at a university with better market reputation.	
Making the best use of my university’s career services.	
Doing an internship during my program.	
Studying abroad during my program.	

Q32 This bit is about economic well-being when you were growing up and now.

Q33 To what extent do you agree with the following sentence, from 0 – Completely disagree to 10 – Completely agree:

0 1 2 3 4 5 6 7 8 9 10

When I was growing up, my parents made sure everyone in the family always had a computer they could work or otherwise use.	
When I was growing up, I traveled abroad with my family for vacation every year.	
Both my parents worked during the whole time I was growing up.	
My family was financially well off when I was growing up.	
I consider myself to be well off currently.	

Q34 Nearly done! About job search.

Q35 How would you rate the quality of the career support you received from your university on a scale of 0 to 10?

- 0
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10
-

Q36 Imagine a company that identifies potential employers and opportunities for people looking for a job. Now, consider that it provided a service of CV and cover letter drafting and review, advice and help in preparing for interviews and tips for the mock/tech assessments, as well as identifying potential employers and opportunities. Which payment method do you think would make the most sense for the service described?

- Monthly fee
 - Fixed fee
 - Percentage of next wage (in case you end up finding a new job)
-

Display This Question:

If Imagine a company that identifies potential employers and opportunities for people looking for a... = Monthly fee



Q37 How much do you think this service would cost per month, in euros? (if you believe it costs 10€, for example, just write 10)

Display This Question:

If Imagine a company that identifies potential employers and opportunities for people looking for a... = Fixed fee



Q38 How much do you think this service would cost, in euros? (if you believe it costs 10€, for example, just write 10)

Display This Question:

If Imagine a company that identifies potential employers and opportunities for people looking for a... = Percentage of next wage (in case you end up finding a new job)



Q39 Which percentage do you think this service would cost? (if you believe it would be 10%, just write 10)

Q40 For that amount, how likely would you be to hire that service if you were looking for a new job?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Q41 Tell us how you search and find information. Where do you usually go to keep up to date with the news?

- TV
- Newspaper
- Radio
- Online Newspaper
- Blogs/Online Communities
- Social Media
- Other internet media (eg: Buzzfeed news, google news, etc.)



Q42 And finally, if you had 100 minutes to spend on Social Media, how much time would you spend on each of the following channels?

Twitter: _____

Facebook: _____

Instagram: _____

Reddit: _____

LinkedIn: _____

YouTube: _____

Tumblr: _____

Quora: _____

VK: _____

Total: _____

Q43 This is it – final section! Just the last questions to help characterize this study's sample! Did you do an internship or placement while at university?

Yes

No

Display This Question:

*If This is it – final section! Just the last questions to help characterize this study's sample!
Did... = Yes*

Q44 Was your first job in the same company where you had had your internship?

Yes

No



Q45 What country are you a national from?

▼ Portugal ... Zimbabwe

Q46 Which interval within the following includes your approximate annual income, in euros?

- 0
 - < 5 000€
 - 5 001 to 10 000€
 - 10 001 to 15 000€
 - 15 001 to 20 000€
 - 20 001 to 25 000€
 - 25 001 to 30 000€
 - 30 001 to 35 000€
 - 35 001 to 40 000€
 - 40 001 to 45 000€
 - > 45 000€
-
-

7.3. APPENDIX 3 - DETAILED STATISTICAL TABLES

Descriptives

Quantitative						
Variable	Mean	Std Dev	Minimum	Maximum	N	
EXP_YEARS	2,427	1,446	0	5	23 7	
SUC_LEVEL	6,219	2,836	0	10	23 7	
INC_LEVEL	4,878	2,655	1	11	23 7	
YOUTUBE	30,072	23,591	0	100	23 7	
FACEBOOK	12,515	15,261	0	100	23 7	
REDDIT	10,987	20,668	0	100	23 7	
LINKEDIN	16,810	17,720	0	100	23 7	

Qualitative

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
EXP_CAT				
1	125	52,740	125	52,740
2	112	47,260	237	100,000
RESI_REG				
1	103	43,460	103	43,460
2	134	56,540	237	100,000
SUCCESS				
1	94	39,660	94	39,660
2	143	60,340	237	100,000
MEDIA_CHANNEL				
1	10	4,220	10	4,220
2	145	61,180	155	65,400
3	82	34,600	237	100,000

7.3.1. Analysis of variance: Experience Category, Region of Residence, Feelings of Success and Income Level vs. Usage of Social Media

ANOVA

YOUTUBE						
	Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
EXP_CAT	Model	1,000	331,960	331,960	0,600	0,441
	Error	235,000	131007,821	557,480		

	Corrected Total	236,000	131339,781			
RESI_RE G	Model	1,000	1603,787	1603,787	2,910	0,090
	Error	235,000	129735,994	552,068		
	Corrected Total	236,000	131339,781			
SUCCESS	Model	1,000	906,464	906,464	1,630	0,203
	Error	235,000	130433,316	555,035		
	Corrected Total	236,000	131339,781			
INC_LEV EL	Model	10,000	4752,835	475,284	0,850	0,582
	Error	226,000	126586,946	560,119		
	Corrected Total	236,000	131339,781			
FACEBOOK						
	Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
EXP_CAT	Model	1,000	44,631	44,631	0,190	0,663
	Error	235,000	54916,568	233,688		
	Corrected Total	236,000	54961,198			
RESI_RE G	Model	1,000	1336,843	1336,843	5,860	0,016
	Error	235,000	53624,355	228,189		
	Corrected Total	236,000	54961,198			
SUCCESS	Model	1,000	41,665	41,665	0,180	0,673
	Error	235,000	54919,534	233,700		
	Corrected Total	236,000	54961,198			
INC_LEV EL	Model	10,000	3000,159	300,016	1,300	0,229
	Error	226,000	51961,039	229,916		
	Corrected Total	236,000	54961,198			
REDDIT						
	Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
EXP_CAT	Model	1,000	373,727	373,727	0,870	0,351
	Error	235,000	100433,235	427,376		
	Corrected Total	236,000	100806,962			
RESI_RE G	Model	1,000	4938,875	4938,875	12,110	0,001
	Error	235,000	95868,087	407,949		
	Corrected Total	236,000	100806,962			
SUCCESS	Model	1,000	0,058	0,058	0,000	0,991
	Error	235,000	100806,904	428,966		
	Corrected Total	236,000	100806,962			

INC_LEV EL	Model	10,000	7646,043	764,604	1,850	0,053
	Error	226,000	93160,919	412,217		
	Corrected Total	236,000	100806,962			
LINKEDIN						
	Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
EXP_CAT	Model	1,00	0,01	0,01	0,00	1,00
	Error	235,00	74106,45	315,35		
	Corrected Total	236,00	74106,46			
RESI_RE G	Model	1,00	1302,78	1302,78	4,21	0,04
	Error	235,00	72803,68	309,80		
	Corrected Total	236,00	74106,46			
SUCCESS	Model	1,00	1014,28	1014,28	3,26	0,07
	Error	235,00	73092,18	311,03		
	Corrected Total	236,00	74106,46			
INC_LEV EL	Model	10,00	4991,18	499,12	1,63	0,10
	Error	226,00	69115,27	305,82		
	Corrected Total	236,00	74106,46			

7.3.2. Chi-Square Tests: Experience Category, Region of Residence, Feelings of Success and Income Level vs. Type of Media Channel

Chi-Square for Media Channel			
Statistic	DF	Value	Prob
EXP_CAT			
Chi-Square	2	4,830	0,089
Likelihood Ratio Chi-Square	2	5,076	0,079
Mantel-Haenszel Chi-Square	1	0,060	0,807
Phi Coefficient		0,143	
Contingency Coefficient		0,141	
Cramer's V		0,143	
RESI_REG			
Chi-Square	2	12,515	0,002
Likelihood Ratio Chi-Square	2	12,534	0,002

Mantel-Haenszel Chi-Square	1	7,923	0,005
Phi Coefficient		0,230	
Contingency Coefficient		0,224	
Cramer's V		0,230	
SUCCESS			
Chi-Square	2	0,509	0,775
Likelihood Ratio Chi-Square	2	0,522	0,770
Mantel-Haenszel Chi-Square	1	0,354	0,552
Phi Coefficient		0,046	
Contingency Coefficient		0,046	
Cramer's V		0,046	
INC_LEVEL			
Chi-Square	20	31,456	0,049
Likelihood Ratio Chi-Square	20	29,858	0,072
Mantel-Haenszel Chi-Square	1	1,565	0,211
Phi Coefficient		0,364	
Contingency Coefficient		0,342	
Cramer's V		0,258	

7.4. APPENDIX 4 – ONBOARDING CALLS' SCRIPT

Talent Advocate: _____

Candidate's name: _____

Landing.jobs profile: _____

1. Are you currently employed?
2. Why did you decide to start actively looking for new opportunities?
3. What is your ideal position?
4. What tech stack are you willing to work with?
5. How do you feel about learning a new technology or programming language?
6. What's your preference of company or project?
7. Why did you leave your position?
8. Do you want to relocate to a new country/city?

[ONLY IF "YES" IN PREVIOUS QUESTION]

9. Where to?

[ONLY IF ANSWERED THE PREVIOUS QUESTION]

10. Why do you want to move to this/these country(ies)?
11. Are you interested in remote work?
12. What is your salary range?
13. Why?
14. What's your deal maker and deal breaker?
15. Which other recruitment platforms do you use or follow? It can be aggregators, blogs, communities, events and influencers.
16. Is your family onboard with your relocation plan?
17. What does this mean for your family?
18. Preferred form of contact/ availability:

7.5. APPENDIX 5 – CULTURAL AND QUALITY DISCREPANCIES AMONG THE COUNTRIES OF OTHEREU AND OTHEREUROPE

7.5.1. Cultural Differences

Hofstede's Dimensions: Power Distance Index (PDI), Individualism (IDV), Uncertainty avoidance (UAI), Masculinity (MAS), Long-term orientation (LTO) and Indulgence (IND)

Country	PDI	IDV	MAS	UAI	LTO	IND
OtherEU						
Austria	11	55	79	70	60	63
Belgium	65	75	54	94	82	57
Bulgaria	70	30	40	85	69	16
Croatia	73	33	40	80	58	33
Cyprus	-	-	-	-	-	-
Czech Republic	57	58	57	74	70	29
Denmark	18	74	16	23	35	70
Estonia	40	60	30	60	82	16
Finland	33	63	26	59	38	57
France	68	71	43	86	63	48
Greece	60	35	57	100	45	50
Hungary	46	80	88	82	58	31
Ireland	28	70	68	35	24	65
Italy	50	76	70	75	61	30
Lithuania	42	60	19	65	82	16
Luxembourg	40	60	50	70	64	56
Malta	56	59	47	96	47	66
Poland	68	60	64	93	38	29
Romania	90	30	42	90	52	20
Slovakia	100	52	100	51	77	28
Slovenia	71	27	19	88	49	48
Sweden	31	71	5	29	53	78
Average	53,19	57,10	48,29	71,67	57,48	43,14
SD	22,12	16,31	24,06	21,64	15,95	19,24
OtherEurope						
Albania	90	20	80	70	61	15
Serbia	86	25	43	92	52	28
Montenegro	-	-	-	-	-	-
Macedonia	-	-	-	-	-	-
Bosnia and Herzegovina	-	-	-	-	-	-
Turkey	66	37	45	85	46	49
Moldova	-	-	-	-	-	-
Ukraine	92	25	27	95	86	14
Belarus	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-
Average	83,50	26,75	48,75	85,50	61,25	26,50
SD	10,33	6,26	19,34	9,66	15,25	14,12

7.5.2. Quality Differences

National Indexes by Numbeo: Quality of Life Index (QLI), Purchasing Power Index (PPI), Safety Index (SI), Health Care Index (HCI), Cost of Living Index (CLI), Property Price to Income Ratio (PPIR), Traffic Commute Time Index (TCTI), Pollution Index (PI) and Climate Index (CI)

Country	QLI	PPI	SI	HCI	CLI	PPIR	TCTI	PI	CI
OtherEU									
Finland	190,2	99,9	76,7	75,8	70,3	8,4	29,9	11,6	58,9
Sweden	176,0	101,7	52,9	69,2	69,9	9,3	30,5	18,1	74,0
Estonia	177,8	71,3	76,9	72,7	50,9	9,1	24,5	19,8	64,3
Denmark	192,7	100,9	74,9	80,0	83,0	7,5	28,9	21,3	81,8
Austria	182,5	82,4	76,3	78,7	70,4	10,9	26,3	22,2	77,3
Slovenia	172,2	66,3	78,9	64,6	53,4	10,5	27,3	24,1	77,6
Lithuania	159,4	57,9	66,9	69,5	44,3	10,9	26,1	28,8	67,8
Croatia	159,0	50,4	75,3	62,7	49,7	13,7	29,1	30,5	89,1
Ireland	153,5	80,9	54,6	51,9	75,9	7,5	37,7	34,0	89,1
Slovakia	152,5	56,9	70,8	60,0	44,5	10,3	29,1	39,7	78,1
Czech Republic	156,2	62,8	74,5	74,6	46,2	15,4	29,7	40,2	77,1
United Kingdom	162,7	91,7	56,3	74,5	67,3	10,1	34,5	40,6	87,6
France	154,0	80,4	53,2	80,0	74,1	13,0	34,8	43,6	90,3
Hungary	128,2	47,6	64,9	47,8	40,9	14,8	35,8	48,3	79,5
Greece	133,1	43,7	59,7	56,2	55,7	10,6	33,8	52,6	94,2
Belgium	153,5	86,3	56,0	74,3	71,8	6,9	36,2	52,9	86,0
Poland	141,8	59,6	71,5	61,0	40,0	11,4	31,7	54,5	76,1
Italy	140,8	65,6	55,7	66,6	67,3	9,7	34,4	55,6	92,3
Romania	132,4	48,9	72,4	55,1	35,3	11,3	34,8	58,4	77,6
Bulgaria	129,8	49,4	61,5	55,4	36,7	8,5	29,4	65,3	82,8
Average	157,4	70,2	66,5	66,5	57,4	10,5	31,2	38,1	80,1
STD	19,7	19,1	9,3	9,9	15,0	2,4	3,8	15,6	9,3
OtherEurope									
Belarus	134,8	37,0	75,0	59,0	34,7	14,7	30,7	43,6	64,4
Serbia	116,3	36,7	62,6	51,3	35,7	18,9	30,4	60,3	83,2
Bosnia And Herzegovina	121,9	41,8	57,0	52,3	36,0	12,6	26,7	62,3	80,5
Russia	102,3	38,9	58,9	57,6	39,2	10,8	45,3	62,8	40,4
Ukraine	104,8	31,8	51,2	52,3	33,2	12,2	38,7	65,1	71,4
Turkey	127,1	40,9	60,5	69,8	34,7	7,8	44,7	67,4	93,3
North Macedonia	110,5	37,2	61,3	56,4	31,6	12,6	27,6	80,2	76,3
Average	116,8	37,8	60,9	57,0	35,0	12,8	34,9	63,1	72,8
STD	11,9	3,3	7,3	6,4	2,4	3,4	7,9	10,8	17,0

7.6. APPENDIX 6 – BUSINESS REQUIREMENT

7.6.1. Business Requirement Specification

LANDING.JOBS Project

Project Name CRM Project Implementation

Current Version	Date	25/04/2020	Last Updated by	Filipa Borja Santos
Author Filipa Borja Santos and Maria Nunes			Creation Date	26/11/2019

Project Stakeholders		
Stakeholder Name	Role	Action (*)
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(*) Possible Values: I – Inform, A – Approve, V - Validate

Revision History					
Date	Version	Author	Description of Change	Revised by	Revision Date
26/11/2020	1	Maria Nunes	First draft of document	Prof. Elizabete Cardoso	16/12/2020
26/11/2020	1	Filipa Borja Santos	First draft of document	Prof. Elizabete Cardoso	16/12/2020
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1. FUNCTIONAL/Business Requirements

Instructions:

- Responsibilities
 - **Chapter 1 must be filled by the Business/Client requester**
 - Chapter 2 must be filled by the IT ADM team
- Not all the sub-chapters are mandatory. Depending on the request type, some sub-chapters may not apply.

1.1 Executive Summary

The aim of this project will be to create a process for automating user and candidate processes in order to make marketing and talent efforts more effective, by streamlining the daily tasks in three key points:

- Marketing Campaigns Optimization (focus on email marketing and platform notifications);
- Database segmentation (for Talent and Marketing Departments);
- Integration of all user interactions with the organisation, regardless of the channel;
- Improve identification and analysis of the various stages of customer journey.

1.2 Origin of Request

Marketing and Talent Departments @ Landing.jobs

1.3 Requirements

1.3.1 Functional Requirements

1.3.1.1 Background

The Landing.jobs' Talent Department handles candidates' applications through the back office of the platform and several excel databases, limiting the ability to target and define the most valuable candidates. Furthermore, without a structured and integrated database, the Marketing Department also struggles in segmenting the userbase and communicating effectively.

As users and applications increase, this analysis and contact emails/notifications are becoming increasingly difficult to manage, leading to incoherent and ineffective communications, which in turn can increase the loss of users and/or active candidates.

A restructure of the data and, ultimately, the implementation of a CRM platform are, hence, essential for the success of Landing.jobs.

1.3.1.2 Current Business Process Flow Diagram

	Awareness Talent learns that LJ exists	Consideration Talent registers at LJ platform and considers to make an application	Conversion Talent makes an application and proceeds to become a candidate	Retention Talent stays an active member in the LJ community
		Touch Point Map		
Social Media	x	x		x
Job Boards	x		x	
Blog	x	x		x
Events	x			x
Google/Third Party Sites	x	x		
Landing Page		x	x	x
Platform			x	
Platform Notifications			x	x
Talent Advocate			x	
Employers			x	
Email			x	x

1.3.1.3 Requirement Detail

To be developed according to the CRM platform to be chosen and the strategic decisions that are made in respect to the website, particularly in what concerns the registration forms and automatic notifications / emails. In a first instance, it is necessary to adjust the format and add a few variables as described in the excel document. In addition to this, it is also necessary to map all the automated communications that are being launched by the platform.

1.3.1.4 Proposed Business Process Flow Diagram

The talent journey will follow the same steps. However, based on the internal changes, it will be improved in terms of talent experience.

1.3.1.5 Expected Benefits/Improvements

- Surcrease of user profiles with unfilled essential fields for the business;
- Surcrease of excel sheets multiplied across different teams and employees;
- Creation of a knowledge base shared by all persons of interest of the company;
- Talent Team access of information and feedback facilitated through a better database segmentation;
- Automated emails and integrated contact lists for users and candidates;
- Facilitation of event promotion and job positions campaigns;

- Avoid inconsistent communication with the user/candidate's current state on the platform;
- Avoid repeated communication (Job Pushes or events);
- Avoid communication that users / candidates do not want to receive.

1.3.1.6 Use Cases

This project's strategic goal is to be able to provide effective and funnel-stage appropriate communication to Landing.Jobs' users, while having the ability to identify the most valuable users. Currently, talent may register in the platform without detailing its location and professional experience. Therefore, the first step would be to make these fields mandatory in order to make this vital information available in the conversion stage. The next steps consist mainly in the creation of new variables. On one hand, variables that allow Landing.Jobs to identify its most engaged users. By doing so, it would be possible to send out surveys that could assist in the development of information regarding potential channels to use for brand awareness. The idea behind this is to correct the current negligence of talent in regions other than Portugal. On the other hand, variables that account for the users' history with the platform. This way, a number of incoherent communications could be improved in terms both job ads and events' promotions. With regards to conversion, there are still a few CRM features worth mentioning. Firstly, it is important to highlight the relevance of the event-based communications that could use in the reactivation of users such as "Finish Your Profile", "Finish Your Application", and so forth. Another extremely valuable feature is the LinkedIn integration, that could have a great role in identifying valuable users. Lastly, instead of neglecting the retention stage, this project proposes a new set of variables based on behaviour and adjusted RFM models, that would enable the distinction of this stage and, hence, a differentiated communication for these users.

1.3.2 Security Requirements

With the assistance of the organisation's stakeholders, it is necessary to define who will be the owner of the information and the different levels of permission.

1.3.3 SOX Requirements

All interfaces must respect compliance and be compatible with GDPR.

1.3.4 Regulatory Requirements

Automatic update of variables as described in the Excel document.

1.3.5 Operating Environment

- Unique access through each employee's personal desktop (Talent & Performance teams);
- Remote access to the same members, if possible;
- Windows and Apple Compatibility.

1.3.6 Availability/Reliability Requirements

The product has a mandatory availability of year-round.

1.3.7 Performance Requirements

- Automatic email for users / candidates: <1 min;
- Automatic notifications for users / candidates: <1min;
- Segmentation by filters based on profile variables: <10 sec;
- Tracking of user platform historic (applications done, engagements, rejections, offers,...): <1 min;
- Access User / Candidate profile: <10 sec;
- Setting of communication limits per periods of time: <10 sec;
- Tracking of likes and preferences: <10sec.

1.3.8 Data Migration/Historic Requirements

In the scope of this request and the acceptable system unavailability period, it is necessary to have a data migration for the Backoffice for platform data, and from Eventbrite for events' tracking.

1.3.9 Training Requirements

Operation and process management for Talent and Performance Teams.

1.4 Dependencies

Given the difficulty of updating regularly and defining the level of reliability of talent data, it must be possible to integrate with LinkedIn, so not just consulting the talent's profile, but also extracting information from the same profile.

1.5 Acceptance Criteria

ID	Description	Expected Results
1	Profile filling	Profile Account created with success
2	Application submission	Application submitted with success
3	Documents attachment	Attachment of documents with success
4	Profile updates	Visible on the platform

1.6 Assumptions

ID	Description
1	Developers must be available during working hours to solve issues
2	The system must be password protected with different users
3	Changes made by different users must be identified
4	Profile creation / application processes must be complete (information and documents)
5	User notifications must be automated and structured
6	System must communicate with BigQuery, with or without intermediate
7	The system must create excel reports with selected information
8	The user / candidate will not be able to duplicate account / application

1.7 Restrictions

ID	Description
	User/candidate receives communication of job offers max. 1 time per week

2. Non-Functional Requirements

[To be filled by the IT ADM Organization]

2.1 Architecture/Systems Scope

[Responsible: Architecture team]

2.3 Hardware/Software Licences

[Responsible: Project Manager, Architecture and Operations teams]

2.4 Operational Impacts

[Responsible: Operations team]

Detail responsables.....

2.5 External Impacts

[Responsible: Project Manager and Architecture team]

2.6 Risk Analysis

[Responsible: Project Manager]

2.7 Security Assessment

[Responsible: Project Manager]

2.8 Assumptions

ID	Description

2.9 Restrictions

ID	Description

7.6.2. Data Specification

As Is

VARIABLE_NAME	VARIABLE_DESC	VARIABLE_SRC
availability	job search status at the moment (I'm currently employed, but open to a new challenge; I'm actively looking for a job; I'm not really looking, just curious)	sign up form
city	city the user is based	sign up form
citizenship	citizenship of the user	sign up form
category_name	areas of interest (Back-end Developer, Data Scientist, etc.)	sign up form
experience_level	years of working experience (<1, 2, ..., 10+)	sign up form
skill	set of skills the user owns	sign up form
birth_year	year of birth YYYY	sign up form
relocation_availability	user's availability for relocation	sign up form
relocation_country	user's relocation countries of preference	sign up form
cv	link cv of user	sign up form
candidate_state	unknown	BigQuery
skills	if user owns a specific skill	BigQuery

Go To

VARIABLE_NAME	VARIABLE_DESC	VARIABLE_SRC	FORMAT	COMMENTS	NEW_VARBL
category_name	areas of past/current work (Back-end Developer, Data Scientist, etc.)	sign up form	string	change the wording of the question	updated
experience_level	years of working experience (<1, 2, ..., 10+)	sign up form	number	updated automatically	updated
birthday_date	date of birthday DD/MM/YYYY	sign up form	date		new
Age	age of the user	birthday_date	number		new
education_level	level of formal education of the user (basic education, secondary education, bachelor's degree, master's degree, PhD)	sign up form	string		new
relocation_availability	flag 1 if user is available for relocation (0 otherwise)	sign up form	1, 0	make mandatory	updated
relocation_country	user's relocation countries of preference	sign up form	string	make mandatory	updated
cv	link cv of user	sign up form	upload a file	make mandatory	updated

candidate_state	user who applied to at least a position in the considered period (candidate, not candidate);	BigQuery	string	correct it	updated
candidate_repeat	flag 1 if user applies after being hired through Landing.jobs (0 otherwise)	BigQuery	1, 0		new
user_recency	number of weeks that have passed since the user last visited the platform	BigQuery	number		new
user_frequency	number of sessions the user has in the last 3 months	BigQuery	number		new
average_session_duration	average session duration of the user in the last 3 months	BigQuery	number		new
relocation_behaviour	flag 1 if user applies to a Job Region different from the one he is located in (0 otherwise)	BigQuery	1, 0		new
event_attendance	flag 1 if user attended a particular Landing events – Landing Festival, Tech Hiring Conference, etc. (0 otherwise)	BigQuery	1, 0		new
last_job_switched	date of the last time the user switched jobs DD/MM/YYYY	LinkedIn Integration	date		new
current_employer	company in which the user is currently working	LinkedIn Integration	string		new
bachelor	flag 1 if user has a bachelor degree (0 otherwise)	LinkedIn Integration	1, 0		new
master	flag 1 if user has a master degree (0 otherwise)	LinkedIn Integration	1, 0		new
doctorate	flag 1 if user has a doctorate degree (0 otherwise)	LinkedIn Integration	1, 0		new
language_skills	languages in which the user has skills	LinkedIn Integration	string		new
tech_skills	set of skills owned by a user	BigQuery	string		updated
offers_accepted	number of total offers the user has received	BigQuery	number		new
hires	number of times the user was hired through the platform	BigQuery	number		updated
application_started_at	date of the day the user started an application but didn't finish it DD/MM/YYYY	BigQuery	date		new
application_category	job category of an application	BigQuery	string		new
talent_advocate	flag 1 if user has/had a Talent Advocate during an application process (0 otherwise)	BigQuery	1, 0		updated
applied_to	job position/company a user has applied to	BigQuery	string		new

