ISCTE Business School
Instituto Universitário de Lisboa

FACTORS OF EMPLOYER ATTRACTIVENESS FOR IT MILLENNIAL STUDENTS

Lucas Reis das Neves

Dissertation submitted as partial requirement for the conferral of

Master in Management

Supervisor:
Alzira Duarte, Assistente, ISCTE Business School, Department of Human Resources and Organizational behavior

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ABSTRACT

Knowledge-based organisations like the ones in the IT sector desperately need employees as a source for competitive advantage, since they constitute their biggest asset. The worldwide expansion of big technology giants like IBM or SAP opened new opportunities for IT professionals to exploit, with more and more non-tech employers investing in technology. These gold-collar professionals are often described as young and highly mobile who earn high incomes in modern offices. Since the world digitalization is much faster than universities can cope with, steady growth over the last few years has led to a big talent shortage in the sector. Therefore, companies are now engaged in a war for talent and constantly look for new ways to attract potential employees.

To face this problem, the current study utilized a sample of 495 IT graduate and undergraduate students across Portuguese universities, analysing their perceptions of employer attractiveness dimensions as well as their media channel's usability, perceived credibility and deception. Moreover, the influence of these variables in their intentions to apply for a job was also analysed.

Results showed that the most valued employer attractiveness dimensions vary depending on the stage of the employer branding process. Furthermore, the fact that these students are millennials, and the fact that they are from this specific field of the study justifies their preferences. As for the media channels, the channels with higher usability are also perceived as the most credible and less likely to display deception.

Keywords: Employer branding; Media Channels; IT students; Millennials

JEL Classification: **D230** – Organizational behaviour; **D830** – Communication, belief, and unawareness.

ABSTRACT- PT

As organizações baseadas no conhecimento como aquelas no mercado das tecnologias de informação (TI) precisam desesperadamente de colaboradores como fonte de vantagem competitiva, sendo que estes constituem os seus maiores ativos. A expansão mundial de gigantes tecnológicos como a IBM ou a SAP abriu novas oportunidades para os profissionais das TI explorarem, com cada vez mais empregadores não tecnológicos a investir em tecnologia. Estes profissionais são normalmente caracterizados por serem jovens voláteis com grandes salários e a trabalhar em escritórios modernos. Considerando que a digitalização do mundo é muito mais rápida do que aquilo que as universidades conseguem sustentar, o crescimento constante do setor ao longo dos últimos anos levou a uma grande escassez de talento. Assim sendo, estas organizações iniciam agora uma guerra de talento e procuram constantemente novas formas de atrair potenciais colaboradores.

Para fazer face a esta situação, este estudo utilizou uma amostra de 495 estudantes das TI de várias universidades portuguesas, analisando as suas perceções acerca das dimensões de atratividade do empregador, assim como da usabilidade, credibilidade e probabilidade de comportamentos fraudulentos nos canais de divulgação.

Os resultados mostram que as dimensões de atratividade mais valorizadas por estes estudantes variam dependendo da fase do processo de employer branding das empresas. Para além disso, as características geracionais e específicas desta área justificam as suas preferências. Relativamente aos canais de divulgação, os canais com maior usabilidade são também os canais percecionados como mais credíveis e com menos probabilidade de comportamentos fraudulentos.

Palavras-chave: *Employer branding*; Canais de divulgação; Estudantes de programação; *Millennials*.

JEL Classification: **D230** – Organizational behaviour; **D830** – Communication, belief and unawareness.

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List of abbreviations/ glossary

Ad(s) – Advertisement(s)

BsC – Bachelor's degree

CS – Computer Science

CW – Career Websites

EB – Employer Branding

EVP – Employer Value Proposition

Gen Y- Generation Y / Millenials

Gen Z – Generation Z

HR – Human Resources

HRM – Human Resources Management

IT – Information Technology

MsC – Master's degree

PC- Principal component

PCA – Principal Components Analysis

RBV – Resource based-view

T&D – Training and Development

Tech – Technology

TI – Tecnologias de Informação

UK – United Kingdom

US – United States of America

WOM – Word of Mouth

Introduction

According to Sawant (2018:1), software engineering can be characterized as the "*process of designing, constructing, and testing software by analysing needs of the end-user*." By writing and designing programs for computers and other electronic products, software engineers ensure the correct and timely development of applications within budget and consistency requirements. The global software engineering market has been witnessing steady growth over the last few years (e.g. Market Research Future, 2018; Silady, 2018; Sawant, 2018). The demand for this kind of talent is increasing as a direct result of the worldwide expansion of big technology giants like IBM or SAP.

On the US alone, according to the Silady (2018), the average salary for software engineers is twice as big as the average of the overall US salary (92,660$ to 46,440$ annually in 2018). Other professions that may be more profitable require many years of additional education in comparison (For instance: lawyers 113,350$ or physicians 187,200$). From 2002 to 2012 there was only a 24% increase in computer science bachelor's degrees. This leads to the fact that software engineers are much more likely to find jobs in their chosen field, considering the 50% increase in jobs in the field from 2002 to 2013 (12.5 times the overall rate of jobs growth throughout that period).

Bischke (cited by Silady, 2018), the CEO of tech recruiting firm Entelo, argues that when combining these factors with a record tech growth and revenues over the last ten years, software engineers aren't enough to fill the high job demand created by this technological revolution, even though college students majoring in computer science (CS) have been growing in numbers. Along with other recruiting professionals, Brown (2018), the IT division lead for Hays US, agrees with this market status and shows this high demand does not appear to be slowing down anytime soon, especially with more and more non-tech employers investing in technology (further increasing demand for IT professionals). Nowadays every employer has at least a website, and many invest in mobile apps, automation, or e-commerce. This constitutes a basis for companies to be tightening the competition for this talent and find out what the best possible offer and work environment to retain and attract IT professionals.

In Portugal, the same trend follows along with the continuous increase of professionals in the HR and Phycology fields being forwarded to IT recruiting. According to MSearch's 2018 market trends survey, this market is also increasingly dynamic with high project rotativity that makes candidates have considerably less time and be much less available for recruitment processes. Furthermore, companies are often losing candidates due to the time they take on the

decision process. Non-Tech companies recruiting IT profiles are now realizing this sense of urgency that tech companies already knew. Every day these candidates become more and more aware of their market value and that they are scarce resources on a world full of opportunities. These factors present a big challenge for companies that must compete for this talent. Companies are now looking for new and innovative ways to attract IT professionals, like remote work initiatives (HomeOffice), the possibility of working in several projects at the same time (for different companies), or even access to an informal work environment. According to the same source, there are other factors enforcing this obvious discontinuity between supply and demand. A lot of these professionals have been moving to foreign countries that offer better salaries and living conditions to work on international projects. Nowadays, a software engineer can do the same job anywhere in the world, making it harder for Portugal to retain talent. Some of the most picked countries include the UK, Netherlands, and Germany.

According to my own professional experience as IT recruiter (also in Portugal) on a big consultancy company, several senior managers of the field confided on the struggle of finding this talent and how crucial it was for the success of their projects and clients.

Finally, with this national and international context, it is possible to conclude that there is a common problem to solve in the sector. How can companies attract IT professionals and students on this highly competitive market?

The main purpose of this thesis is precisely to address part of the identified problem. This dissertation will analyse which factors contribute the most towards employer attractiveness, for software engineering students. The reason behind this target population decision is further addressed in the methodology of the present paper. As for the utilized tools, quantitative methods were used on a students' sample and a questionnaire was designed and applied. In addition, a vast number of reliable sources, including market benchmarks and literature were accessed to strengthen this analysis.

Employer Branding has been gaining increased importance over the last few years. The LinkHumans report (2019) showed that 72% of recruiting leaders around the world agree that Employer Brand has a significant impact on hiring. Furthermore, 78% of people will look into a company's reputation whereas 88% of millennials believe that being part of the right company culture is very important. At the current times, when it comes to millennials, it is crucial for building brands through social media platforms as 79% of job seekers are likely to use social media in the hunt for their next job and 84% of employees consider leaving their current jobs if another company has a better reputation. According to TalentNow 2018 infographics, at least

73% of all candidates are passive job seekers and the best of them only stay available 10 days before getting hired.

As software engineering students and professionals become more and more passive, the way in which they are approached by companies may very well be an important factor. According to Deloitte's Human Capital Management report (2017), despite years of talking about the value of social networks for recruiting, only 28 percent of companies believe their use of social sourcing is excellent. This being, media channels were also part of this study.

Chapter I. LITERATURE REVIEW

Following the conductive sequence of the intended study, the relevant findings regarding Employer Branding (EB) will be approached, and among other sections, the effectiveness in which companies can approach the targeted millennials.

1.1. Employer Branding

In order to pinpoint what moves IT millennial applicants to really want a job and apply, employer branding studies must be addressed as a factor of brand attractiveness. Thus, this literature review will start by a general overview of what is Employer Branding, why is it relevant and how it is implemented.

1.1.1. Defining employer branding and employer brand

Employer branding research was first introduced and conceptualized by the grand metropolitan senior fellow Tim Ambler and chairman of the management communication consultants Simon Barrow (1996) under the term of "Employer brand" (Ambler & Barrow, 1996). They combine human resources (HR) and brand marketing into a single conceptual framework, concluding that the application of brand management techniques to the employment situation can bring diverse mutual benefits and lead to comparable performance measures. In this context, people are considered the company's most important resource as well as the brand's greatest asset. Thus, generating strong corporate equity will improve the return on HR, which in turn improves the provided service and, consequently, the return on brand equity through external costumers. In other words, several links are made binding these two fields into a brand-new concept. For instance, the link between the best people leading to the best shops, which in turn leads to the best word of mouth, which leads to the best candidates. Lastly, the best candidates will ultimately lead to the best people.

It is important to distinguish two terms in branding research: employer brand (i.e. the identifier; Theurer, Tumasjan, Welpe, & Lievens, 2018), and employer branding (the means to build and modify brand equity; e.g. Berthon et al. 2005; Davies 2008; Moroko & Uncles 2008 cited by Theurer et al., 2018). By examining synergies between HRM and marketing, Ambler & Barrow (1996:187) define Employer Brand as the "…*package of functional, economic and psychological benefits provided by employment and identified with the employing company*." The authors further indicate that employer brand's main role is to provide a coherent framework for management to simplify and focus priorities, increase productivity and to improve recruitment, retention, and commitment. Its offered benefits to employees are also correspondent to those a conventional (product) brand offers consumers. Since then, the term "branding" has gradually developed into HR (e.g. Conference Board, 2001; Backhaus & Tikoo, 2004; Edwards, 2009), describing as employer branding as the "*…process of building an identifiable and unique employer identity or, more specifically, the promotion of a unique and attractive image as an employer"* (Blackhaus 2004; Blackhaus & Tikoo 2004 quoted by Theurer et al., 2018:156). So how can Employer Branding be ultimately defined?

The following table illustrates how the term was conceptualized across the years (*Table 1*):

Author/Report	**Concept Definition**
The Conference Board (2001:10)	Identity of the firm as an employer, including the firm's value system, policies, and behaviours toward the objectives of attracting, motivating and retaining the firm's current and potential employees.
Lloyd (2002) quoted by Edwards (2009:7)	Sum of a company's efforts to communicate to existing and prospective staff that it is a desirable place to work.
Sullivan (2004) cited by Backhaus & Tikoo (2004:501)	A targeted long-term strategy to manage the awareness and perceptions of employees, potential employees, and related stakeholders with regards to a firm. Additionally, employer branding shows the organization as a good place to work
Backhaus & Tikoo (2004:501)	Representation of a firm's efforts to promote, both within and outside the firm, a clear view of what makes it different and desirable as an employer.
Edwards, (2009:6)	An activity where principles of marketing, in particular, the "science of branding", are applied to HR activities in relation to current and potential employees (employees are considered branding targets).
CIPD (2010) quoted by Wahba & Elmanadily (2015:687)	Set of attributes and qualities, often intangible, that make an organization distinctive, promises a particular kind of employment experience, and appeals to those people who will thrive and perform best in its culture.
Martin and colleagues (2011) quoted by Backhaus (2016:194)	Generalized recognition for being known among key stakeholders for providing a high-quality employment experience, and distinctive organizational identity which employees value, engage with and feel confident and happy to promote to others.

Table 1 – Definitions for Employer Branding (my authorship);

As seen in *Table 1*, there is a lack of consensus among EB's concept, mainly regarding to weather it represents a more passive construct: a set of attributes and qualities, recognition for being known, identity of the firm (CIPD, 2010 quoted by Wahba & Elmanadily, 2015; Martin & colleagues, 2011 quoted by Backhaus, 2016; The Conference board, 2001) or a more active one: activity, targeted long-term strategy, sum of a company's efforts (Sullivan, 2004; Edwards, 2009). In other words, weather the concept is the representation of a firm's efforts or the actual application of the firm's efforts (Blackhaus & Tikoo, 2004). There seems to be an incoherence between the distinctive constructs of Employer Brand and Employer Branding (Theurer, Tumasjan, Welpe, & Lievens 2018). In addition, there is also no consensus on the target group for employer branding, although most conceptualizations focus potential and current employees (Theurer et al., 2018).

After carefully analysing the different Employer Branding definitions throughout literature (*Table 1* with the most relevant concepts) and for the purpose of this paper, it can be ultimately defined as: a long-term combination of a firm's efforts (both within and outside the firm) to create a distinctive and desirable identity as an employer, among key stakeholders. This identity as an employer shall be considered the firm's Employer Brand.

1.1.2. Employer branding's theoretical background

According to Blackhaus and Tikoo (2004), since human capital brings value to the firm, skilfully investing in it can enhance a firm's performance. By predicating this assumption, the practice of employer branding constitutes one of the most important resources modern organizations possess. When seen through a resource-based view (RBV) scope, it can contribute to sustainable competitive advantage, considering each organisation has its very unique employer brand and the possession of rare, valuable, non-substitutable, and difficult to imitate resources allow firms to bypass competitors (Barney, 1991 quoted by Blackhaus & Tikoo, 2004). As new industries grow, and new economies emerge, the relevance of finding competent employees is increasingly important (Piric, Masmontet, & Martinovic, 2018). Furthermore, since the arrival of EB many companies apply branding practices in order to keep their most skilled employees a source of competitive advantage (Moroko, 2008; Golts & Wilson, 2001; Elving, 2013 cited by Piric et al., 2018), which have proven to be an important resource to do so (Priem & Butler, 2001 cited by Blackhaus & Tikoo, 2004). Lastly, not only employer branding is one of many reputational factors leading to competitive advantage, it can be summarized into the presentation of a positive and attractive image to current and potential employees (Backhaus, 2016). Therefore, it should be considered as more than an employee

seeking strategy. It is also a strategy to ensure a trustworthy and appealing reputation of the organisation (Nappa, 2013 quoted by Hadi & Ahmed, 2018).

Following this line of thought, enterprises are investing a lot in achieving the "best employer" status (Berthon et al., 2005 cited by Hadi & Ahmed, 2018) in order to differentiate and gain a competitive advantage over rivals (Lievens & Highhouse, 2003 cited by Hadi & Ahmed, 2018). According to Backhaus (2016), a 2016 LinkedIn business survey also supports the fact that a wide array of firms recognizes the power of employer branding for competitive advantage. Just as RBV research represents a foundation for EB, so does the psychological contract and its effects on the employee organizational relationship (Backhaus & Tikoo, 2004; Edwards, 2009). The psychological contract can be defined as "…*an individual's beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party*" (Rousseau, 1989 cited by Edwards, 2009:13). Thus, the employment experience and nature of the employment relationship go beyond explicit contractual terms (Edwards, 2009). What the employee gets at work (also in regards to his expectations) will help form the content of the employment experiences of an organization's EB (Miles & Mangold, 2004 cited by Edwards, 2009), just as advertising the employment offering by employers is likely to drive expectations of what the organisation is obliged to provide (Backhaus & Tikoo, 2004 cited by Edwards 2009). Fulfilled or not, the created expectations will make up the lived employment experience of current employees (Miles & Mangold, 2004 cited by Edwards, 2009).

The employment experience is an important factor of EB, considering that its right management and clarification will help create value and influence (Edwards, 2009). This is where the marketing literature comes in (Cascio & Graham, 2016) because a unique employment experience is considered the "branded product" when the concept of a brand is applied to the HR setting (Edwards, 2009). The "brand" consists of "…*different identifiers, such as name, sign, symbol or a mix of these. These components serve as differentiators that distinguish a firm's goods and services from the competition*" (Keller, 1993; Kotler & Keller, 2016 cited by Theurer et al., 2018:157). Its purpose is to gain relevance through a strong positioning, although the concept evolved over time to the point where it becomes the company (Berthon, 2011, Aaker, 2011 cited by Sousa, Arriscado, Ferreira, & Quesado, 2016), due to the significant payoffs for well-known brands (Kotler & Keller, 2009 quoted by Cascio & Graham, 2016). From a customer's perspective, Keller (2012 cited by Cascio & Graham, 2016) also argues that brands simplify choice, increase trust, reduce risk and promise a particular level of value.

In contrast to EB, corporate or product branding is primarily directed at external audiences with a primary interest in a firm's customers (Backhaus & Tikoo 2004 cited by Theurer et al., 2018).

By considering a unique employment experience the branded product, the same brand effects and significant payoffs apply to employee and potential employee's perspectives (Cascio & Graham, 2016), which reinforces the importance for firms to identify unique employment experiences through the consideration of tangible and intangible features that a particular organisation can offer its employees (Edwards, 2009). In fact, Backhaus (2016:193) concludes that "…*just as the corporate brand makes a promise to its customers about its product or service, the employer brand makes a promise to its prospective and current employees about the experience they will have in the organization."* Undoubtedly, all employers have a brand, but not all employers engage effectively in branding efforts to clearly differentiate themselves as employers (Michington & Thorne, 2007 cited by Sousa et al., 2016).

This sequence leads to the last and complementary perspective for understanding EB (Backhaus & Tikoo, 2004). The concept of brand equity, or as mentioned previously, the significant payoffs of well-known brands (Kotler & Keller, 2009 cited by Cascio & Graham, 2016). Brand equity can be essentially conceptualized as "…*the added value associated with a product or a service"* (Aaker, 1991, cited by Theurer et al., 2018:157). This value can be added or subtracted according to a set of assets and liabilities associated with brand identifiers. The same author separates them into five categories: brand loyalty, name awareness, perceived quality, brand associations, and other proprietary assets like patents (Aaker, 1991 cited by Theurer et al., 2018). Just like RBV and the psychological contract, brand equity can be applied to the employment context. When it comes to EB, the effect of brand knowledge is applied on current and potential employees through brand equity, which means potential applicants are propelled to apply, and be the desired outcome of EB activities in a specific way. Thus, current and potential employees will react differently to similar recruitment and retention efforts from different firms, because of the underlying employer brand equity associated with these firms (Backhaus & Tikoo, 2004). It is, therefore, possible to affirm that brand equity increases potential applicants' desire to apply for a certain company, as well as current employees' commitment to stay and support a certain organization (Backhaus & Tikoo, 2004 cited by Cascio & Graham, 2016). In conclusion, "…*the extent to which the brand contributes to attracting and retaining employees constitutes the equity associated with the employer brand*" (Wilden, Gudergan, & Lings, 2010 quoted by Cascio & Graham, 2016:184).

Similar to the presented Aaker model for brand equity (1991 cited by Theurer et al., 2018), in order to create brand value, customers and/or potential employees (Love & Singh, 2011 cited by Cascio & Graham, 2016) need to have: a high level of awareness of the brand; strong, positive, and unique brand associations; positive brand attitudes; intense brand attachment and

loyalty; and a high degree of brand activity (Keller & Lehmann, 2003 cited by Cascio & Graham, 2016). Therefore, working on those brand value characteristics (for instance, increasing levels of importance for the recognition of the workforce) can constitute a source of value for the firm (Hadi & Ahmed, 2018). As seen, brand loyalty contributes to a company's brand value and describes how a consumer feels about a specific product and service (Keller & Lehmann, 2003 cited by Cascio & Graham, 2016).

The concepts of brand value and brand equity are tightly related to organizational reputation, and more importantly, the reputation of the firm as an employer. It can be defined as "…*job-seekers beliefs about public's effective evaluation of the organization*" (Cable & Turban, 2001 quoted by Theurer et al., 2018:162). Perceptions of organizational reputation act as a form of EB which will also add value to a job beyond the job itself, since a positive perception of the organizational reputation leads to positive evaluations of job attributes and a sense of pride from working in a particular firm (Cable & Turban, 2003 quoted by Edwards, 2009). The firm's reputation as an employer affects both the employer image, as well as an organizational attraction (Cable & Turban, 2001 cited by Theurer et al., 2018). In short, organisational attractiveness describes employees' evaluative reactions to organizations (Cable & Turban, 2001 quoted by Theurer et al., 2018:158).

While brand image can be described as a "…*set of associations linked to the brand that consumers hold in memory*"(Keller, 1993 quoted by Cascio & Graham, 2016:183), the employer image is in many ways, the projected organisational image (Whetten & colleagues, 1992 cited by Backhaus, 2016) that is constructed by insiders and conveyed to outsiders in an effort to create a positive reputation (Gioia, Schultz, Corley, 2000 quoted by Backhaus 2016). Furthermore, if done correctly, the employer brand's image can communicate the organization's employment personality, making job seekers understand the organization's values and find similarities between themselves and the organization (Backhaus, 2016). More specifically, employer brand image motivates current and potential employees to link themselves through a developed affinity between aspects of their own identity and the organization (Edwards, 2009). In turn, brand associations are thoughts and ideas that a brand name suggests in customers' minds (Aaker, 1991 cited by Cascio & Graham, 2016).

Since employer image directly influences job seekers' pursuit, application intentions, (Gatewood et al., 1993; Lemmink et al. 2003 cited by Theurer et al., 2018) and applicant's attraction (Highhouse et al., 1999 cited by Theurer et al., 2018), it is possible to conclude that "*EB directs the firm's operational practices through building a strong corporate image of the*

firm in the market and transforming it into an attractive workplace" (Ahmad & Daud, 2016 quoted by Hadi & Ahmed, 2018:2).

1.1.3. Employer branding's process

In regards to its implementation, HR practitioner literature describes EB process in three main steps (e.g. Lievens, 2007 cited by Gregorka, 2017; Naadi & Hamed, 2018; Vatsa, 2016; Sengupta, Bamel, & Singh, 2015). According to Backhaus and Tikoo (2004): First, a firm develops the "value proposition" that is to be embodied in the brand. It can be done by using information about the organization's culture, management style, qualities of the current employee, and many other criteria. Secondly, the firm decides how to communicate, marketing the value proposition to the outside (its targeted potential employees, recruiting agencies, …) where external marketing takes place. Lastly, internal marketing represents the third aspect of EB. On this stage, the goal is to communicate the value proposition to the inside and develop a workforce that is committed to the set of values and organizational goals established by the firm. Afterward, most studies followed this line of thought to further investigate EB's applications and strategies (e.g. Moroko & Uncles, 2008; Edwards & Edwards, 2013; Backhaus, 2016).

Value propositions are the central message of the employer brand (Eisenberg et al. 2001 cited by Sengupta et al., 2015). In the EB's context, the value proposition is often defined as the employee value proposition or EVP (e.g. Mosley, 2014; Vatsa, 2016), as it is mostly targeted at current and potential employees, and represents the organisation's unique employment offerings (Sengupta et al., 2015). The EVP aims to provide a consistent platform for brand communication and people management activities through brand integrity. In addition, it serves as a compass to guide companies from strategic direction to the way they manage value creation (Mosley, 2014). As Mosley (2014:142) says, "*…the art in writing an effective EVP is to balance clear definition of the brand elements while also conveying the right feeling, spirit and culture of the organisation"*. Nevertheless, the customers or other beneficiaries will be the ones deciding the acceptability of a company's value proposition (Holttinen, 2014 quoted by Sengupta et al., 2015). Therefore, one must find a distinctive manner to position its EVP (Mosley, 2014) in a way that not only current and potential employees consider it attractive, but the psychological contract is fulfilled (Edwards, 2009; Moroko & Uncles, 2008).

Most leading employers redevelop or refresh their EVPs every 4-5 years (Mosley, 2014) and include "purpose" as their EVP's key part (Benz, 2014). Just like consumers are highly conscious about values offered from product/services, employees also have this consciousness

in regards to the offered values by employers (Marriot, 2001 cited by Sengupta et al., 2015). These values can be seen as a source of motivation for individual action (Gursoy et al. 2013, cited by Sengupta et al., 2015), thus leading to talent retention and attraction (Sengupta et al., 2015). In conclusion, person-job fit, person-organisation fit, and cultural differences can determine recruitment success (Valentine, 2000 cited by Sengupta et al., 2015).

When it comes to external marketing (or external branding), Backhaus and Tikoo (2004.503) argue that "…*it establishes the firm as an employer of choice*", enabling it to attract the best possible workers. According to Berthon, Ewing, and Hah (2005 cited by Vatsa, 2016), there are primarily five factors that make the employer attractive to potential employees: economic value (e.g. salary), interest value (e.g. interesting work), social value (e.g. enjoyable working environment), development value (e.g. advancement opportunities), and application value (e.g. opportunities to implement own knowledge).

Regarding internal branding (or internal marketing), it can be defined as "…*a process of promoting the company brand values amongst employees*" (Canadian Marketing Association, 2006 cited by Vatsa, 2016:10). It helps create a workforce that is hard for other firms to imitate, by systematically exposing workers to the EB's value proposition (EVP; Backhaus & Tikoo, 2004). In addition, a culture of trust amongst employers and employees is more easily promoted (through the EVP) by enabling the organization to fulfill the promise made to the recruits at the time of the interview (Frook, 2001 cited by Sengupta et al., 2015). This promise can be kept through the establishment of strong moral corporate values which make their employees proud to be a member (Sengupta et al., 2015), or even just fulfilling the psychological contracts (Moroko & Uncles, 2008).

1.1.4. Employer branding strategy foundation

Employer brand management can be defined as "*a strategic activity of creating, implementing and communicating a distinct employment experience that motivates and retains current employees, and places employers in a strong position to attract high-quality applicants on relevant labour markets"* (Mölk & Auer, 2018:1). A great deal of research is being conducted in growing economies (like the IT market) to determine the EB message that will reap the best and most qualified employees (Backhaus, 2016). Although, not all employees are looking for the same offering (Cascio & Graham, 2016), and the attributes employees consider most attractive can be different in each organization (Maxwell & Knox, 2009 cited by Cascio & Graham, 2016). Therefore, organisations need to find a distinctive message that best fits their objectives and strategy (Cascio & Graham, 2016). Thus, if people identify with the brand and

integrate it into their own self-concept, becoming aligned with it, they will be more willing to stay with the organization and potentially work harder and smarter (Dutton & Dukerich, 1991; Reiche, 2008 cited by Russell & Brannan, 2016). Additional research supports the importance of portraying accurate (Cable, Aiman-Smith, Mulvey, & Edwards, 2000 cited by Cascio & Graham, 2016) and authentic (Martin, 2008 cited by Cascio & Graham, 2016) representations of the firm and the employee experience (Cascio & Graham, 2016). If the brand is believed to be a promise (Fekdwick, 1991; Ind, 2004; Kapferer, 2004 cited by Cascio & Graham, 2016), then the EB is also a promise to employees that should be kept (Cascio & Graham, 2016; Edwards, 2009) and consistently delivered in order to achieve success (Moroko & Uncles, 2008). It is possible to affirm that EB values impact organisational citizenship behaviours, and organizational citizenship behaviours could potentially be the bridge between EB and employee productivity outcomes (Backhaus, 2016). Furthermore, employees are more satisfied when they trust their employer (Davies, 2008 cited by Cascio & Graham, 2016), and the EB is strengthened when the employer brand promise and corporate vision are aligned with the personal benefits offered to employees (these can range from working conditions to child care; Moroko & Uncles, 2008).

EB goes way beyond the attraction of talent, though the fact that it benefits the recruitment practice represents the core argument that has been advising managers to invest in an organisation's EB (Daniel & José, 2010). Nevertheless, this will be a key part considering the current study aims to find factors of business attractiveness towards IT students, which means the external employer branding part should be at focus (Sousa et al., 2016).

In order to align people's behaviour with the brand image, employee recruitment, selection, trainning and on-going monitoring practices are key and represent a new way of controling the employment relationship (Russell & Brannan, 2016). According to Lievens and Slaughter (2016; cited by Cascio & Graham, 2016), positive images result in applicant pools that are larger and of higher quality, lead to quicker decision-making and a stronger emotional bond, and are associated with finantial performance. In turn, employer brand loyalty contributes to increasing employee productivity (Backhaus & Tikoo, 2004). The greater a company's reputation, the more attractive it tends to be to potential recruits, in a way that they are more likely to apply for a job if the company has an existing positive reputation (Edwards, 2009). In conclusion, Maxwell and Knox (2009; cited by Cascio & Graham, 2016:183) share the same view, arguing that "…*employees consider their organisation's employer brand to be more attractive when the organisation as a whole is perceived to be successful, when they value the*

attributes of the organisation's product or service, and when they view its external image as being attractive".

By considering what was mentioned previously, firms will have an easier time developing strong brands. This will allow them to pay their executives substantially less since they value being associated with strong brands, as well as the possibility for greater premiums. In addition, brands allow for charging higher prices, and candidates might accept lower pay levels from them. Lastly, the EB will have spillover effects that can affect a firm's reputation and consumers' purchasing patterns. Therefore, EB value can be linked to shareholder value (Theurer et al., 2018).

1.1.5. Employer branding practices

An effective EB process is active both externally and internally (Barck, 2015 cited by Cascio & Graham, 2016). This process shall be reflected internally, through HR and line managers' validation of the EVP, and externally by expressing said EVP through the marketing field (Cascio & Graham, 2016). On *Appendix 1* it is possible to see a summary of important HR practices that enhance EB (Cascio & Graham, 2016).

In addition to those practices, including explanation of brand attributes and roles (as well as brand workshops) in the new hire orientation, having special events commemorating success milestones, performance reviews encompassing brand behaviours, and peer recognition programs can prove to be powerful tools at an internal employer branding level (Canadian Marketing Association, 2006 cited by Vatsa, 2016). Best places to work certifications can also impact organisation-level outcomes internally (Dineen & Allen, 2016 cited by Theurer et al., 2018), in a way to promote the desirability of working for the organisation and its position as a trusted/respected employer (Russell & Brannan, 2016).

According to Russel & Brannan (2016), the selection process can also benefit from brand-specific HR initiatives. Candidates can be selected according to their ability to demonstrate behaviours and attitudes that match the established brand values. An example of this practice could be asking prospective employees to provide examples of situations where they showed the application of the company's values in practice (For example, asking for a situation where the candidate showed teamwork spirit). Therefore, it is important to assess the candidate in terms of weather he would be a good "brand ambassador" (Hurrel & Scholarios, 2011 cited by Russel & Brannan, 2016), shifting the emphasis to the ability of prospective employees to demonstrate and display their value identification with the company to others. In conclusion, nowadays "…*companies aim deliberately to recruit and mould individuals who already have*

the correct attitude on entry ensuring that individuals working in the organization will be both committed and motivated by the brand, and willing to reproduce branded dispositions and performances" (Callaghan & Thompson, 2002; Warhust & Nickson, 2007 cited by Russel & Brannan, 2016:118). Employee-alumni activities can also add value to attract potential employees (Sengupta et al., 2015).

In 2015, global companies have created specialist roles for 'employer brand managers', usually within the HR department. Those events were followed by a steady stream of new books, conferences, and articles covering the topic, making the concept well known in 2016 on the HR field, particularly in the context of the organisation's appeal to potential candidates (Barrow & Ambler, 2016). Some companies even sunder the role into dedicated employee experience teams and candidate experience teams (Reis & Mendes, 2019), considering that attracting and retaining qualified staff are key tasks of Human Resources Management (HRM) in post-industrialised working environments (Orlitzky, 2007 cited by Edlinger, 2015). Thus, the creation of a unique EVP to potential and existing employees has become a vital management task (Bratton & Gold, 2012 cited by Edlinger, 2015).

In conclusion, employer brand managers are responsible for making the company visible and attractive to these employees (Edwards, 2009), as well as creating, implementing, and manage the company's employer brand (Edlinger, 2015). These tasks may include the use of assessment tools to see how people perceive the company (surveys, workshops, focus groups…; Edlinger, 2015), and EB strategy re-accessing every year (Reis & Mendes, 2019). Furthermore, they should be eager to intervene and align the deviations (from interpretations and practices of their ideal message) with the desired employer brand contents and meanings through communication, explanations and more promotional activities.

1.1.6. Employer branding's benefits and barriers

In 2001, many firms have developed formal employer branding or are interested in developing such a program. They found that effective employer branding leads to competitive advantage, helps employees internalize company values and assists in employee retention (The Conference Board, 2001; Backhaus & Tikoo, 2004; Backhaus, 2016).

In 2016, Ambler and Barrow named some of the benefits of employer branding: increased equity (intangibles represent around 80% of a modern company's value, sometimes called goodwill, and include costumer and staff brand equity), lower recruitment costs (the stronger the brand, the easier it will be to hire people), greater engagement of employees, improved delegation, greater agility, fewer middle managers (the staff knows what needs to be done), less

waste, improved inter-departmental cooperation, and better performance measurement. The same authors who talked with several senior executives confirmed that the successful implementation of EB really works. Nevertheless, most companies never try to implement EB and many that do fail, mainly because of: the naturally slow pace of both HR and marketing's evolution; the difficulty of measuring brand equity; the divided territory and skills of the two relevant functions: HR and marketing (Barrow & Ambler, 2016). The employer brand manager role can bind both fields by developing tasks on the interface of internal and external communication, HRM, and marketing. On the other hand, this is a relatively new position with the disadvantage of being an outsider to the core operational business (Edlinger, 2015).

1.2. Approaching the Current Generation

Approaching college students in 2019 calls for specific generation literature. Particularly, due to the specificities of the generation that is now entering and about to enter the labour market (Gen Y). The current generations are called Gen Y and Z. Although, there is no consensus in literature regarding the actual beginning and end of each one, there seems to be an agreement that Gen Y is fundamentally unique and identifiable when compared with the others (Hershatter & Epstein, 2010) and that Gen Z that comes after represent the children of social media (Woźniak, 2016). As an example, some articles show Gen Y representing people born in 1980 to 1994 (Stachowka, 2012; Bran & Klos, 2014; cited by Woźniak, 2016) and Gen Z people born after 1990 (Woźniak, 2016). Kwoh (2012 cited by Cascio & Graham, 2016) says Gen Y was born from 1981 to 1995, whereas Roepe (2017) from 1981 to 1997. In Deloitte's millennial survey (2018), Gen Y ranged from 1983 to 1994, and Gen Z from 1995 to 1999. Lastly, Veloso (2018) considers Gen Y to go from 1981 to 2000.

Generation Y is often called with the term "Millenials" (Woźniak, 2016). According to Hershatter and Epstein (2010), the first millennial college graduates entered the workforce in the summer of 2004, and this trend shall continue in large numbers until 2022. It is estimated that they will be more than 40% of the US workforce by 2020, and half of the global workforce well before that (Kwoh, 2012 cited by Cascio & Graham, 2016). By 2025, they should comprise 75% of all US employees, an increase from 1 in 3 workers today (Roepe, 2017). Thus, Gen Y is the most relevant generation to analyse for this study.

Fortunately, there is no shortage of data regarding their values and beliefs, as well as their specificities, due to the hundreds of surveys conducted (Hershatter & Epstein, 2010).

1.2.1. What do millennials have in special?

The millennial generation is probably the most studied and talked one (Veloso, 2018). To some they might be the next "greatest generation" armed with tools to drive companies towards a better future. To others, they are the "generation whine" made of young people incapable of handling mundane tasks without guidance (Hershatter & Epstein, 2010). When it comes to job attraction, Cascio & Graham (2016) cited studies confirming that the number one characteristic for this generation is opportunities for continuous learning and skill development (Hirsch, 2016a; Meister & Willyerd, 2010 cited by Cascio & Graham, 2016), and mentioned that positive training experiences directly enhance an employer brand. In fact, the Silver Swan recruitment report (2018) shows that on the personal development level, 87% of millennials say development is important in a job, 35% are attracted to employers who offer excellent training and development programmes, and 52% say career progression is their top priority (*Appendix 2*). Millennials want to know if the organization is invested in their growth, and what exactly they must do in order to get promoted. Providing a career roadmap, and show them a path forward within the company is one of the best ways to recruit and retain younger workers, especially in the early stages of their careers (Roepe, 2017; Silver Swan Recruitment, 2018). In addition, they seek ample feedback to make sure they are moving along the progressive path set for them (Hershatter & Epstein, 2010). As digital natives, they are accustomed to having immediate responses, and if they don't get the feedback they need, they are likely to start looking for other jobs (Hirsch, 2016 cited by Cascio & Graham, 2016). Fewer than 1 in 10 think weekly feedback is enough, with 60% of millennials asking between once a day and multiple times a day (Shaw, in Hirsch, 2016 cited by Cascio & Graham, 2016). This means that performance appraisal can't happen just once a year. It should follow the principles of meritocracy since millennials expect an equitable system assuring that industriousness and accomplishment are rewarded with acknowledgment, encouragement, and access (Hershatter & Epstein, 2010).

It's concludable that the way they are treated is increasingly important. Some millennials describe their ideal manager as a best friend. They want to feel a connection with the people they work with and are less likely to consider different opportunities if they do so (Roepe, 2017). If they feel valued and appreciated, they will respond with loyalty. For this loyalty, the psychological contract includes job security, a good work environment, and a positive atmosphere from the employer side (Hershatter & Epstein, 2010). Even though the salary is still important, culture and mission of the organisation should be more highlighted, as they are

considered a top factor when recruiting millennials (Roepe, 2017). Young workers want to know if their values are aligned with the company's culture, and if they will be able to make an impact on their community and environment to drive change (Hershatter & Epstein, 2010; Roepe, 2017; Deloitte, 2018).

Despite the negative stereotypes of them relying too much on technology, many recruiters appreciate their fresh perspectives and tech-savvy attitudes (Roepe, 2017). They grew up with most of the technology the previous generations had to learn in the workplace, and this is also why recruiting millennials requires the use of social media and online tools. They can access information and resources more easily and creatively through their technology familiarity (Hershatter & Epstein, 2010) and already expect it to be part of their workday (Silver Swan Recruitment, 2018).

Companies must also update their work environment and communication style. For millennials, a good work environment goes way beyond the traditional corporate office, with 90% of them expecting their workplace to be social and fun. 88% consider positive culture an important aspect, 95% say work/life balance is important, and 69% feel office attendance is unnecessary on a regular basis. Those elements require a work environment that is relaxed and has special elements. Perhaps with flexible working hours, open spaces and distance from rigid hierarchies (Silver Swan Recruitment, 2018). Regarding the way companies communicate, if they don't respond in the right way, they will lose millennials in the process. Messages should not be too standardized nor sound too formal. Recruiters should thank applicants for applying and offer a timeline for the upcoming feedback. Specific messages should also be created for each candidate in order to show familiarity with their background since millennials have high regards for authenticity (Roepe, 2017).

Lastly, there is a tendency for millennials to switch between jobs until they find what they are looking for. A LinkedIn survey (cited by Roepe, 2017) with more than 13000 members found that 93% are interested in hearing about new job opportunities and 66% are open to talking to a recruiter. 30% see themselves working for less than a year at their current company. A 2016 Deloitte survey is quoted in the same article, finding that 44% of Millennials would like to leave their present employer in the next two years. On average, Millennials will have 15 to 20 jobs, becoming more ambitious and pro-active in the job hunt, with a clearer idea of career progression and workplace goals they wish to achieve (Silver Swan Recruitment, 2018). Although this can be frightening for companies, they have a huge opportunity to get top talent, because millennials are always looking for the next shiny opportunity (Roepe, 2017; Silver Swan Recruitment, 2018).

1.3. Communication and Media Channels

As employer branding affects potential applicant's attraction to a company, the way the company interacts with these applicants may very well constitute a key factor in persuading IT millennials to apply for a job. Mainly when it comes to the media choice, communication strategies and tools used, the content of the sent message, etc. The way employers' intentions are communicated is increasingly relevant, considering that most of the studied applicants have become passive job seekers as seen before.

1.3.1. Media channels and employer branding

Vatsa (2016) argues that it is imperative for organizations to adequately articulate their EVP for the benefits of potential and existing employees through different kinds of media approaches. These approaches include articulating the brand message using a variety of different media options, like a dedicated career page on the official website of the company, widely circulated newsletters, active participation in seminars and conferences organized by the industry association, and more significantly, the social media footprint. Additionally, consistent word of mouth endorsements by existing employees can also help to boost people's trust on said portrayed message (Reis & Mendes, 2019). In short, job seeker's employer knowledge is highly influenced by multiple different information sources (Cable & Turban, 2001 cited by Theurer et al., 2018).

Campus-based, university recruitment fairs play a key role in recruiting potential employees as they provide an opportunity to showcase the company's culture (Russell & Brannan, 2016). These opportunities are indeed privileged by young people (Piric et al., 2018), and more importantly, have high relevance considering the target of the current study (approaching IT university students). According to Mölk and Auer (2018), some campus-based activities may include: contacting students of selected schools/universities, creating contact points (presentations, topics for final thesis, walk-ins, fair presence) and searching for consultants for external presentations as a means of local employer branding. Mosley (2014) further states that campus presentations, career fairs and employer-sponsored lectures and events are crucial to ensure effective brand building. Career fairs can be expensive but investing in them may be very profitable as they increase communication effectiveness and are perceived as rich by job seekers (Cable & Yu, 2006). Mosley (2014) highlights key trends in employer branding marketing to students: Reaching out to potential candidates much earlier in their academic

studies, as well as more often in order to build deeper and more continual relationships (not just in recruitment season) with top-ranked universities; employing more remote recruiting methods to extend the talent net to a wider range of universities (this students tend to be as successful as the elite and have more manageable egos and expectations regarding employment), like online mini-projects and competitions, and video interviewing; growing use of LinkedIn to target high potential graduate trainees.

By combining publicity, sponsorships, word-of-mouth endorsements and advertising, employer image elements are deeply influenced in people's minds, shaping their decisions from the combination of different media (Collins & Stevens, 2002 cited by Theurer et al., 2018). For well-known companies that have a high positive public image, high involvement practices (e.g. detailed recruitment ads, employee endorsements) are best suited. On the other hand, low involvement practices (e.g. general recruitment ads, sponsorships) can have a positive effect on replacing corporate advertisement/firm reputation if those are not already extensive. Firms with an existing unfavourable employer reputation should focus on high-information (recruitment) messages to change adverse applicant perceptions (Collins & Han, 2004 cited by Theurer et al., 2018). This is also confirmed by Kanar et al., 2015 (cited by Theurer et al. 2018).

Media richness and credibility are also important factors. Recruitment websites (high media richness) had a stronger and significant (indirect) impact on applicant attraction compared with printed recruitment advertisements (low media richness). Additionally, when compared with low media richness channels (e.g. print), media of high richness (e.g. internet) allow for timely feedback and greater variety (e.g. language), offering greater effectiveness in transferring important information. Most importantly, richer and more credible media have a greater impact on the applicant's image beliefs (Baum & Kabst, 2014 cited by Theurer et al., 2018). Different media used can explain differences in applicant's perceptions of organizational attraction, including perceptions of media richness and source credibility (Frasca & Edwards, 2017). Therefore, correspondence between applicant's image beliefs and firm's projected images also increased with both media richness and credibility (Cable & Yu, 2006 cited by Theurer et al., 2018). According to Theurer et al., 2018 (citing Cable & Yu, 2006), oral and more synchronous media (like face to face interactions) were the ones rated with highest richness and credibility above company websites and electronic ads.

Nevertheless, the amount of information and level of website vividness can also strongly affect applicant attraction (Theurer et al., 2018), while site visits are likely to modify candidates' employer image further (Slaughter et al. 2014 cited by Theurer, 2018). Lastly, word of mouth has a significant effect among different studies when it comes to the credibility of received

employment information and best employer rankings can lead to the higher likeliness of application (Theurer et al., 2018). Furthermore, certifications can improve applicant pool quality for smaller companies and when job openings are scarce (Dineen & Allen, 2016 cited by Theurer et al., 2018).

Concluding, regardless of the used media channel, Backhaus (2016:199) argues that "…*the emphasis must switch from seeking the best brand message to seeking a way to deliver the brand message that most accurately conveys what it is like to work for the company*". The author also suggests that social media will become the main platform used for external employer branding with an emphasis on brand messaging control on the different social media channels. Thus, brands will have to control the way potential recruits and employees perceive and interact with the brand through social media, on this brand-new digital world. This view is backed up, among others, by Mosley (2014). On *Appendix 3* there is a summary of relevant media channels and their effectiveness along with relevant conclusions developed by this author. As Cascio (2014 cited by Russell & Brannan, 2016) states, an organization's brand walks out of the door every night as employees go home and post news on Facebook or LinkedIn about what happened at work. Organizations need to consider the wider impact of web-based recruitment strategies when designing branding campaigns and make sure they reflect the attractiveness of the organization in the right way (Russel & Brannan, 2016). They should link and integrate different media, devote efforts into promoting their rich social and video media, and infuse their web-based media with greater personalized focus, cues, and amount of information (Frasca & Edwards, 2017). Each digital platform is experienced in a unique way. Instagram and Facebook are often used to fill an empty moment, unlike YouTube or Pinterest. Advertising on Instagram is experienced as more entertaining when compared with the other platforms and advertising on YouTube or Facebook might come off as intrusive and provoke negative emotions on users (Voorveld, van Noort, Muntinga, & Bronner, 2018).

1.3.2. Recruiting through social media

Nowadays, the massive daily growth of social media along with its exponential use in the recruitment process has added numerous other sourcing possibilities and activities (Langlois, 2014; Laick and Dean, 2011 cited by Piric et al., 2018; Koch, Gerber, & De Klerk, 2018). It is one of many solutions employees apply to shop for new employers (Weinstein, 2017). Thanks to millennials, social media introduced new customs both on a personal and professional level (Piric et al., 2018). Social media can be defined as "*the production, consumption and exchange of information through online social interactions and platforms*" (Marketo, 2010 cited by Dutta,

2014:96), or in other words, as *"…the use of web-based conversational media among communities of people who meet online…"* (Safko & Brake, 2009 cited by Koch et al., 2018:4). Besides being well-positioned to alter traditional practices, organisations that are able to use these platforms effectively have much to gain (Langlois, 2014). In fact, companies that don't embrace social media as a recruitment tool might risk losing quality candidates that already expect the company to be online (Hunt, 2010). In addition, companies that use social media have a better reputation (Sivertzen, 2013 cited by Piric et al., 2018), are more attractive (Piric et al., 2018) and perceived as evolving, innovative, and open to technological change (Dutta, 2014), thus increasing applicant's intentions to apply (and the relevance for this study). Therefore, companies that recruit through social media have better and more productive employees than companies who use other recruitment programs, since the candidates who frequently use it are potentially more innovative and tech-savvy (Emanuela, 2018).

Evidence shows that thanks to social networks, recruiters and organisations are realising that more and better candidates can be discovered and approached faster and at a lower cost (Armstrong, 2006; Singh & Sharma, 2014 cited by Koch et. al., 2018). Furthermore, these networks can be accessed by a wide range of potential applicants at any given time (Koch et al., 2018), as more and more people are connecting to social networks in order to find a job (Nikolau, 2014; Smith, 2017; Stopfer, 2013 cited by Piric et al., 2018). Advertising external vacancies have now become a lot faster and cost-effective due to the wider range of this media (Emanuela, 2018). But the range is not everything, while organisations today need to move their attention away from basic metrics like time to fill and cost per hire to quality for hire metrics. This way organisations can focus their efforts on targeted messages to filtered audiences by using social media to increase their quality scorecard, so that they don't miss the most suitable applicant for the fastest available applicant (Dutta, 2014). One of the key advantages of social media is the way it enables the employer to connect to individual job seekers. It is an interactive tool unlike traditional ads, that are used to spark, and join a conversation (Weinstein, 2017).

Social networks can increase the visibility of potential candidates towards employers (Piric et al., 2018) and allow job seekers to have more information about a business and current job offers (Brecht, 2011; Smith, 2017 cited by Piric et al., 2018). Furthermore, candidates are more attracted to an organisation when information is transmitted through word-of-mouth (or even online word-of-mouth) rather than employee testimonials on the company's website (Van Hoye, 2007 cited by Piric et al., 2018). This happens because they consider the received information as more credible in comparison to advertising and corporate websites, thus giving it more weight (Sullivan, 2013 cited by Poeppelman, 2014). Although, companies can use social

media to respond to criticism and display the best parts of their corporate culture (Weinstein, 2017). More importantly, not only is social media used as a tool for the employer branding strategy (thus attracting desired applicants and promoting job vacancies), it is also used for active recruitment (Brecht, 2011 cited by Piric et al., 2018; Dutta, 2014).

From a wide array of well-established social media platforms, Facebook, LinkedIn and Twitter are the ones mainly used in the sourcing process (Caers & Castelyns, 2011; Doherty, 2010; Dutta, 2014; Singh & Sharma, 2014 cited by Koch et al., 2018). Although, it is possible to say that while LinkedIn focuses on finding candidates and networking online, Facebook and Twitter are focused on employer branding and engaging the candidates in a different way (Jobvite, 2014 cited by Koch et al., 2018; Hunt, 2010; Mosley, 2014). This may happen because one can tell a company's story in a more authentic and personal way through Facebook and other social media channels rather than the website (Mosley, 2014). It constitutes an important way to shape brand reputation (Mosley, 2014), whereas LinkedIn is seen almost exclusively for building professional relationships (Zide et al., 2014 cited by Koch et al., 2018). In addition, there is a big variety of practices and strategies that companies can use on the different social media displayed by *Appendix 4.* Nevertheless, LinkedIn alone has 3 million active job listings (Chaudhary, 2017 cited by Koch et al., 2018) that receive more views from potential candidates than those on Facebook and Twitter combined (Bullhom, 2014). According to the same author, 95% of recruiters who use social media in their work use LinkedIn, this against 66% for Facebook and 52% for Twitter. The Silver Swan Recruitment then conceived 2018 infographics to help companies build their millennial recruitment strategies, referring that "most successful recruiters are already aware of the importance of online recruitment with 98% of recruiters using LinkedIn as a sourcing tool. Furthermore, in 2017 there was a 3% rise in recruiters using Instagram and this is expected to increase further in 2018. Since there is already a lot of competition in the most popular social media platforms (LinkedIn, Facebook, and Twitter), companies should venture out and find specific platforms connected with a certain industry (Campeau, 2018; Dhawan, 2016). For instance, developers use the Stack Overflow website to share knowledge (Dhawan, 2016).

1.3.3. Facebook, LinkedIn and Twitter

With 467 million members in 2017 (Chaudhary, 2017 cited by Koch et al., 2018), LinkedIn has proven to have the biggest impact on recruitment (Dutta, 2014; Koch et al., 2018; Poeppelman, 2014; Weinstein, 2017; Mosley, 2014; etc) even though Facebook registered an average of 1.32

billion daily active users in June 2017 (Facebook, 2017 cited by Koch et al., 2018), and the 317 million users of Twitter (2OceansVibe, 2016 cited by Koch et al., 2018). With this kind of numbers, companies now realize the value of such mediums for recruiting purposes (Hunt, 2010). When discussing the most popular social media platforms for recruitment, LinkedIn and Facebook can be classified as social networking tools, allowing users to share information and interact, while Twitter falls under the subcategory of microblogging tools, allowing users to communicate a message in less than 140 characters (Koch et al., 2018).

1.3.4. Why is Social Media, and mainly LinkedIn, so important in the IT sector?

As LinkedIn became a dominant player within the recruitment industry, Jobvite's 2013 survey showed that it caters for every stage of the recruitment funnel, including generating employer brand awareness, posting jobs, search for candidates, contacting candidates and ultimately vetting them (Mosley, 2014). On its most basic level, companies can search for talent and establish relationships with potential candidates for free, by simply creating a profile for business on the web site. On a more advanced level, companies can get bonus features like posting jobs, sending private messages to any user and managing profiles of prospects (Hunt, 2010). According to Lucie (2016), LinkedIn is already the world's largest professional online service, with Europe being their biggest market outside the US. In addition, its main benefit for recruiters is the ability to find passive job seekers (The Economist, 2014 cited by Lucie, 2016). When talking about certain markets like the Portuguese IT, where the candidates are of a high calibre but have become passive-seekers due to the high demand levels, it is crucial to move away from the traditional "spray and pray" approach and embrace the new sourcing opportunities offered by social media (Dutta, 2014 quoted by Koch et al. 2018). In fact, placing an advertisement in popular media or an organisation's website has a limited chance of attracting the right candidates (Philips & Gully, 2012 cited by Koch et al., 2018). The best way to take advantage of what social media has to offer, is to use targeted and personalised messages with candidates. It creates greater loyalty towards the company, and makes it harder on competition to reach the same audience (Doherty, 2010 cited by Dutta, 2014). Passive job seekers are essentially potential candidates not actively looking for a job. On the IT market, companies often compete to entice them into picking employers and changing jobs, due to the lack of active candidates. Therefore, recruiters must use the pool of very competent, but passive candidates that social networks give access to, and turn them into active candidates (Doherty, 2010; Joos, 2008, cited by Koch et al., 2018; Poeppelman, 2014) in order to survive. Dhawan (2016) follows the exact same line of thought and refers that the fight for new recruits is not

only intense in the tech sector, but across all industries. On the same article, a study from the Society of Human Resource Management (2015) is quoted, reporting that 84% of organizations use social media for recruiting, and 82% of them use it primarily in the hunt for passive candidates (Dhawan, 2016). Furthermore, a strong association has been found between the use of LinkedIn and the ability to identify and attract passive candidates (Nikolaou, 2014 cited by Koch et al., 2018), thus revealing the importance of studying social media, and mainly LinkedIn approaches to IT millennial students. In 2012, the remarkable John Sullivan provided a list of reasons why LinkedIn has all the potential to be the number one recruiting portal of the future, that can be found on *Appendix 5* (edited by Mosley, 2014). This list also reveals that LinkedIn has a high passive to active member ratio, meaning that 80% of prospects who are not actively looking for a job represent most LinkedIn members (Sullivan, 2012 cited by Mosley, 2014).

To my best knowledge, there is still little research regarding the content of the text messages sent by companies, and how their effectiveness can impact candidate's decisions. In fact, little is known about how applicants react to organizational correspondence, even when they apply (Jack Walker, Helmuth, Feild, & Bauer, 2015). However, according to the same authors, initial organizational correspondence delivered to job applicants after submission can affect their informational, interpersonal, and justice perceptions. Which means organizations can and should encourage positive organizational perceptions through good use of information delivery towards candidates.

1.4. Final Outlook on the IT Sector

As seen, with a scarce talent pool, organizations will apply for candidates through their employer brands and not the other way around (Dahlstrom, 2011 cited by Wahba & Elmanadily, 2015). The current and future talent shortage comes from the fact that larger generations of employees will soon be replaced by smaller ones that change jobs a lot more frequently, along with the shortage of technology and engineering students (Lodberg, 2011 cited by Wahba & Elmanadily, 2015). Knowledge-based organisations like the ones on the IT sector desperately need employees as a source for competitive advantage, since they constitute their biggest asset (Ewing et al. 2002 cited by Wahba & Elmanadily, 2015; Marks & Scholarios, 2008 cited by Muratbekova-Touron & Galindo, 2018). Thus, it is fair to say that organizational competitiveness in this industry has created the often mentioned "war for talent" (Edlinger, 2015; Hadi & Ahmed, 2018; Mölk & Auer, 2018; Sengupta et al., 2015; Wahba & Elmanadily, 2015). To win the "war for talent", it is crucial that companies understand all the specificities

associated with software developers and engineers. Therefore, they need to be managed differently from other workers. Some of their different values include independence, as well as a preference for unstructured tasks (Davenport, 2005; Kunda, 1992 cited by Muratbekova-Touron & Galindo, 2018). High-tech firms have now the challenge of organising strategic HR systems according to those specificities and choose their practices based on developers' job values (Muratbekova-Touron & Galindo, 2018). These practices often include recruitment processes based on technical and soft skills (Marks & Scholarios, 2008 cited by Muratbekova-Touron & Galindo, 2018), and internal policies based on flexibility, work-life balance (Meyer, Barton, Murphy, Zimmermann, & Fritz, 2017 cited by Muratbekova-Touron & Galindo, 2018), and work autonomy (Marks & Huzzard, 2008 cited by Muratbekova-Touron & Galindo, 2018). Ultimately, software developers can be described as "*…young and highly mobile gold-collar professionals who earn high incomes, work in modern offices for enlightened managers and come and go from work as they please"* (Barrett, 2001 in Scholarios & Marks, 2004 cited by Muratbekova-Touron & Galindo, 2018:718). As for their attractiveness requisites, Frick (2016) cites a study focused on IT professionals that came out with very interesting findings. Companies need to offer more than just a competitive salary in this market segment (Frick, 2016; Kucherov & Zamulin, 2016). To attract IT professionals, they should focus on their technology investment and learning opportunities, which will be valued over salary. In short, there is a natural attraction of these employees for cutting-edge technology companies who can provide good learning opportunities (Tambe, Ye, & Cappelli cited by Frick, 2016; Kucherov & Zamulin, 2016). Moreover, finding digital talent is particularly difficult for large traditional firms. Especially, the ones which operate in consolidated, non-growth industries (e.g. pulp and paper, steel, airlines) and which are often located away from metropolitan areas where data scientists live (Dahlander & Wallin, 2018).

In conclusion, developers have a strong constant learning orientation (Fang & Neufeld, 2009 cited by Muratbekova-Touron & Galindo, 2018) and high achievement goals (higher than most of other professionals) motivated by the desire to fix things and think outside the box (Couger et al., 1979; Roberts, Il-Horn, & Slaughter, 2006 cited by Muratbekova-Touron & Galindo, 2018). Lastly, they also participate in various networks both inside and outside their companies (Licorish & MacDonell, 2017 cited by Muratbekova-Touron & Galindo, 2018) that recruiters can use to reach them more easily (e.g. Dhawan, 2016).

1.5. Identified Problem and Research Questions

After the subject was approached on the Introduction, there was a clear view that the high demand and very low supply of IT professionals is a constant all over the world. A war for scarce talent (e.g. Edlinger, 2015; Hadi & Ahmed, 2018; Mölk & Auer, 2018; Sengupta et al., 2015; Wahba & Elmanadily, 2015) erupted in the sector as the new digital world rises with companies competing to get the few available graduates and undergraduates from computer sciences. The aim of this study is precisely helping IT employers understanding how they can conduct their brands, strategies, approaches and offerings to best attract the IT students they desperately need. In order to do this, the study answers and highlights the following research questions, focusing on both employer attractiveness and the way this attractiveness is delivered (media channels):

1- Which dimensions of employer attractiveness are most valued by IT students?
2- How does employer attractiveness and credibility of social networks and traditional media channels, affect IT students' intentions to apply for a job?
3- What differences can be seen between social networks and traditional media channels when it comes to usability, credibility, and possibility of deception?

To answer the first research question, the following hypotheses were identified:

H1: The mean level of employer attractiveness dimensions is significantly different for every pair of dimensions.

H1a: The mean level of employer attractiveness dimensions for men is significantly different than the mean level of employer attractiveness dimensions for women in every dimension.

H1b: The mean level of employer attractiveness dimensions for people just studying is significantly different than the mean level of employer attractiveness dimensions for people who work and study, for every dimension.

H1c: The mean level of employer attractiveness dimensions between people studying in different university years is significantly different for at least one pair of different university years.

H2: The mean level of IT student's intentions to apply for a job is significantly different for every scenario.

H3: The mean level of employer attractiveness dimensions is significantly higher than the mean level of IT student's intentions to apply for a job, for every scenario.

To answer the second research question, the following hypotheses were identified:

H4: At least one Employer attractiveness dimension significantly impacts IT students' intentions to apply for a job

H4a: The interest value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.

H4b: The social value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.

H4c: The application value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.

H4d: The economic value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.

H4e: The development value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.

H5: Channel credibility and socio-demographic characteristics significantly impact IT students' intentions to apply for a job in at least one scenario.

To answer the third research question, the following hypotheses were identified:

H6: The usability of social media networks is significantly higher than the usability of traditional media channels.

H7: The usability of channels IT students consider to be more important is significantly higher than the usability of channels IT students use the most.

H8: There are significant differences between traditional media channels' credibility and social media networks' for at least one combination of media channels.

H9: There are significant differences between traditional media channels' deceiving behaviour and social media networks' for at least one combination of media channels.

Chapter II. METHODOLOGY

Management investigation comprises the study of organizational problems through the method and scientific principles. This kind of study is directly applicable to the social world and produces solid knowledge (as valuable and valid as the one produced in the social sciences) in the management field (Whitley, 1984).

This research methodology will provide along with other topics, the type of study, instruments used to obtain data, and the necessary methods to analyse the retrieved data, therefore meeting the investigation requirements (Barañano, 2008). It derives from an investigation model that started with the formulation of the research topic; problematic and evaluation of the necessities

it could satisfy; a definition of the population the study would target; critical review of literature; definition of the sample needed; development and application of instruments to gather primary data; and lastly the data analysis with final conclusions (Barañano, 2008; Saunders, Lewis, & Thornhill, 2012). Arguably, preliminary research was conducted to better understand the impact of employer branding and external communication in the attraction of IT students. Generational and situational factors were also considered, and secondary data were analysed using a stream of books, papers and reports from credible sources and academic databases (for instance, b-on). After conducting this research and analysing the current status of the labour IT market, the identified problem had a solid foundation.

2.1. Research Approach

The present study follows a deductive approach (Saunders et al. 2012) since the final conclusions came from a set of premises or hypothesis (Ketokivi & Mantere, 2010 cited by Saunders et al. 2012) deduced from literature, that were tested and evaluated resorting to the collection of appropriate data (Blaikie, 2010 cited by Saunders et al. 2012). This approach works within scientific principles with the purpose of testing theory using quantitative data and replicable methods (Anderson, 2009). Similarly, the present study conducts positivist HR research by studying with variables and quantitative data, social and organizational realities mirroring processes used in the natural sciences (Anderson, 2009). However, the data collected is based on student preferences and opinions regarding the labour market rather than attributes. These are often referred to as "qualitative numbers" that may fit within an interpretive philosophy (Saunders et al., 2012).

2.2. Research Design

According to Saunders et al. (2012), the research design is a general plan of how the research questions will be answered. The study followed a cross-sectional research strategy that is appropriate for relatively short-term projects and particularly useful for establishing patterns and comparisons. It involved the collection of data in a fairly standardized manner from people at a single point in time (Anderson, 2009; Saunders et al. 2012). In turn, the research design follows a descripto-explanatory nature since the conclusions are drawn from the literature review (describing the attraction of IT students through a corporate scope) serve as a forerunner to the explanatory research that was conducted through a questionnaire. Therefore, the study provides quantitative research design, because it examines the relationship between variables numerically analysed using statistical techniques (Saunders et al. 2012).

By using a questionnaire, primary data was collected. This method is useful because its structure is easily replicable and allows for easier comparisons with other surveys. Furthermore, the anonymity it provides enables people to respond in a more honest way, therefore increasing the value of the answers. Questionnaires can identify significant patterns and relationships between different variables (Anderson, 2009). According to Saunders et al. (2012), they allow the collection of standardized data from a sizable population in a highly economical way and can generate findings that are representative of the whole population at a lower cost. On the other hand, a survey can be interpreted differently by people from different backgrounds, lacks in-depth due to the limited answer options (Anderson, 2009) and the number of questions need to be limited depending on the goodwill of the respondent (Saunders et al. 2012). However, by using questionnaires the researcher is detached from the situation and it is possible to say that this study only addresses people with the same or relatively similar backgrounds (IT background). Besides being the easiest and cheaper way to reach a large audience, it is also the fastest, which is probably why it is a popular strategy in business and management research, mostly used to answer "what", "who", "where", "how much" and "how many" questions (Saunders et al. 2012). Therefore, it was the most suitable choice, considering the given short timeframe and available resources. Additionally, there is already a lot of literature around the topic, allowing for a reliable questionnaire based on what was already known. Finally, this study also conducts causal-comparative research as it explores differences between groups in outcomes or dependent variables (For instance, examining differences between male and female students regarding the employer attractiveness dimensions; Schenker & Rumrill, 2004).

2.2.1. Sample

Considering that it would be impracticable to survey the entire student population, along with time and budget constraints, non-probability sampling techniques were used. According to Anderson (2009: p.201), *"sampling is the deliberate choice of a number of people to represent a greater population.* Although non-probability samples cannot address objectives and answer research questions that require statistical inferences about the population, non-probability sampling is the most practical method as well as the most suitable when there is no sampling frame available (Saunders et al. 2012). Therefore, the probability of each case being selected from the total population is not known (Anderson, 2009; Saunders et al. 2012). Most importantly, it may still be possible to generalise about the population and draw relevant conclusions using non-probability sampling (but not on statistical grounds), as both methods

can answer research questions regarding what job attributes attract people to jobs, for instance (Saunders et al. 2012).

The questionnaire has both an online and a printed version (further discussed in the procedure section). As the core objective of this study's sampling procedure was to have the biggest reach of IT students, volunteer sampling techniques were used for the online version, whereas haphazard sampling techniques were used for the printed version (Saunders et al. 2012).

The volunteer sampling techniques used were snowball sampling, where participants were asked to share the questionnaire's link after completion with their network of IT colleagues (in turn these colleagues would also share with their networks and so on) and self-selection sampling techniques, where participants could voluntarily participate by accessing the questionnaire through posts on different social media and groups as well as their institutional e-mails (the questionnaire was shared on several university institutional e-emails). According to Saunders et al. (2012), snowball sampling is most commonly used when it is difficult to identify members of the desired population. Regarding this study, even though the population is not hard to identify, the number of students in the IT fields is very restricted when compared with other students, which made this technique a crucial pillar of the sampling procedure.

In 2018 there were 372,753 students in Portuguese universities. From all these students, only 32,019 students are from sciences (social sciences not included), math and IT (PORDATA, 2019). This means that the target population of the study is estimated to be way below 32,019 students when math and science students are subtracted from this number. The reason behind this choice is that students are likely less biased in terms of company decision-making (most of them are now establishing the first contact with the labour market), while putting a lot of value on entry-level positions. Additionally, there are certain aspects that make millennials unique, and in the long run, they are an easier population to address and study. The target population of the study is therefore estimated to be around 11000 students spread across 37 Portuguese universities lecturing computer science degrees or similar (DGES, 2019).

According to Saunders et al. (2012: p.290), *"Haphazard sampling occurs when sample cases are selected without any obvious principles of organisation in relation to your research question"*. The haphazard sampling technique used in the printed version of the questionnaire was convenience sampling (also known as availability sampling). The printed questionnaires were given to IT students in different classrooms, study rooms, and school grounds of three selected universities. The selected universities are ISCTE, FCT-NOVA, and IST. These universities were selected based on convenience, considering the high number of students and professors in the field from my personal network and the distance from each other. Furthermore,

these universities are without a doubt among the best in the field country-wise (therefore most valued by employers), admit a large number of students every year, and are also all geographically located in the region that lectures by far most of the students in the country (Lisbon metropolitan area with 110,635 out of all 372,753 students according to PORDATA, 2019). In convenient sampling, participants only appear due to the easiness of obtaining them, which creates a bias, just like the one from snowball sampling where respondents are more likely to identify other respondents similar to themselves. This results in a homogeneous sample (Lee, 1993 cited by Saunders et al. 2012). Nevertheless, this does not constitute a problem, since the full scope and sample used in the present study is composed of IT students, therefore offering little population variation (Saunders et al. 2012). In fact, with little population variation, the sampling ratio size required tends to be smaller.

According to Anderson (2009) there are no clear answers regarding the size the sample should be. Nevertheless, the smaller the population, the bigger the ratio of a sample size to population size needed. It is indicated that for populations between 1000 and 10000, a ratio of 10% may be acceptable, whereas for populations over 15000, 1% ratio should suffice (Neuman, 2006 cited by Anderson 2009). On the other hand, Saunders et al. (2012) argue that in all non-probability sampling techniques besides quota sampling there are no rules and the sample size is mainly dependent on the research questions and objectives in consideration with the available resources (Patton, 2002 cited by Saunders et al. 2012).

With the central limit theorem and the law of large numbers in mind, a total sample of 495 participants was collected for the purpose of this study. This sample includes 84 participants from the online version and 411 participants from the printed version. From all the participants, 28,7% are 1st-year undergraduates, 17,8% are 2nd year undergraduates, 20,4% 3rd year undergraduates, 17,8% 1st year master students, 11,1% 2nd year master students, 1,6% high school or professional course students, and 2,6% other students (*Table 2*). Regarding the universities they attend, 34,7% are from ISCTE, 31,9% are from IST, 26,1% are from FCT-NOVA and 7,3% are studying elsewhere.

Tabulação cruzada Sexo * Habilitação Literária (Frequência)

			Habilitação Literária (Frequência)							
			Licenciatura - 1° ano	Licenciatura - 2° ano	Licenciatura - 3° ano	Mestrado 1° ano	Mestrado 2° ano	Outra	12° ano ou Curso Profissional	Total
Sexo	Feminino	Contagem	31	20	25	29	18	3	0	126
		% em Sexo	24,6%	15,9%	19,8%	23,0%	14,3%	2,4%	0,0%	100,0%
	Masculino	Contagem	111	68	76	59	37	10	8	369
		% em Sexo	30,1%	18,4%	20,6%	16,0%	10,0%	2,7%	2,2%	100,0%
Total		Contagem	142	88	101	88	55	13	8	495
		% em Sexo	28,7%	17,8%	20,4%	17,8%	11,1%	2,6%	1,6%	100,0%

Table 2 – University year and gender cross table.

Regarding the professional situation, 84,4% of participants are studying, 13,3% are both studying and working and 2,2% are in a different situation (*Table 3*).

Tabulação cruzada Sexo * Situação Profissional

			Situação Profissional			
			Estudante	Trabalhador-estudante	Outra	Total
Sexo	Feminino	Contagem	105	17	4	126
		% em Sexo	83,3%	13,5%	3,2%	100,0%
	Masculino	Contagem	313	49	7	369
		% em Sexo	84,8%	13,3%	1,9%	100,0%
Total		Contagem	418	66	11	495
		% em Sexo	84,4%	13,3%	2,2%	100,0%

Table 3 – Professional situation and gender cross table.

Regarding gender, the sample totals 369 (74,5%) males and 126 females (25,5%) as shown in (*Table 4*). More information on the nature of the sample can be found in *Appendix* 6.

Tabulação cruzada Sexo * Universidade

			Universidade				
			ISCTE-IUL	Instituto Superior Técnico	FCT-NOVA	Outra	Total
Sexo	Feminino	Contagem	31	53	36	6	126
		% em Sexo	24,6%	42,1%	28,6%	4,8%	100,0%
	Masculino	Contagem	141	105	93	30	369
		% em Sexo	38,2%	28,5%	25,2%	8,1%	100,0%
Total		Contagem	172	158	129	36	495
		% em Sexo	34,7%	31,9%	26,1%	7,3%	100,0%

Table 4 – University and gender cross table.

2.2.2. Instrument

The referred questionnaire (*Appendix* 7) is composed by 9 sections. The first 5 sections each contain 5 questions representing a job ad with a different employer attractiveness dimension, then section VI with 20 questions taken from the EmpAt scale, followed by section VII with 4 questions studying IT students' usability, credibility and deceptive behaviours regarding media channels. Section VIII is only composed by 1 question further deepening the understanding of deception and lastly section IX with the final questions regarding the characteristics of the respondents. This division was extracted from the online version of the questionnaire to facilitate comparisons and remove possible bias and the questions will be explained in the following pages.

This questionnaire starts with a covering letter explaining the purpose of the study and highlighting the importance for respondents to complete it (Saunders et al.2012). Furthermore, it includes a clear unbiased title along with a neutral graphic illustration that can add interest, as these elements along with the covering letter message affect participant response rate

(Dillman, 2009 cited by Saunders et al.2012). The questionnaire was printed with colours to keep participants engaged and the context of the study was also exposed along with my contact information in case of any doubt.

The questionnaire is composed of different types of closed questions (Fink, 2009 cited by Saunders et al. 2012) in its entirety, considering the purpose of each analysis. Unlike open questions, these are quicker and easier to answer, compare and analyse (Saunders et al. 2012).

In order to measure employer attractiveness effectively, a version of the EmpAt Scale developed by Berthon, Ewing, and Hah (2005) was used. This scale has shown good reliability across multiple international studies (e.g. Alniaçik & Alniaçik, 2012; Arachchige & Robertson, 2011; Roy, 2008; Shivertzen, Nilsen, & Olafsen, 2013; Wallace, Lings & Cameron, 2012). It is composed by 5 dimensions (Interest value, Social value, Application value, Economic value and Development value) based on employer attributes proven to effectively impact company reputation and employer attractiveness for job seekers (Sivertzen, Nilsen, & Olafsen, 2013). The utilised version of the scale comes from a confirmatory factor analysis conducted by Reis and Braga (2016), resulting in a 20 item final EmpAt scale (instead of the initial 25 item scale) with outer loadings all above 0.6 that were therefore kept in the model (Chin, 1998, Hair et al., 2011, Hulland, 1999 cited by Reis & Braga, 2016).

Each one of these 5 dimensions is mirrored in the form of a job advertisement that purposely reflects every scale item of the analysed dimension. Consequently, the questionnaire begins with five job advertisements (one for each dimension), where fake brand names and logos are used: HeyDeveloper portrays the interest value, SoftwareWizard portrays the social value, QuickBot portrays the application value, Computorial portrays the economic value, and MassiveCode portrays the development value. After each job advertisement, participants were asked about their intentions to pursue the company, more specifically, if they would consider the company one of their first choices as an employer ("*um empregador de excelência*"). After this question, 4 additional questions were asked about the 4 remaining dimensions, in order to cross different dimensions with each other during the analysis. These questions asked participants if they would consider the company one of their first choices as an employer ("*um empregador de excelência*"), even though the company was lacking in a different dimension (e.g. would you consider this company one of your first choices as an employer even though colleagues are not supportive and encouraging). Therefore, a total of 25 rating questions used in a Likert-style rating (sections I to V; Saunders et al. 2012) were asked regarding all the job advertisements (5 questions for each). Questions were asked using statements and a 5-point Likert scale of agreement, just like Reis and Braga (2016) used. Participants could answer each

question from 1 – totally disagree to 5 – totally agree. All of these questions were asked based on item 7.1 of the scale Highhouse, Lievens, and Sinar (2003) developed to measure intentions towards the company (*"I would make this company one of my first choices as an employer"*). Regarding the job advertisements, even though brands and logos are fake, and their main purpose is to portray Berthon dimensions, the contexts used were inspired in real companies and the function IT specialist was used in every dimension in order not to restrict the sample nor create a bias. For the same reason, the function requisites on every job ad were all the same (frequency on a bachelor or master's degree in the IT area).

Inquiring about fictive job ads is sustained by a vignette study's methodology. The used job ads are essentially vignettes which are carefully constructed fictive descriptions (Alexander and Becker, 1978 cited by Wallander, 2009) of a person, object, or situation, representing a systematic combination of characteristics (Atzmüller & Steiner, 2010). They are very powerful for investigating respondent judgments (Atzmüller & Steiner, 2010) because according to Wallander (2009), they present respondents "*... with concrete and detailed descriptions in which several different factors believed to influence the judgment being studied are systematically varied*" (Wallander, 2009:505). Furthermore vignettes are particularly beneficial when addressing sensitive topics (Aguinis & Bradley, 2014, Aviram, 2012 cited by Dickel & Graeff, 2018) as their purpose is less obvious to respondents because they are not fully attentive to the manipulation of different elements in the vignettes (Alexander and Becker, 1978 cited by Wallander, 2009). This reduces the risk of social desirability bias (Weinberg et al. 2014 cited by Dickel & Graeff, 2018; Alexander and Becker, 1978 cited by Wallander, 2009), therefore triggering more honest answers (Auspurg, Hinz, Sauer, & Liebig, 2014 cited by Dickel & Graeff, 2018) in a more realistic setting (Oll et al., 2018 cited by Dickel & Graeff, 2018). Lastly, the use of vignettes as job advertisements is considered valid as vignette studies are very flexible (e.g. narrative, cartoons, narrative vignettes, etc) and may be adapted to different objectives (Wallander, 2009) depending on the research questions (Atzmüller & Steiner, 2010).

After the job advertisements, a matrix grid (Saunders et al. 2012) of 20 questions follows (one for each item extracted from the confirmatory factor analysis from Reis & Braga, 2016; section VI). As the Berthon et al. (2005) scale was used, retroverted and validated multiple times in the Portuguese context (e.g. Carvalho, 2017), a translation from Andrade (2018) was used in this questionnaire. Through the 5 dimensions, these questions are meant to measure employer attractiveness, whereas the scenario questions are meant for measuring IT students' intentions

to apply for a job. In this grid, participants can answer in a scale of importance from *1- Nada importante to 5- Muito importante*.

After this grid of questions, the rest of the questionnaire is meant to identify differences among media perceptions (sections VII and VIII). More specifically, differences between social and more traditional media. The internet drastically changed the way organisations show information to job seekers (Reynolds & Weiner, 2009 cited by Howardson & Behrend, 2014). After surveying major IT companies, there is solid evidence that innovative sourcing channels including social media and campus hiring have become dominant in comparison with traditional media where newspapers, advertisements and company official websites are included. From an employer's perspective, companies are increasingly using newer channels due to factors like quality and cost (Sinha & Thaly, 2013). Although, some authors argue that employers tend to adopt different recruitment strategies when job seekers become scarce (like in the IT market), valuing advertisements over different channels due to the high applicant arrival rate (e.g. Russo, Rietveld, Nijkamp, & Gorter, 2000).

This being, job sites, portals, social media and campus recruitment are reported to be the ones candidates use the most, whereas newspapers have suffered the most in the last years (Sinha & Thaly, 2013). Following this trend, social media has become incredibly popular among college students for academic and personal activities (Surjandy & Julisar, 2017). This is making companies replacing part of their e-recruitment process with social media platforms as technology becomes a better way for people to portray themselves and communicate (van Esch & Mente, 2018).

Therefore, this study also aims at verifying the trend of innovative media and differentiate traditional media channels from social media channels through three different scopes: usability of media channels (mentioned before), the credibility of media channels and deceptive behaviours in media channels.

By adapting the usability definition to this context, it can be characterized as the perceived ease of acquiring information and using a media channel to meet desired objectives (Cober et al. 2004 cited by Howardson & Behrend, 2014). When considering the usability of media channels, the goal is to validate if there are differences between the channels that IT students prefer to use to find job advertisements (question 2; section VII) and the channels they consider more adequate to advertise job opportunities (question 1; section VII). If no alignment is seen, then companies must adjust to new media channels. Thus, participants are asked to identify from 6 media channels (3 traditional media channels- campus fairs, newspapers, word of mouth from an employee and 3 social networks- LinkedIn, Facebook and Twitter), three channels they

consider to be most adequate to publicize job advertisements on a ranking question (Saunders et al. 2012) followed by another ranking question asking them to identify from the same pool, the three channels they use the most.

The credibility of media channels is important to study when predicting how media affects an audience (e.g., Breaugh & Starke, 2000; Cook, 1979; Johnson & Kaye, 1998; Meyer, 1988 cited by Cable & Yu, 2006). For instance, job seekers may not trust corporate recruiters because they are known to be job sellers (Fisher, Ilgen, & Hoyer, 1979 cited by Cable & Yu, 2006). Credibility can ultimately be described as *"…the believability of a medium based on the information source"* (Cable & Yu, 2006: p.829) and whether this source is perceived to be knowledgeable and truthful (e.g., Gaziano & McGrath, 1986; Ilgen, Fisher, & Taylor, 1979; Petty & Cacioppo, 1981 cited by Cable & Yu, 2006). To study media channel's credibility, participants were asked on a grid of questions (Saunders et al. 2012) from the same pool of channels mentioned previously, to rank each channel from *1- Nada credivel to 5-Muito credivel* (Chinthakayala, Zhao, Kong, & Zhang, 2014).

Besides knowing if participants trust media channels, it is important to find out if they are aware of employer's deceptive behaviour most commonly seen online. According to Vidros, Kolias, Kambourakis, and Akoglu (2017), the most common case of online recruitment fraud is employment scam. It is a form of malicious behaviour that includes rogue job advertisements for non-existing positions with the purpose of harvesting information that can be re-sold to third parties (e.g. to cold-callers, aggressive marketeers, etc), or using job applicants' sensitive documents for money laundering (Vidros et al., 2017). Therefore, participants were asked if they were aware of any situation where job advertisements were publicized deceptively. Should they answer "*No*", they would be forwarded to the last section of the questionnaire inquiring about their biographical data (section IX). Should they answer "*Yes*", they would have to answer a final grid of questions (section VIII) regarding the probability of occurrence of these situations for each media channel from *1-Raramente* to *5- Muito frequentemente* (Chinthakayala et al., 2014).

The questionnaire ends with four questions regarding participants' bibliographical data. They are inquired about their gender, their university, the year they are attending, and their professional situation.

Concluding, the questionnaire varies from a total of 56 to 50 questions depending on participants' answers.

2.2.3. Principal Components analysis (PCA)

As mentioned previously, a principal components analysis was conducted on the section VI of the questionnaire – "Atratividade do Empregador" (*Appendix* 7). This section included 20 questions with a 5 item Likert scale (1-*"Nada Importante"* to 5- *"Muito Importante"*), each one representing a variable obtained by the confirmatory factor analysis of Reis and Braga (2016) from Berthon et al. (2005) EmpAt scale. With this analysis, the original set of variables is transformed into a substantially smaller set of variables representing most of the information on the variables that were present initially. The smaller dimensionality of the new data set is much easier to understand and analyse.

2.2.4. Necessary assumptions

PCA requires that the initial variables under analysis are correlated. The KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy obtained (*Appendix* 8) shows that the current sample is appropriate to apply PCA, providing a value of 0,856 which is considered good to very good. In addition, the null hypothesis that the correlation matrix is an identity matrix (correlations are 0) is rejected (Sig (α) = 0,00; $p \leq 0,05$) in Bartlett's test, meaning there are pairs of variables significantly correlated and PCA may now be performed. Lastly, the sample dimension is over 5 times bigger than the number of initial variables.

2.2.5. Analysis

After analysing the total variance explained (*Appendix* 8), it is concludable that 8 components would need to be extracted in order to retain at least 70% of the variance of the initial variables. Therefore, as the objective is to extract as few components as possible while still explaining most of the initial variables' variance, a solution with 5 components was chosen (explaining 59,526% of the total variance) similarly to Reis and Braga's (2016) solution. For this decision, the Kaiser's criterion was used, therefore retaining all components with eigenvalues equal to or greater than 1.

Lastly, the selected components were extracted using varimax rotation, with the purpose of creating a simplified structure that maximizes the variability of the loadings of the initial variables on each component (*Table 5*). The proportion of variance accounted for the extracted principal components can be seen in *Appendix* 8. After analysing the rotated solution, it is visible that all the initial variables fit with the dimensions identified in literature: PC1 (social value- 8,7,9, 6,13), PC2 (interest value- 2,5,3,4,1), PC3 (application value- 14, 12, 10, 11), PC4 (development value- 18,19,20), PC5 (economic value- 16,17,15). Most importantly, the

solution of this PCA is exactly the same as the one from Reis and Braga (2016) with the exception of the variable 13- Acceptance and belonging (*"Pertençer a uma organização onde sinto que pertenço e sou aceite"*). This analysis shows that this variable should be part of the social value dimension instead of the application value as stated by Reis and Braga (2016). Nevertheless, the names and descriptions associated to the components should be maintained as described in the literature: "*social value* (PC1): *a positive and pleasant social and interpersonal environment; interest value* (PC2): *a challenging and stimulating job, with innovative working practices, products and services, in an environment that encourages creativity and innovation; application value* (PC3): *opportunity to apply expertise and convey knowledge to others, in a customer-oriented and humanitarian workplace; development value* (PC4): *provides recognition, self-worth and confidence, the development of skills and career-enhancing experiences; economic value* (PC5): *above-average wages, compensation package, job security, and promotion opportunities"* (Berthon et al. 2005 cited by Reis & Braga, 2016: p106).

In conclusion, the principal components were saved as new variables and tested for internal consistency (reliability) using Chronbach Alfa statistics (*Table 6*). Interest value (α= 0,754), application value (α= 0,711), development value (α= 0,718) and economic value (α= 0,709) showed reasonable to good reliability indicators whereas social value showed good to very good reliability indications (α= 0,824). According to the "if deleted analysis" (*Appendix* 9), the removal of variables would not benefit the current study. Therefore, the solution model from the performed-PCA was kept for further analysis.

Components	PC1 – Social Value	PC2- Interest value	PC3- Application value	PC4- Development value	PC5- Economic value
8-AIC-Pertencer a uma organização onde posso contar com o apoio e incentivo dos colegas	,811				
7-EBRCL-A existência de boas relações com os colegas	,800				
9-ATF-Pertencer a uma organização com um ambiente de trabalho feliz	,735				
6-EBRC-A existência de boas relações com a chefia	,713				
13-OPA-Pertencer a uma organização onde sinto que pertenço e sou aceite	,546				
2-PTA-Pertencer a uma organização que adota práticas de trabalho atuais e que está a par das tendências do futuro		,744			
5-DPSI-Pertencer a uma organização que desenvolve produtos e serviços inovadores		,702			
3-VFUC-Pertencer a uma organização que valoriza e faz uso da minha criatividade		,651			
4-DPSAQ-Pertencer a uma organização que desenvolve produtos e serviços de alta qualidade		,635			
1-ATD-Pertencer a uma organização com um ambiente de trabalho desafiante		,623			
14-OOSC-Pertencer a uma organização orientada para o serviço ao cliente			,765		
12-OPCO-Pertencer a uma organização onde terei oportunidade de passar o conhecimento adquirido a outros			,729		
10-PAS-Pertencer a uma organização com um papel ativo na sociedade			,663		
11-OPCAV-Pertencer a uma organização onde terei oportunidade de colocar em prática os conhecimentos adquiridos no ensino superior			,573		
18-SIBE-Sentir-me bem comigo mesmo(a) por trabalhar numa determinada organização				,773	
19-SMAC-Sentir-me mais auto-confiante por trabalhar numa determinada organização				,745	
20-AEAV-Adquirir experiência que acrescenta valor ao meu percurso profissional				,587	
16-OSAMM-Pertencer a uma organização com oferta salarial acima da média do mercado					,862
17-PRGA-Pertencer a uma organização com um pacote remuneratório global atrativo					,845
15-POPC-Pertencer a uma organização que proporciona oportunidades de progressão de carreira					,567
Eigenvalues	5,738	2,040	1,653	1,377	1,097
% of Variance	28,690	10,199	8,265	6,886	5,486
Chronbach Alfas	0,824	0,754	0,711	0,718	0,709

Table 5- Rotated component matrix with Varimax rotation, decision criteria and reliability.

2.2.6. Procedure

Before the distribution stage, a pre-test was made with 6 IT university students. With all the conditions in order, the questionnaire (*Appendix* 7) was distributed. It was available online from 18th May to 5th of June using Google Docs – Forms of Google Inc. The questionnaire's link was shared through a post mentioning the aim of the study and the participant requirements on LinkedIn and different Facebook/WhatsApp groups. These groups were either fully composed by IT students or from institutional pages of IT universities (like ISCTE). Some participants

from my personal network also helped to share through personal messages or on their LinkedIn and Facebook feed, since a significant part of their friends were university colleagues who qualify for the defined sample. Some of them even managed to publicize it on their own institutional general e-mails (for instance, FEUP). The reason behind the online version choice is the nature of the selected sample. IT students are extremely close to technology and google forms offer a free and easy way to reach a high number of people in a very short time frame.

In spite of all the reach online forms can offer, there is a lack of effectiveness when compared to printed questionnaires. Students approached at ISCTE, NOVA-FCT and IST with the printed version of the questionnaire were much more willing to reply. Although, they were offered free chocolates and pens in return for completion. Two teams of two persons helped spread the questionnaires across study rooms, classrooms, and university lobbies that were dedicated to IT students. Furthermore, several IT professors were contacted with the request of providing 10 min of their class in order for their students to complete the questionnaires. Some of these IT professors were selected considering my personal network whereas some were selected randomly. Some of these professors also shared the questionnaire's link on their institutional platform (like. e-learning).

Online responses were collected automatically through Google forms and printed responses were collected upon completion. After the established deadline, online responses were exported to Microsoft Excel and printed responses were manually added to that Excel sheet. Subsequently, all responses were exported to SPSS (Statistical Package for Social Sciences) since ISCTE provides full access and it can conduct all statistical analysis required. Every printed questionnaire was kept and numbered for reliability purposes, along with the Excel spreadsheet of online answers.

2.3. Variable Codification

In order for SPSS to process all data obtained, nominal variables had to be coded with the goals of the study in mind. Even though most of the questionnaire used quantitative scales from 1 to 5, questions 1, 2 and 4 from section VII regarding media's usability and deceptive behaviours were coded as follows:

The first 2 questions regarding media usability gave participants six media channel options. Those options were LinkedIn, Facebook, Twitter, Campus Fairs, Newspapers and WOM from a company employee. These options were firstly coded into Microsoft Excel as *"lin", "fac", "twi", "fei", "jor"* and *"par"* respectively, and respondents were asked to choose three of them in each question. Secondly, the mode of all answers was analysed, and a coding strategy was

defined. It was possible to identify 29 different combinations of answers regarding different media channels (e.g *"fac, jor, par"*). As this study aims at differentiating traditional media channels from digital ones, these 29 combinations of answers fell into 5 possible scenarios that were finally coded for the purpose of exporting data to SPSS:

Final answer coding per Media Channel		
Code	**Answers D vs T ***	**% Digital vs %Tradicional**
10	0;3	0% D - 100% T
11	1;2	33,33% D - 66,66% T
12	2;1	66;66% D - 33,33% T
13	3;0	100% D - 0% T
14	0;0	0% D - 0% T

Table 6- Final answer coding per Media Channel. * D = Digital; T = Tradicional

As *Table 6* illustrates, code 10 was assigned to participants who would choose three traditional media channels and therefore 0 digital media channels (for example, *"fei, jor, par"*). Code 11 was assigned to the answers containing 2 traditional channels and 1 digital channel (for example, *"lin, fei, jor"*). Code 12 was assigned to the answers containing 2 digital channels and 1 traditional channel (for example, *"lin, twi, par"*). Code 13 was assigned to the answers containing 3 digital media channels and therefore 0 traditional media channels (for example, *"lin, fac, twi"*). Lastly, Code 14 was assigned to all the other scenarios as they rarely occurred. LinkedIn, Facebook and Twitter were considered digital media, whereas newspapers, campus fairs, and WOM from a company employee were considered traditional media channels. Question 4 regarding participants' knowledge of media deceptive behaviour was coded 1 for "*Sim*" and 2 for "*Não*".

The last questions of the questionnaire (section IX) regarding participants bibliographical data were coded as follows:

Gender: 1- Masculino 2- Feminino;

University: 1- ISCTE; 2- IST; 3- FCT-NOVA; 4- Other

The year they attend: 1- 1st-year undergraduate; 2- 2nd-year undergraduate; 3- 3rd-year undergraduate; 4- 1st-year master student; 5- 2nd-year master student; 6-Other; 7- high school or professional course (new category)

Professional Situation: 1- Studying; 2- Working and studying; 3- Other

Chapter III. DATA ANALYSIS

After gathering all primary data, characterizing the sample and updating a new database on SPSS, several statistical analysis were executed in order to better understand and test the highlighted hypothesis of the study.

3.1. Employer attractiveness analysis

3.1.1. Scenario question analysis

All scenarios were measured for internal consistency and showed high correlation values for Sig = 0,01 (*Appendix* 10). The first scenario, just like the others, has a total of 5 questions with a 5 item Likert-scale (1- *"Discordo totalmente*" to 5- *"Concordo totalmente"*) regarding participant's agreement level with several dimension-based affirmations.

This scenario is about "HEYDEVELOPER", which is a fictive company advertising with the focus on interest value. Firstly, respondents were asked if they agree that this company is an excellent employer (*Figure* 1). The mean (μ) of replies was 3,41 (σ=0,790; *Appendix* 11) on a scale from 1 to 5, meaning that even though most participants don't agree nor disagree, there is a clear inclination towards agreeing with the affirmation, and therefore valuing interest value. As seen, 47,46% agree or totally agree whereas only 9,9% disagree or totally disagree. In addition, a Pearson correlation matrix was made between the principal components representing the different dimensions and each question in the scenario (*Appendix* 12). This question shows a strong positive correlation with interest value (R= 0,206; Sig = 0,01) which was expectable considering the scenario clearly highlights interest value aspects. In addition, there is also a strong positive correlation with social (R=0,138; Sig = 0,01), application (R=0,218; Sig = 0,01) and development value (R=0,193; Sig= 0,01), meaning the more participants consider HEYDEVELOPER an excellent employer, the more they tend to value four of the dimensions on the section VI of the questionnaire.

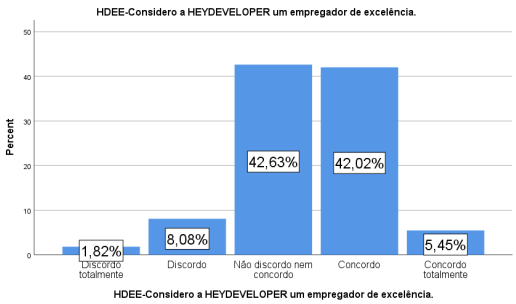

Figure 1- Interest value scenario attractivity measurement.

The second question asks respondents if they would consider HEYDEVELOPER an excellent employer regardless of not having a happy work environment and having unsupportive and discouraging colleagues (low social value; *Figure* 2). The mean (μ) of replies was 2,19 (σ=0,872) on a scale from 1 to 5, meaning that most of the respondents disagree (40,81%) with a total of 64,04% disagreeing or totally disagreeing that HEYDEVELOPER would still be an excellent employer. As expected, this question shows a negative correlation with social value (R=-0,162; Sig = 0,01) meaning the more they value the social value dimension, the more they worry about having a happy work environment with supportive and encouraging colleagues (social value elements) in this scenario.

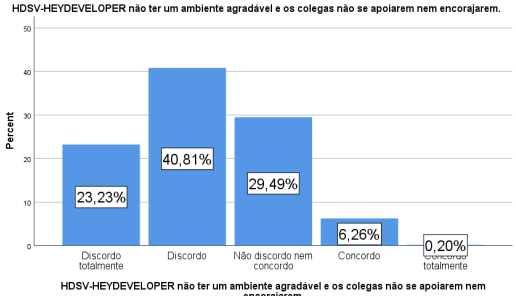

Figure 2- Social value measurement in the interest value

The third question asks respondents if they would consider HEYDEVELOPER an excellent employer regardless of not contributing to society nor caring for sharing knowledge (low application value; *Figure* 3). The mean (μ) of replies was 2,23 (σ=0,922) on a scale from 1 to 5, meaning that most of the respondents disagree (40,81%) with a total of 63,64% disagreeing or totally disagreeing that HEYDEVELOPER would still be an excellent employer. This question also shows a negative correlation with social (R= -0,117;Sig = 0,01) and interest value (R= -0,135; Sig= 0,01) meaning that the more respondents value the social and interest value dimensions, the more they value contributing to society and sharing knowledge (application value elements) in this scenario.

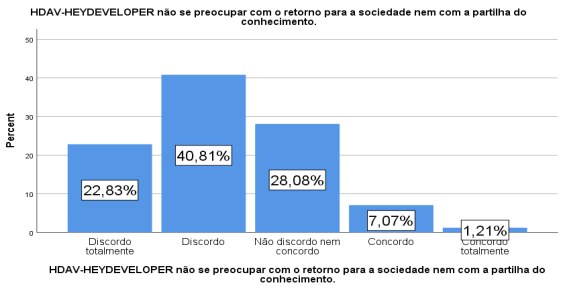

Figure 3- Application value measurement in the interest value

The fourth question asks respondents if they would consider HEYDEVELOPER an excellent employer regardless of the salary and career policies being below average (low economic value; *Figure* 4). The mean (μ) of replies was 2,18 (σ=0,919) on a scale from 1 to 5, meaning that most of the respondents disagree (35,15%) with a total of 62,22% disagreeing or totally

disagreeing that HEYDEVELOPER would still be an excellent employer. This means that participants valued economic value over interest value in the first scenario. As expected, this question shows a negative correlation with economic value (R= -0,203; Sig = 0,01) meaning the more they value economic value elements on section VI of the questionnaire, the more they value salary and career policies in this scenario.

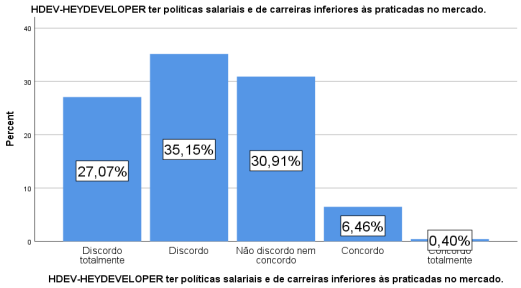

Figure 4- Economic value measurement in the interest value

The fifth question asks respondents if they would consider HEYDEVELOPER an excellent employer regardless of not promoting self-realization nor creating value for their professional career (low development value; *Figure* 5). The mean (μ) of replies was 1,95 (σ=0,939) on a scale from 1 to 5, meaning that most of the respondents totally disagree (38,99%) with a total of 72,93% disagreeing or totally disagreeing that HEYDEVELOPER would still be an excellent employer. This means that participants valued development value over interest value in the first scenario. Additionally, this question shows a negative correlation with economic (R= -0,171; Sig = 0,01) and social value (R= -0,114; Sig = 0,05), meaning the more they value economic and social dimensions, the more they value self-realization and professional career value (development value elements) in this scenario.

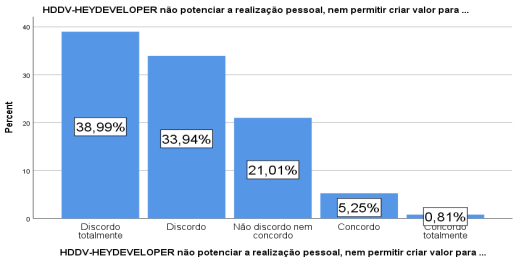

Figure 5- Development value measurement in the interest value

The next scenario is about "Software Wizard", which is a fictive company advertising with the focus on social value. Firstly, respondents were asked if they agree that this company is an excellent employer (*Figure* 6). The mean (μ) of replies was 3,59 (σ=0,913; *Appendix* 11) on a scale from 1 to 5, meaning that most participants agree (43,64%) with a total of 57,78% agreeing or totally agreeing that Software Wizard is an excellent employer. In addition, this question shows a strong positive correlation with social value (R= 0,170; Sig = 0,01) which was expectable considering the scenario clearly highlights social value elements, as well as

development value (R= 0,151; Sig = 0,01), meaning the more participants consider Software Wizard an excellent employer, the more they tend to value development and social value on section VI of the questionnaire.

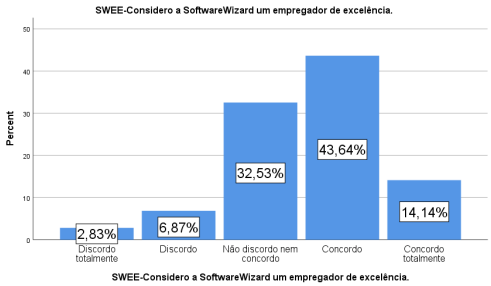

Figure 6- Social value scenario attractivity measurement.

The second question asks respondents if they would consider Software Wizard an excellent employer regardless of not having a challenging work environment nor caring for innovation and product quality (low-interest value; *Figure* 7). The mean (μ) of replies was 2,59 (σ=0,979) on a scale from 1 to 5, meaning that even though most participants don't agree nor disagree (34,55%), there is an inclination towards disagreeing with the affirmation, since 46,46% disagree or totally disagree versus the 18,99% that agree or totally agree that Software Wizard would still be an excellent employer. Additionally, this question shows a negative correlation with interest value (R= -0,142; Sig = 0,01) as expected, as well as application (R= -0,91;Sig=0,05) and economic value (R= -0,98; Sig=0,05). This means that the more they value these dimensions, the more they value a challenging work environment where there is care for innovation and product quality (interest value elements) in this scenario.

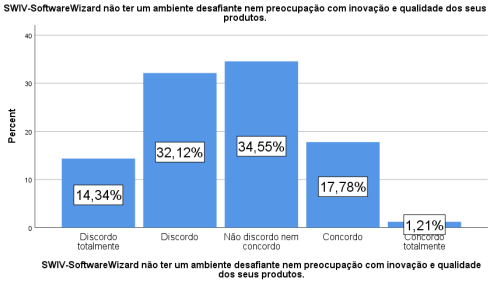

Figure 7- Interest value measurement in the Social value scenario.

The third question asks respondents if they would consider Software Wizard an excellent employer regardless of not contributing to society nor caring for sharing knowledge (low application value; Figure 8). The mean (μ) of replies was 2,45 (σ= 1) on a scale from 1 to 5. In this question, most respondents disagree (36,57%) that Software Wizard would still be an excellent employer, with a total of 54,55% disagreeing or totally disagreeing and only 15,76% agreeing or totally agreeing. Additionally, this question shows a negative correlation with application value (R= -0,186; Sig = 0,01) as expected, as well as social (R= -0,123;Sig=0,01) and interest value (R= -0,149; Sig=0,01). This means that the more they value these dimensions,

the more they value contributing to society and sharing knowledge (application value elements) in this scenario.

Figure 8- Application value measurement in social value scenario.

The fourth question asks respondents if they would consider Software Wizard an excellent employer regardless of salary and career policies being below average (low economic value; Figure 9). The mean (μ) of replies was 2,24 (σ= 0,911) on a scale from 1 to 5. In this question, most respondents disagree (37,58%) that Software Wizard would still be an excellent employer, with a total of 61,01% disagreeing or totally disagreeing and only 7,68% agreeing or totally agreeing. Additionally, this question shows a negative correlation with economic value (R= -0,154; Sig = 0,01) as expected, meaning that the more they value salary and career policies (economic value elements) in this scenario, the more they value the economic value dimension.

Figure 9- Economic value measurement in the social value scenario.

The fifth question asks respondents if they would consider Software Wizard an excellent employer regardless of not promoting self-realization nor creating value for their professional career (low development value; *Figure* 10). The mean (μ) of replies was 2,17 (σ=0,996) on a scale from 1 to 5. In this question, most respondents disagree (35,56%) with a total of 65,05% disagreeing or totally disagreeing that Software Wizard would still be an excellent employer, versus the 10,1% that agree or totally agree. Additionally, this question shows a negative correlation with economic (R= -0,110; Sig = 0,05) and social value (R= -0,92; Sig = 0,05), meaning the more they value economic and social dimensions, the more they value self-realization and professional career value (development value elements) in this scenario.

Figure 10- Development value measurement in social value scenario.

The next scenario is about "Quickbot", which is a fictive company advertising with the focus on application value. Firstly, respondents were asked if they agree that this company is an excellent employer (*Figure* 11). The mean (μ) of replies was 3,89 (σ=0,834; *Appendix* 11) on a scale from 1 to 5, with most participants agreeing (48,28%) and a total of 71,31% agreeing or totally agreeing that Quickbot is an excellent employer (versus the 4,65% that disagree). As expectable, this question shows a strong positive correlation with application value (R= 0,170; Sig = 0,01) since the scenario clearly highlights application value elements, as well as social (R= 0,146; Sig = 0,01), interest(R= 0,198; Sig = 0,01), and development value(R= 0,221; Sig = 0,01). This means that the more participants consider Quickbot an excellent employer, the more they tend to value these dimensions.

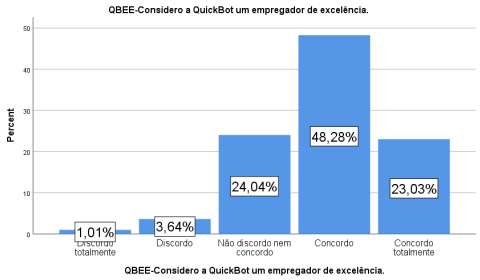

Figure 11- Application value scenario attractiveness measurement.

The second question asks respondents if they would consider Quickbot an excellent employer regardless of not having a challenging work environment nor caring for innovation and product quality (low-interest value; *Figure* 12). The mean (μ) of replies was 2,50 (σ=1,0) on a scale from 1 to 5. In this question, even though most participants don't agree nor disagree (33,94%), there is an inclination towards disagreeing with the affirmation, since 50,1% disagree or totally disagree versus the 15,96% that agree or totally agree that Quickbot would still be an excellent employer. Additionally, this question shows a negative correlation with interest value (R= -0,184; Sig = 0,01) as expected, as well as social (R= -0,98;Sig=0,05) and economic value (R= -0,122; Sig=0,01). This means that the more they value these dimensions, the more they value a challenging work environment where there is care for innovation and product quality (interest value elements) in this scenario.

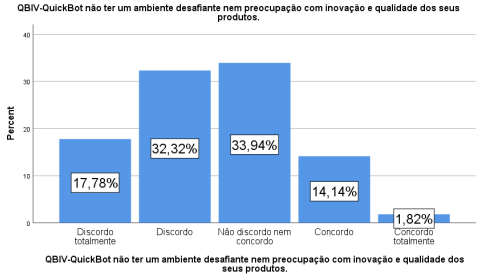

Figure 12- Interest value measurement in application value scenario.

The third question asks respondents if they would consider Quickbot an excellent employer regardless of not having a happy work environment and having unsupportive and discouraging colleagues (low social value; *Figure* 13). The mean (μ) of replies was 2,22 (σ=0,936) on a scale from 1 to 5, meaning that most of the respondents disagree (41,82%) with a total of 65,25% disagreeing or totally disagreeing that Quickbot would still be an excellent employer. As expected, this question shows a negative correlation with social value (R= -0,267; Sig = 0,01), as well as interest (R= -0,111; Sig = 0,05), development (R= -0,093; Sig = 0,05), and economic value (R= -0,124; Sig = 0,01) meaning the more they worry about having a happy work environment with supportive and encouraging colleagues (social value elements) in this scenario, the more they value these dimensions.

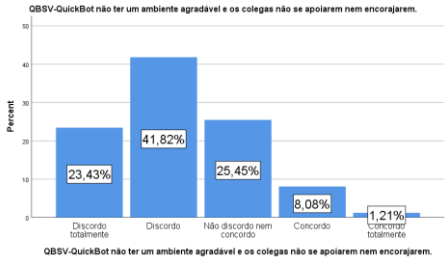

Figure 13- Social value measurement in application value scenario.

The fourth question asks respondents if they would consider Quickbot an excellent employer regardless of salary and career policies being below average (low economic value; *Figure* 14). The mean (μ) of replies was 2,36 (σ= 0,955) on a scale from 1 to 5. In this question, even though most respondents don't agree nor disagree (35,15%) that Quickbot would still be an excellent employer, there is an inclination towards disagreeing with a total of 53,94% disagreeing or totally disagreeing and only 10,91% agreeing or totally agreeing. Additionally, this question shows a negative correlation with economic value (R= -0,184; Sig = 0,01) as expected, as well as social value (R=0,102;Sig=0,05) meaning that the more they value salary and career policies (economic value elements) in this scenario the more they value the economic and social value dimension.

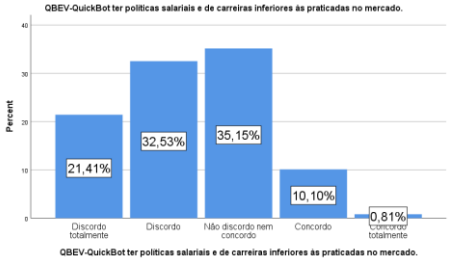

Figure 14- Economic value measurement in the application value scenario.

The fifth question asks respondents if they would consider Quickbot an excellent employer regardless of not promoting self-realization nor creating value for their professional career (low development value; *Figure* 15). The mean (μ) of replies was 2,16 (σ=0,975) on a scale from 1 to 5. In this question, most respondents disagree (37,37%) with a total of 66,26% disagreeing or totally disagreeing that Quickbot would still be an excellent employer, versus the 9,9% that agree or totally agree. Additionally, this question shows a negative correlation with social (R= -0,150; Sig = 0,01), interest (R= -0,123; Sig = 0,01), development (R= -0,92; Sig = 0,05), and economic value (R= -0,176; Sig = 0,05), meaning the more they value these dimensions, the more they value self-realization and professional career value (development value elements) in this scenario.

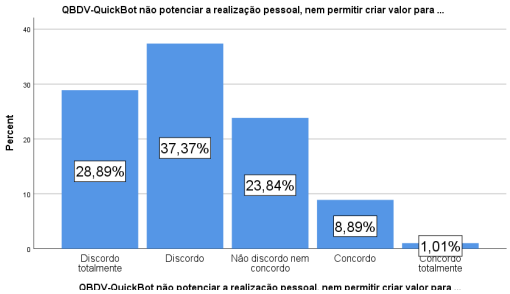

Figure 15- Development value measurement in the application value scenario.

The next scenario is about "COMPUTORIAL", which is a fictive company advertising with the focus on application value. Firstly, respondents were asked if they agree that this company is an excellent employer (*Figure* 16). The mean (μ) of replies was 4,11 (σ=0,895; *Appendix* 11) on a scale from 1 to 5, with most participants agreeing totally (39,60%) and a total of 76,77% agreeing or totally agreeing that COMPUTORIAL is an excellent employer (versus the 4,44% that disagree). As expectable, this question shows a strong positive correlation with economic value (R= 0,177; Sig = 0,01) since the scenario clearly highlights economic value elements, as well as social (R= 0,119; Sig = 0,01) and development value (R= 0,144; Sig = 0,01). This means that the more participants value these dimensions, the more they consider COMPUTORIAL an excellent employer.

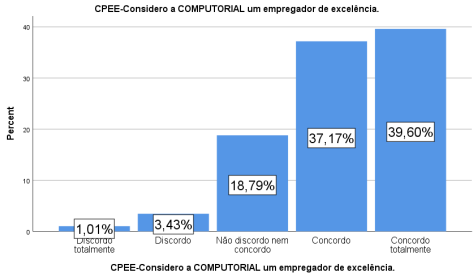

Figure 16- Economic value attractiveness measurement.

The second question asks respondents if they would consider COMPUTORIAL an excellent employer regardless of not having a challenging work environment nor caring for innovation and product quality (low-interest value; *Figure* 17). The mean (μ) of replies was 2,79 (σ=1,093) on a scale from 1 to 5. In this question, even though most participants don't agree nor disagree (32,12%), there is a slight inclination towards disagreeing with the affirmation, since 41,01% disagree or totally disagree versus the 26,87% that agree or totally agree that COMPUTORIAL would still be an excellent employer. Additionally, this question shows a negative correlation with interest value (R= -0,176; Sig = 0,01) as expected, as well as application value (R= -0,182;Sig=0,01). This means that the more they value these dimensions, the more they value a challenging work environment where there is care for innovation and product quality (interest value elements) in this scenario.

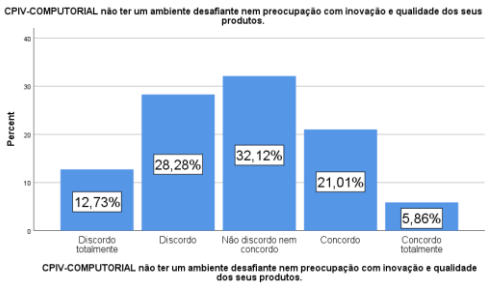

Figure 17- Interest value measurement in the economic value scenario.

The third question asks respondents if they would consider COMPUTORIAL an excellent employer regardless of not having a happy work environment and having unsupportive and discouraging colleagues (low social value; *Figure* 18). The mean (μ) of replies was 2,52 (σ=0,996) on a scale from 1 to 5. In this question, most of the respondents don't agree nor disagree (36,16%) with a total of 49,29% disagreeing or totally disagreeing and only 14,55% agreeing or totally agreeing that COMPUTORIAL would still be an excellent employer. As expected, this question shows a negative correlation with social value (R= -0,174; Sig = 0,01), as well as application value (R= -0,108; Sig = 0,05), meaning the more they worry about having

a happy work environment with supportive and encouraging colleagues (social value elements) in this scenario, the more they value these dimensions.

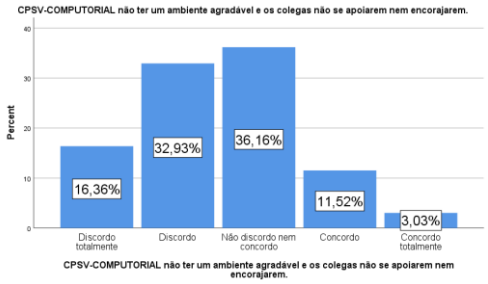

Figure 18- Social value measurement in the economic value scenario.

The fourth question asks respondents if they would consider COMPUTORIAL an excellent employer regardless of not contributing to society nor caring for sharing knowledge (low application value; *Figure* 19). The mean (μ) of replies was 2,64 (σ= 1,102) on a scale from 1 to 5. In this question, most respondents disagree (32,53%) that COMPUTORIAL would still be an excellent employer, with a total of 48,29% disagreeing or totally disagreeing and only 23,64% agreeing or totally agreeing. Additionally, this question shows a negative correlation with application value (R= -0,201; Sig = 0,01) as expected, as well as social (R= -0,127;Sig=0,01), interest (R= -0,143; Sig=0,01), and development value (R= -0,106; Sig=0,05). This means that the more they value these dimensions, the more they value contributing to society and sharing knowledge (application value elements) in this scenario.

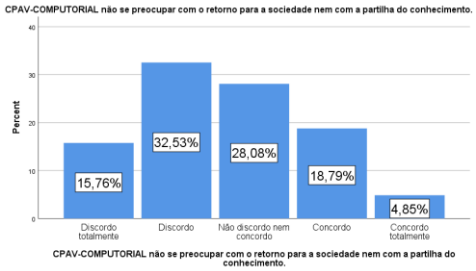

Figure 19- Application value measurement in the economic value scenario.

The fifth question asks respondents if they would consider COMPUTORIAL an excellent employer regardless of not promoting self-realization nor creating value for their professional career (low development value; *Figure* 20). The mean (μ) of replies was 2,32 (σ=1,086) on a scale from 1 to 5. In this question, most respondents disagree (32,53%) with a total of 59,20% disagreeing or totally disagreeing that COMPUTORIAL would still be an excellent employer, versus the 15,15% that agree or totally agree. Additionally, this question shows a negative correlation with social value (R= -0,114; Sig = 0,01) meaning the more respondents value self-realization and professional career value (development value elements) in this scenario, the more value they attribute to the social value dimension.

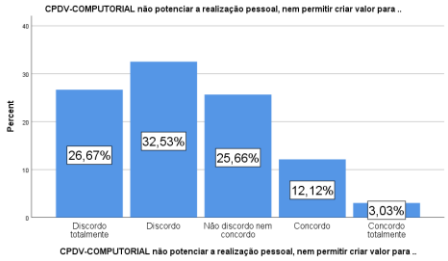

Figure 20- Development value measurement in the economic value scenario.

The last scenario is about "Massive Code", which is a fictive company advertising with the focus on development value. Firstly, respondents were asked if they agree that this company is an excellent employer (*Figure* 21). The mean (μ) of replies was 3,64 (σ=0,927; *Appendix* 11) on a scale from 1 to 5, with most participants agreeing (39,80%) and a total of 57,38% agreeing or totally agreeing that COMPUTORIAL is an excellent employer (versus the 8,49% that disagree). As expectable, this question shows a strong positive correlation with development value (R= 0,155; Sig = 0,01) since the scenario clearly highlights development value elements, as well as interest (R= 0,133; Sig = 0,01) and application value (R= 0,103; Sig = 0,05). This means that the more participants value these dimensions, the more they consider Massive Code an excellent employer.

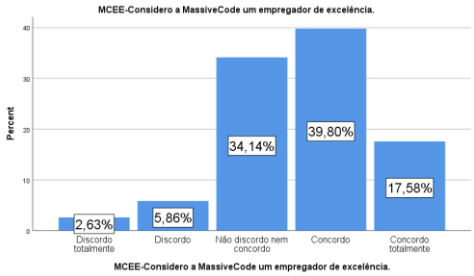

Figure 21- Development value attractiveness measurement.

The second question asks respondents if they would consider Massive Code an excellent employer regardless of not having a challenging work environment nor caring for innovation and product quality (low-interest value; *Figure* 22). The mean (μ) of replies was 2,42 (σ=0,976) on a scale from 1 to 5. In this question, most participants disagree (32,73%) with 54,35% of respondents disagreeing or totally disagreeing and only 12,93% agreeing or totally agreeing that Massive Code would still be an excellent employer. Additionally, this question shows a negative correlation with interest value (R= -0,154; Sig = 0,01) as expected, as well as application (R= -0,103;Sig=0,01), social (R= -0,108; Sig=0,05) and development value (R= -0,155; Sig=0,05). This means that the more they value these dimensions, the more they value a challenging work environment where there is care for innovation and product quality (interest value elements) in this scenario.

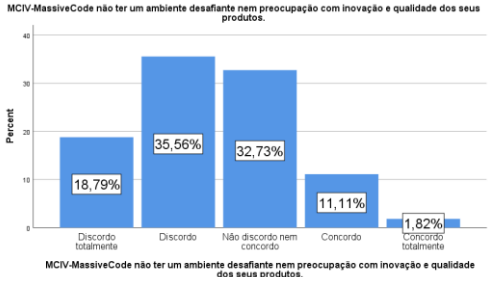

Figure 22- Interest value measurement in the development value scenario.

The third question asks respondents if they would consider Massive Code an excellent employer regardless of not having a happy work environment and having unsupportive and discouraging colleagues (low social value; *Figure* 23). The mean (μ) of replies was 2,35 (σ=0,872) on a scale from 1 to 5. In this question, most of the respondents disagree (41,62%) with a total of 58,19% disagreeing or totally disagreeing and only 8,49% agreeing or totally agreeing that Massive Code would still be an excellent employer. As expected, this question shows a negative correlation with social value (R= -0,161; Sig = 0,01), meaning the more they worry about having a happy work environment with supportive and encouraging colleagues (social value elements) in this scenario, the more value they attribute to the value the social value dimension.

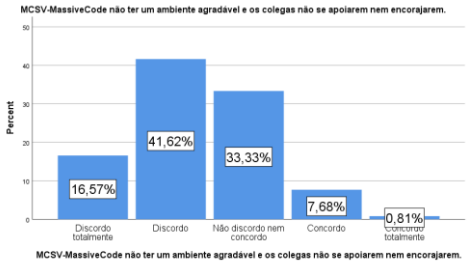

Figure 23- Social value measurement in the development value scenario.

The fourth question asks respondents if they would consider Massive Code an excellent employer regardless of not contributing to society nor caring for sharing knowledge (low application value; *Figure* 24). The mean (μ) of replies was 2,35 (σ= 1,016) on a scale from 1 to 5. In this question, most respondents disagree (35,56%) that Massive Code would still be an excellent employer, with a total of 58,39% disagreeing or totally disagreeing and only 14,15% agreeing or totally agreeing. Additionally, this question shows a negative correlation with application value (R= -0,173; Sig = 0,01) as expected, as well as social (R= -0,183;Sig=0,01), interest (R= -0,181; Sig=0,01), and development value (R= -0,098; Sig=0,05). This means that the more they value these dimensions, the more they value contributing to society and sharing knowledge (application value elements) in this scenario.

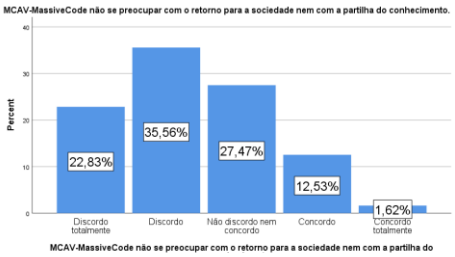

Figure 24- Application value measurement in the development value scenario.

The fifth question asks respondents if they would consider Massive Code an excellent employer regardless of salary and career policies being below average (low economic value; *Figure* 25). The mean (μ) of replies was 2,24 (σ= 0,908) on a scale from 1 to 5. In this question, most respondents disagree (36,16%) that Massive Code would still be an excellent employer, with a total of 59,80% disagreeing or totally disagreeing and only 7,07% agreeing or totally agreeing. Additionally, this question shows a negative correlation with economic value (R= -0,145; Sig = 0,01) as expected, meaning that the more they value salary and career policies (economic value elements) in this scenario, the more value they attribute to the economic value dimension.

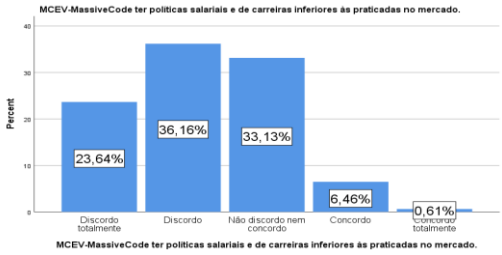

Figure 25- Economic value measurement in the development value dimension.

3.1.2. Dimension and scenario analysis

After analysing the previous questions, it is important to compare IT students' intentions to apply for a job in each scenario (a first question of every scenario representing a specific dimension) with the value they attribute to each dimension (*Figure* 26).

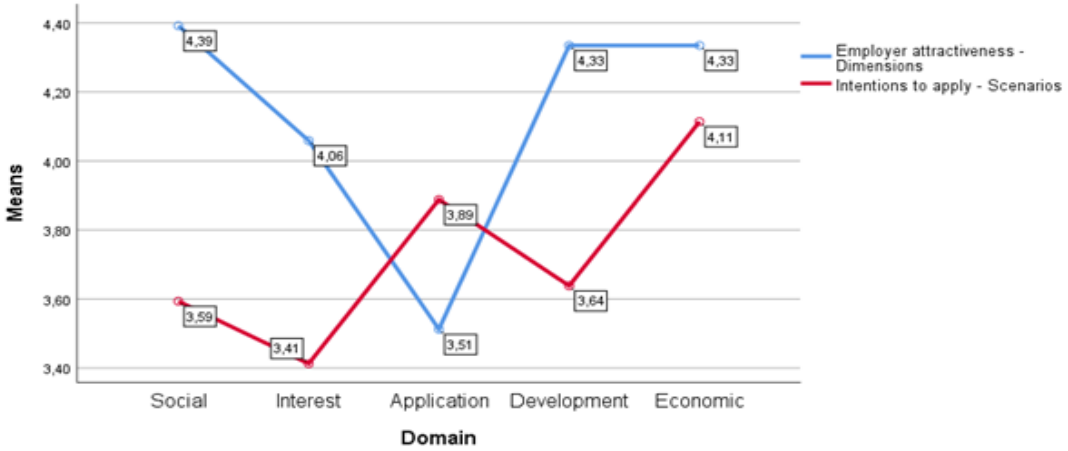

Figure 26- Employer attractiveness and intentions to apply - comparison per dimension.

In order to statistically describe the previous *Figure,* the represented means were all tested with ANOVA repeated measures for more than 2 paired samples (all the assumptions were verified). In turn, the tests were applied three times as the scenario questions were compared with the dimensions, and both the dimensions and the scenario questions were compared with themselves (*Appendix* 13). As seen, this comparison shows very interesting findings. The means of the dimensions are all significantly different from IT students' intentions to apply for a job in the correspondent scenario. Moreover, employer attractiveness dimensions surpassed intentions to apply for a job in every scenario, with the exception of application value. When trying to conceive the dimension ranking preference according with employer attractiveness, the most valued dimension is social value (μ=4,39; σ=0,55), followed by economic (μ= 4,33; σ=0,60) and development value (μ=4,33; σ=0,61) with the same attributed value, interest value (μ=4,06; σ=0,59), and lastly application value (μ=3,51; σ= 0,72). Although, the means of social, economic and development value are not statistically different, unlike interest and application value which have statistically different means from every dimension. Therefore, dimensions ranked as follows: 1st - social, economic and development value, 2nd - interest value, 3rd - application value. On the other hand, when trying to conceive the dimension ranking preference according with intentions to apply for a job (measured by the scenarios), the most valued dimension is economic value (μ= 4,11; σ= 0,89), followed by application value (μ= 3,89; σ= 0,83), development value (μ= 3,64; σ= 0,93), social value (μ= 3,59; σ= 0,91), and lastly interest value (μ= 3,41; σ= 0,79). Nevertheless, the mean of social value is not significantly different from the mean of development value. Therefore, according to the intentions to apply for a job, dimensions ranked as follows: 1st – economic value, 2nd – application value, 3rd – development and social value, 4th – interest value. As seen from the ranked preferences, dimensions ranked very differently according to the questions under analysis.

3.1.3. Dimension analysis according to different sample characteristics

After this analysis, the dimensions were studied regarding the sample's individual characteristics. A series of t-tests were performed, including the one way-ANOVA, with the purpose of comparing means regarding gender, students' professional situation and students' university year of attendance (*Appendix* 14). As expected there were no significant differences between students that attend different universities, so this test was excluded from the study.

When it comes to gender, a t-test for independent samples was performed to compare the means between male and female IT students. The population is considered to be approximately normal, as every group under analysis has $N \geq 30$. Equality of variances was verified for interest,

application, economic and development value as the null hypothesis for Levene's statistics that the two samples come from populations with equal variance (for each dimension $\sigma^2_1=\sigma^2_2$) was not rejected (Sig (α) $\geq$ 0,05). With these assumptions under consideration, it is possible to see that women attributed more value to every dimension when compared to men. Although, the mean of answers was only significantly higher for social, application, economic and development value. Therefore, the null hypothesis that the means for men and women are not different ($\mu_1=\mu_2$), was rejected for these dimensions ($\mu_1\neq\mu_2$). Consequently, this null hypothesis is not rejected for interest value, since the mean of answers was not significantly different when comparing male and female IT students.

The same test was applied to compare means regarding students' professional situation. In other words, the test was applied to compare means between IT students who just study and IT students who study and work. All the necessary assumptions were verified, and equality of variances was seen for every dimension. With the given results, it was possible to conclude that the mean of answers is not significantly different between groups for every dimension.

The university year of attendance was studied using one-way ANOVA. Since every group under analysis has N $\geq$ 30, the population was considered to be approximately normal. As for the second assumption, Levene's statistics verified the equality of variances for every dimension as the null hypothesis that the three samples come from populations with equal variance (for each dimension $\sigma^2_1=\sigma^2_2=\sigma^2_3=\sigma^2_4=\sigma^2_5$) was not rejected (Sig (α) $\geq$ 0,05). Results showed that the means for the 5 groups under analysis are the same for social, application, economic and development value (H_0: $\mu_1=\mu_2=\mu_3=\mu_4=\mu_5$). However, this null hypothesis was rejected for interest value (F=3,238; Sig (α)= 0,012; p $\leq$ 0,05) showing that there are at least two groups different from each other (H_1: $\mu_1\neq\mu_2$, for some pair (i,j) with i$\neq$j). The Scheffe post hoc analysis was performed in order to find out which groups differed from each other in this dimension. The analysis showed that the means for interest value are significantly different between students in their 1st year of bachelor's degree (μ=4,18;σ= 0,53) and their last year of master's degree (μ=3,87;σ=0,65), whereby the null hypothesis that the mean for interest value between these groups is not statistically different ($\mu_1=\mu_2$), is rejected (Sig (α)= 0,029; p $\leq$ 0,05).

3.2. Intentions to Apply for a Job Analysis

Intentions to apply for a job were measured by the first question of every scenario. For this analysis, 5 multiple linear regression models were performed in order to measure IT students' intentions to apply for each company portrayed by the scenarios (dependent variable). The sample's individual characteristics (like gender), channel credibility and employer

attractiveness dimensions were all tested as independent variables that could explain IT students' intentions to apply for a job.

Firstly, the test-F for global validity of each multiple linear regression model was applied. Arguably, all the five multiple linear regression models (*Appendix* 15) were validated as the null hypothesis (H_0: $\beta_1=\ldots=\beta_k=0$, k – nº of independent variables) was rejected ($Sig(\alpha)\leq 0,05$). It was concluded that at least some of the explanatory variables used are important in explaining the dependent variable "intentions to apply for a job" in every company portrayed by the scenarios (H_1: $\exists\beta_{k\neq}0$). Therefore, all the required assumptions were verified: sample drawn at random; linearity of the relationship between variables; normality of the random error; mean of the random error is null; variance of the random error is constant; independence between the random error and the independent variables; and independence of the random errors. This being, the analysis proceeded, and the relevant results were summarized in *Table 7.*

Intentions to apply	**Sample Characteristics**	**Employer attractiveness**	**Channels**	**R^2**
HeyDeveloper	Gender + Year of attendance -	Application value +	NO MATCH	0,167
Software Wizard	NO MATCH	Social value +	Campus Fairs +	0,067
Quickbot	Year of attendance -	Economic value -	NO MATCH	0,139
COMPUTORIAL	Gender + Year of attendance -	Economic value +	Facebook +	0,117
Massive Code	Gender + Year of attendance -	Economic value -	LinkedIn + Campus Fairs +	0,135

Table 7- Intentions to apply for each scenario- Results from 5 multiple linear regression models

By looking at the T-tests to the coefficients β for the HeyDeveloper scenario, it is concludable that only gender, university year of attendance and application value should be kept in the model, since the null hypothesis (H_0: $\beta_k=0$) was rejected ($Sig(\alpha)\leq 0,05$), therefore concluding that these variables are useful in explaining IT students' intentions to apply for HeyDeveloper (H_1: $\beta_k\neq 0$). All the remaining variables had $Sig(\alpha)\geq 0,05$ and were considered not important to explain this dependent variable. In addition, 16,7% (R^2) of the variation of Y (intentions to apply for HeyDeveloper) is explained by the explanatory variables in the model ($\hat{Y}$= 1,407 + 0,138*application+0,232*sexo-0,125*habilitaçaoliteraria). University year of attendance (habilitação literária) is the most important variable to explain the variation of Y (standardized coefficient = -0,220).

After analysing the unstandardized coefficients, several conclusions were made: a unit increase in the application value leads to an increase of 0,138 points in the intentions to apply for

HeyDeveloper; since gender is defined by 0=Male and 1=Female in the new codification, male is the reference category, and on average women have 0,232 more intentions to apply for HeyDeveloper than men; on average, master's students have 0,125 fewer intentions to apply for HeyDeveloper than undergraduate students.

When looking at the T-tests to the coefficients β for the Software Wizard scenario, it is concludable that only social value and campus fairs' credibility should be kept in the model, since the null hypothesis (H_0: $\beta_k=0$) was rejected ($Sig(\alpha)\leq 0,05$), therefore concluding that these variables are useful in explaining IT students' intentions to apply for Software Wizard (H_1: $\beta_k\neq 0$). All the remaining variables had $Sig(\alpha)\geq 0,05$ and were considered not important to explain this dependent variable. In addition, 6,7% (R^2) of the variation of Y (intentions to apply for Software Wizard) is explained by the explanatory variables in the model ($\hat{Y}$= 1,453 +0,213*social+0,139*feiras). Social value is the most important variable to explain the variation of Y (standardized coefficient = 0,124).

After analysing the unstandardized coefficients, several conclusions were made: a unit increase in the social value leads to an increase of 0,213 points in the intentions to apply for Software Wizard; a unit increase in campus fair credibility leads to an increase of 0,139 points in the intentions to apply for Software Wizard.

When looking at the T-tests to the coefficients β for the Quickbot scenario, it is concludable that only economic value and university year of attendance should be kept in the model, since the null hypothesis (H_0: $\beta_k=0$) was rejected ($Sig(\alpha)\leq 0,05$), therefore concluding that these variables are useful in explaining IT students' intentions to apply for Quickbot (H_1: $\beta_k\neq 0$). All the remaining variables had $Sig(\alpha)\geq 0,05$ and were considered not important to explain this dependent variable. In addition, 13,9% (R^2) of the variation of Y (intentions to apply for Quickbot) is explained by the explanatory variables in the model ($\hat{Y}$= 2,241 -0,174*economic-0,123*habilitacaoliteraria). University year of attendance (habilitação literária) is the most important variable to explain the variation of Y (standardized coefficient = -0,204).

After analysing the unstandardized coefficients, several conclusions were made: a unit increase in the economic value leads to a decrease of 0,174 points in the intentions to apply for Quickbot; on average, master's students have 0,123 fewer intentions to apply for Quickbot than undergraduate students

Regarding the T-tests to the coefficients β for the Computorial scenario, it is concludable that only gender, university year of attendance, economic value and Facebook credibility should be kept in the model, since the null hypothesis (H_0: $\beta_k=0$) was rejected ($Sig(\alpha)\leq 0,05$), therefore concluding that these variables are useful in explaining IT students' intentions to apply for

Computorial (H_1: $\beta_k \neq 0$). All the remaining variables had Sig(α)≥0,05 and were considered not important to explain this dependent variable. In addition, 11,7% (R^2) of the variation of Y (intentions to apply for Computorial) is explained by the explanatory variables in the model ($\hat{Y}$=2,375 + 0,218*economic + 0,251*sexo -0,112*habilitaçaoliteraria + 0,123*facebook). University year of attendance (habilitação literária) is the most important variable to explain the variation of Y (standardized coefficient = -0,171).

After analysing the unstandardized coefficients, several conclusions were made: a unit increase in the economic value leads to an increase of 0,218 points in the intentions to apply for Computorial; since gender is defined by 0=Male and 1=Female in the new codification, male is the reference category, and on average women have 0,251 more intentions to apply for Computorial than men; on average, master's students have 0,112 fewer intentions to apply for Computorial than undergraduate students; a unit increase in Facebook credibility leads to an increase of 0,123 points in the intentions to apply for Computorial.

Regarding the T-tests to the coefficients β for the Massive Code scenario, it is concludable that only gender, university year of attendance, economic value, campus fairs' and LinkedIn credibility should be kept in the model, since the null hypothesis (H_0: $\beta_k=0$) was rejected (Sig(α)≤0,05), therefore concluding that these variables are useful in explaining IT students' intentions to apply for Massive Code (H_1: $\beta_k \neq 0$). All the remaining variables had Sig(α)≥0,05 and were considered not important to explain this dependent variable. In addition, 13,5% (R^2) of the variation of Y (intentions to apply for Massive Code) is explained by the explanatory variables in the model ($\hat{Y}$=1,740-0,156*economic+0,308*sexo-0,093*habilitaçaoliteraria +0,143*linkedIn+0,156*feiras). Gender (sexo) is the most important variable to explain the variation of Y (standardized coefficient = 0,144).

After analysing the unstandardized coefficients, several conclusions were made: a unit increase in the economic value leads to a decrease of 0,156 points in the intentions to apply for Massive Code; since gender is defined by 0=Male and 1=Female in the new codification, male is the reference category, and on average women have 0,308 more intentions to apply for Massive Code than men; on average, master's students have 0,093 fewer intentions to apply for Massive Code than undergraduate students; a unit increase in LinkedIn credibility leads to an increase of 0,143 points in the intentions to apply for Massive Code; a unit increase in Campus fairs' credibility leads to an increase of 0,156 points in the intentions to apply for Massive Code.

3.3. Media channel analysis

The media channel analysis starts with questions 1 and 2 from section VII. Respondents are asked which media channels they consider being more adequate to advertise job opportunities in the first question and which media channels they prefer to use to find job advertisements in the second question. As seen by *Figure* 27, the answers look very similar when comparing both questions. The Qui-square (χ^2) test for homogeneity was applied with 0 cells having expected count inferior to 5 and the minimum expected count is 7,99. As expected, the null hypothesis that for both questions, the distribution of media channels' usability is the same, was not rejected (Sig(α)= 0,997; p≥0,05). On the other hand, the same test was applied to confirm the differences between media channels in each question and as expected, the null hypothesis was now rejected for both questions (Sig(α)=0,00;p≤0,05). Therefore, in spite of not existing significant differences between questions, there are significant differences between media channels within each question (*Appendix* 16).

This being, for the first question the most selected media was LinkedIn, selected 453 times, in 91,5% of cases, followed by campus fairs, selected 407 times in 82,2% of cases and WOM from a company employee, selected 378 times in 76,4% of cases. After these three media channels, Facebook was selected 120 times in 24,2% of cases, then newspapers selected 67 times in 13,5% of cases and finally Twitter, selected 45 times in 9,1% of cases. For the second question, all media ranked the same position, with LinkedIn selected 450 times in 92,2% of cases, followed by campus fairs, selected 398 times in 81,6% of cases and WOM from a company employee, selected 367 times in 75,2% of cases. After these three media channels, Facebook was selected 121 times in 24,8% of cases, then newspapers selected 75 times in 15,4% of cases and finally Twitter, selected 33 times in 6,8% of cases.

In conclusion, media channels' usability for both questions rank as follows: 1st – LinkedIn, 2nd – campus fairs, 3rd – WOM from a company employee, 4th – Facebook, 5th – Newspapers, 6th – Twitter.

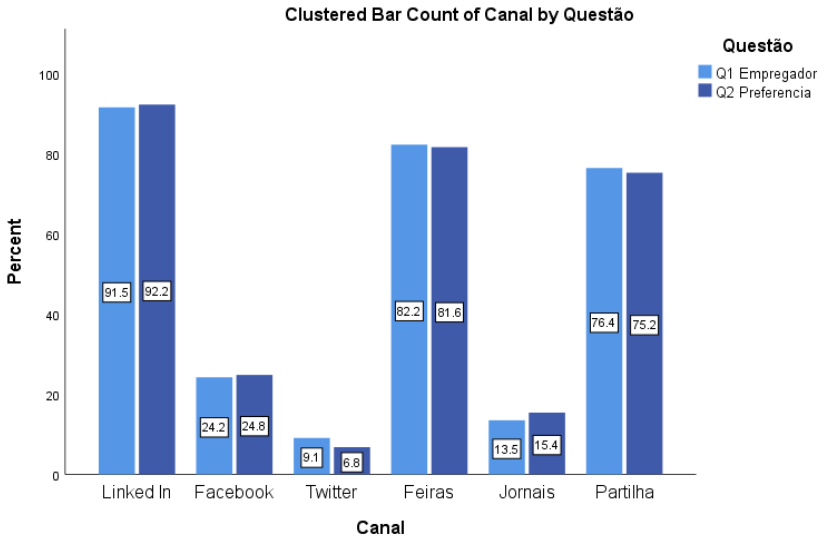

Figure 27- Media channel's usability.

When using the previously referred variable codification, it is possible to distinguish IT students' preference regarding traditional or social media channels (*Figure* 28).

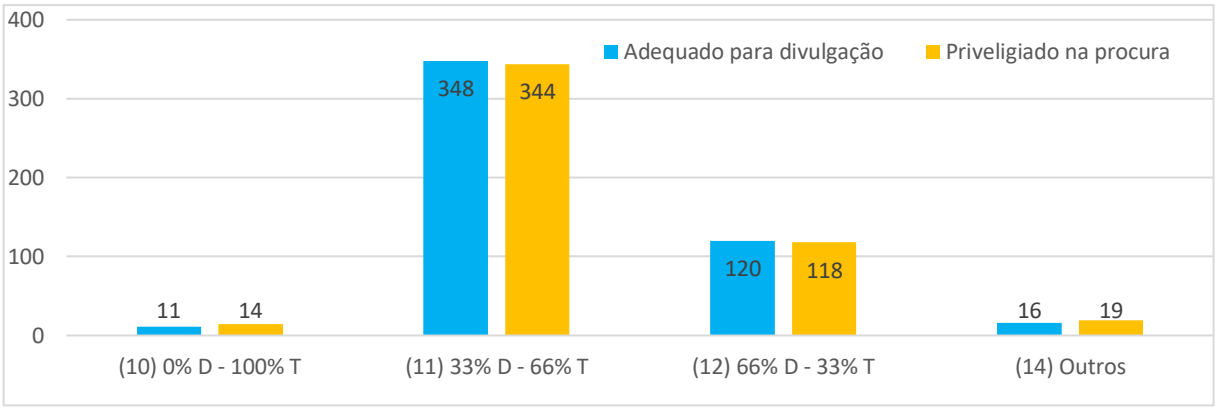

Figure 28- Media Channels' usability per combination type.

Since participants were asked to select 3 media channels in both questions, different combinations of choices can be made. As seen, the most picked combination had 2 traditional channels and only 1 social media channel for both questions. This combination of media channels was picked 348 times for question 1 and 344 times for question 2. The combination with 2 social media channels and 1 traditional channel was also often picked (120 times for the first question and 118 times for the second question), followed by a combination with 3 traditional media channels (picked 11 times for the first question and 14 times for the second). The third question asks respondents to evaluate each media channel's credibility in a 5-point Likert scale. Results are shown in *Figure* 29 and the ANOVA repeated measures for more than 2 paired samples was applied to confirm the mean differences (*Appendix* 17). Since the null hypothesis that there is sphericity between variables is rejected (Sig(α)=0,00;p≤0,05), the ANOVA was done through the Greenhouse-Geisser test. Results show that there are significant

differences between at least 2 media channels. More specifically, in spite of LinkedIn(μ=4,46;σ=0,76), WOM from a company employee(μ=4,46;σ=0,73) and campus fairs' (μ=4,45;σ=0,73) means not being significantly different from each other, they differ from every other media channel. In addition, Facebook(μ=2,40;σ=0,94), Twitter(μ=2,06;σ=0,95) and newspapers(μ=3,37;σ=0,94) have means significantly different from all media channels. Concluding, IT students' ranked media channel credibility as follows: 1st – LinkedIn, campus fairs, WOM from a company employee; 2nd – newspapers; 3rd – Facebook; 4th – Twitter.

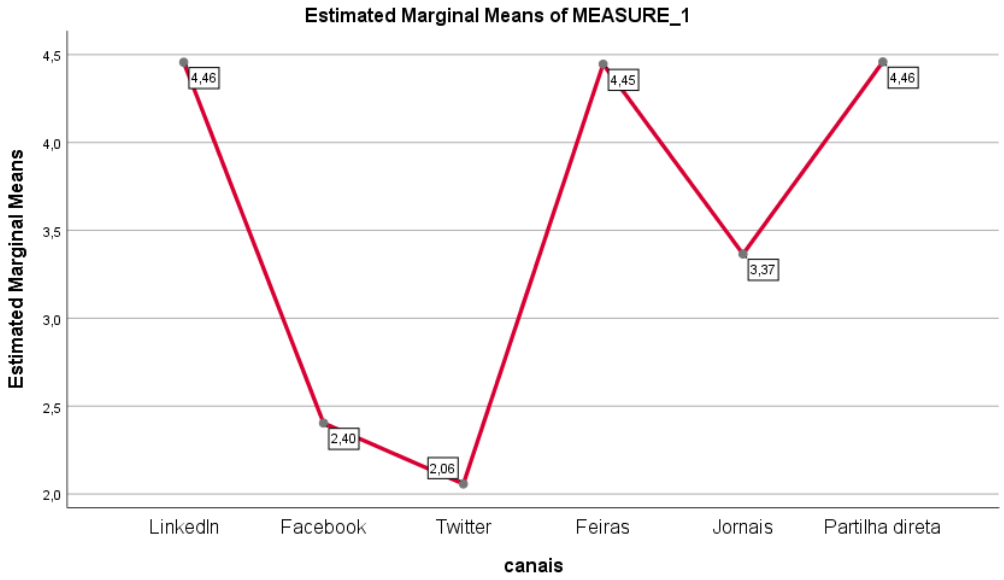

Figure 29- Media channel credibility.

The fourth question asks respondents if they are aware of any job advertisement that was publicized unduly or deceptively. Only 21,8% (106 students) answered: "yes", whereas 78,2% replied with "no" (380 students).

The last question asks respondents who answered "yes" in the previous question, to evaluate each media channel regarding the likelihood of deceptive job ads in a 5-point Likert scale. Results are shown in *Figure* 30 and the ANOVA repeated measures for more than 2 paired samples was applied to confirm the mean differences (*Appendix* 17). Since the null hypothesis that there is sphericity between variables is rejected (Sig(α)=0,00;p≤0,05), the ANOVA was done through the Greenhouse-Geisser test. Results show that there are significant differences between at least 2 media channels. More specifically, LinkedIn(μ=1,79;σ=1,01), campus fairs(μ=1,67;σ=0,83) and WOM from a company employee(μ=2,01;σ=1,12) do not have means significantly different from each other whereas differing from every other media channel. Newspapers' mean(μ=2,79;σ=1,04) is significantly different from all media channels.

Facebook(μ=3,98;σ=0,92) and Twitter(μ=3,86;σ=0,98) do not have significantly different means while differing from all the remaining media channels.

Concluding, the media channel's that are considered less likely to have deceptive behaviours are: 1st -LinedIn, campus fairs and WOM from a company employee; 2nd -newspapers; 3rd – Twitter and Facebook.

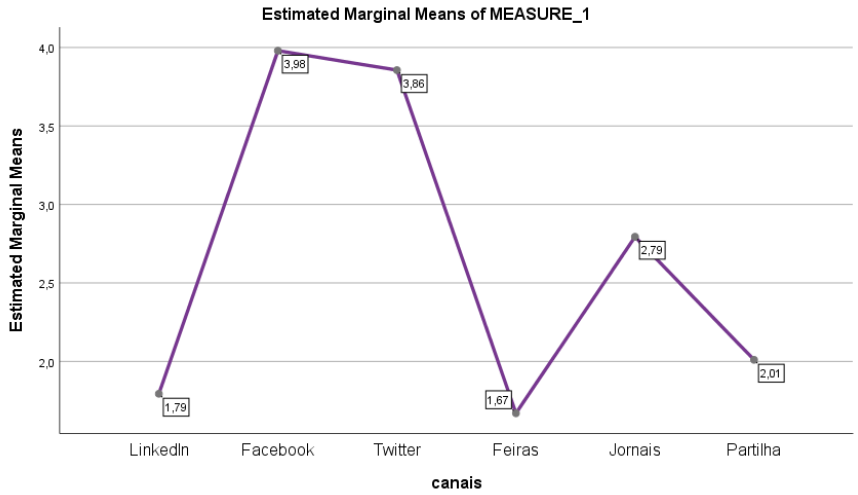

Figure 30- Media channels' attributed probability of having deceptive job ads.

Chapter IV. RESULTS DISCUSSION

H1: *The mean level of employer attractiveness dimensions is significantly different for every pair of dimensions.*

Results showed that in the globality of the sample, Portuguese IT students valued social, economic and development value equally, then interest value and lastly application value which means H1 is not verified. In short, the ideal company for these students has to provide recognition, self-worth and confidence as well as career-enhancing experiences, an above-average compensation package, promotion opportunities and a positive and pleasant social environment. The reason for the presented results may be linked with the fact that the three most valued dimensions are related to self-interest and things that IT students can benefit directly for themselves (for instance, salary above average), whereas interest and application value have a higher relation with third-party benefits (e.g. application value - organization that gives back to society; interest value - produces high-quality products and services). This assumption was tested and confirmed (*Appendix* 18) since the dimensions were compiled in there 2 groups (self-interest and externalities) that showed not only significant differences between the means of each other but also a very significant correlation (at the 0,01 Sig. level) between them (0,507).

It is important to notice that the dimension results are in accordance with the dimensions said to be most valued by millennials. Some studies say that the number one characteristic for this generation is an opportunity for continuous learning and skill development (Hirsch, 2016a; Meister & Willyerd, 2010 cited by Cascio & Graham, 2016) which are elements of the development value dimension. On the other hand, although the Silver Swan Recruitment report (2018) identified 87% of millennials saying that development is important, 52% of millennials agreed that career progression is their top priority, which is an element of the economic value dimension in this study. In addition, according to Roepe (2017), millennials want to feel a connection with the people they work with and describe their ideal manager as their best friend, which are social value elements. Since IT students are essentially millennials, it makes sense that they valued economic, social and development value over the remaining dimensions. Moreover, Reis and Braga (2016) studied generations with the EmpAt scale and millennials (gen Y) had the exact same hierarchy of valued dimensions, with the most valued also being development, economic and social value (even though development and economic value were significantly higher than social value). In conclusion, there seems to be a consensus between millennial employer attractiveness studies and the present study. Arguably, there are some exceptions, for instance, millennials in the north of Europe (wealthier countries) not valuing the economic dimension as much as the remaining dimensions (Sivertzen, Nilsen, & Olafsen, 2013).

Software engineering is also a very specific field. It is no secret that developers earn high incomes (Muratbekova-Touron & Galindo, 2018) and top IT employers reward them with attractive financial and non-monetary perks (Dabirian, Kietzmann, & Paschen 2019). In fact, some studies even affirm that IT professionals give precedence to employers offering competitive salaries and related benefits (e.g. Kaur, Sharma, Kaur, & Sharma, 2015; Frick, 2016). Nevertheless, it seems like Portuguese IT employers value non-monetary EVP factors over monetary ones (Gregorka, 2017) which can constitute a barrier to attracting and retaining IT young talent according to the findings of the present study. However, technology investment (interest value element) and good learning opportunities (application value element) are said to be valued over salary (economic value element) by IT professionals (Tambe, Ye., & Cappelli cited by Frick, 2016; Kucherov & Zamulin, 2016). It is clear in the literature that economic value is very important for these professionals, therefore reinforcing the findings of this study. It is also possible to conclude that salary is not the most important aspect of the economic value for this population, or else it would have scored lower than the other dimensions (confirmed by the mean levels: $\mu_{\text{above average salary}} = 4{,}29$; $\sigma = 0{,}78 \leq \mu_{\text{career progression opportunities}} = 4{,}50$; $\sigma = 0{,}66$).

H1a: *The mean level of employer attractiveness dimensions for men is significantly different than the mean level of employer attractiveness dimensions for women in every dimension.*

Women attributed significantly more value to the social, economic, development and application dimensions than men and scored higher on every dimension. Since this effect was not significant in the interest value dimension, H1a is not verified. In different fields, male and female students seek different benefits from employment (e.g. Wallace, Lings, & Cameron, 2012). Similar results were found in a study where female students also scored higher than male students in most of employer attractiveness dimensions (Alnıaçık & Alnıaçık, 2012). It seems as if female students are more uncertain about their employer preferences. Although, further research would be required to justify these differences.

H1b: *The mean level of employer attractiveness dimensions for people just studying is significantly different than the mean level of employer attractiveness dimensions for people who work and study, for every dimension.*

There were no significant differences between people only studying and people who work and study. Therefore, H1b is not verified. Similar results were found in studies that investigated the differences between employed and unemployed college students and differences between experienced workers and students (Alnıaçık & Alnıaçık, 2012; Arachchige & Robertson, 2013[b]). It was expected that working could change the perspective of college students because they could get a better understanding of what they want in an employer. According to these findings, generation and field characteristics are more important to justify employer attractiveness dimension perceptions than the students' professional situation.

H1c: *The mean level of employer attractiveness dimensions between people studying in different university years is significantly different for at least one pair of different university years.*

Results show that master's degree students on their last year attributed significantly less value to the interest value dimension than first-year bachelor's degree students. This means that either aging or the university education is having an impact on the value IT students attribute to a challenging and stimulating job, with innovative working practices, products and services in an environment that encourages creativity and innovation. In literature while some argue that as students get older, they will be more attracted to these attributes (Reis & Braga, 2016; Alnıaçık & Alnıaçık, 2012), there are also multiple studies defending that younger people tend to

prioritize novelties and challenges (Reis & Braga, 2016; Reis, et al. 2010 cited by Reis & Braga, 2016). Adding to the fact that none of the studies accounts for the specificities of the IT field (different samples were used), it is concludable that there is no consensus among authors regarding the effects that influence interest value perceptions and further research is required to justify these results.

H2: *The mean level of IT student's intentions to apply for a job is significantly different for every scenario.*

Results show that IT students presented higher intentions to apply for the economic value scenario, then the application value scenario, followed by development and social value equally and lastly interest value. Since there are no significant differences between the means of social and development value scenarios, H2 is not verified. Lastly, there is a lack of studies from which results can compare with this hypothesis.

H3: *The mean level of employer attractiveness dimensions is significantly higher than the mean level of IT student's intentions to apply for a job, for every scenario.*

For H3 employer attractiveness dimensions were expected to have superior means than the intentions to apply for each scenario since the scenarios portray the dimensions in a more realistic setting with the attributes of each dimension being delivered in a specific manner. On the other hand, employer attractiveness dimensions were measured with more abstract questions that leave room for respondents to fantasise about perfect and ideal elements. As seen in *Figure 26*, this effect occurred with every dimension with the exception of application value (therefore H3 is not verified). Although application value was the least valued dimension, its scenario was the 2nd most preferred. The higher shown intentions to apply in this scenario could mean that IT students attribute way more value to the application value dimension than they originally thought, and companies should invest in this dimension for their external marketing activities. The economic value was among the most valued dimensions and IT students have also shown high intentions to apply for its scenario. Interest value was amongst the least valued dimensions and low intentions to apply for its scenario were shown. On the other hand, the social value was the most valued dimension and IT students showed low intentions to apply for its scenario. The same effect happened with development value. While this could mean that IT students don't value social and development value dimensions as much as they think, it is likely that they highly value these dimensions but due to their characteristics, they are not well marketable. For instance, IT students can attribute a lot of value to having a good relationship

with colleagues and a fun environment while not believing in a job advertisement that says the environment is fun and colleagues are nice. This means that although these dimensions are indeed highly valued, they should not be highlighted in external marketing activities. Lastly, there is a lack of studies from which results can compare with this hypothesis.

H4: *At least one Employer attractiveness dimensions significantly impacts IT students' intentions to apply for a job.* ***H4a:*** *The interest value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.* ***H4b:*** *The social value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.* ***H4c:*** *The application value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.* ***H4d:*** *The economic value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.* ***H4e:*** *The development value dimension significantly impacts IT students' intentions to apply for a job in at least one scenario.*
H5: *Channel credibility and socio-demographic characteristics significantly impact IT students' intentions to apply for a job in at least one scenario.*

It is known that intentions to apply for a job are influenced and can be strengthened by employer attractiveness (Nugroho & Liswandi, 2018). For the purpose of this study, it is important to know the characteristics of this relation (*Table 7*). In the first scenario (HeyDeveloper) women have more intentions to apply than men which is not surprising, considering this scenario portrays interest value and women attributed more value to this dimension than men (although the difference is only marginal). Additionally, women entered the labour market later than men, which can cause an urge for innovation and a challenging workplace as they want to show their capacities at the maximum level in the workplace. It is also not surprising that master students have fewer intentions to apply for this scenario when compared to bachelors' students since they attributed significantly less value to the interest value dimension than the bachelor's students. This urge can also happen for younger people, in the same way, making younger students want to prove themselves and justify these results. Application value significantly impacts intentions to apply for HeyDeveloper too, since the more IT students value the application value dimension, the bigger the intentions to apply for HeyDeveloper. Even though this is the interest value scenario, an impact from the application value is not peculiar since these two dimensions are highly correlated (*Appendixes* 10, 12 and 18). Therefore, H4 and H4c are verified.

Intentions to apply for the second scenario (Software Wizard) are positively influenced by the social value dimension and campus fair's credibility. Naturally, since this scenario portrays the social value dimension and its elements, it was expected that the higher people value the social dimension, the higher their intentions to apply for this scenario. Similarly, the more credible they perceive campus fairs, which are social events, the more they were likely to apply for this scenario because the higher the chance they would believe in the advertised social elements. Therefore, H4b is verified as well as H5.

In the third scenario (Quickbot), the more value respondents attribute to the economic value dimension, the less they want to apply for this scenario. This may be due to the fact that this scenario is focused on the application value aspects and therefore people valuing economic elements are less attracted to application value elements. Additionally, master students have fewer intentions to apply in this scenario when compared to bachelors' students probably because since they have a lot more knowledge to apply, they get to choose from a much bigger variety of firms knowing that they will apply it even if it is not highlighted in the job ad. Therefore, H4d is verified.

In the fourth scenario (Computorial) women have more intentions to apply than men, which was expected, considering this scenario portrays economic value and women attributed more value to this dimension than men. In addition, generally, women earn smaller incomes than men and focusing on this dimension can help in closing that gap. Intentions to apply for Computorial are also positively influenced by economic value. Naturally, since this scenario portrays the economic value dimension and its elements, it was expected that the higher people value the economic dimension, the higher their intentions to apply for this scenario. Once again, master students have fewer intentions to apply for this scenario when compared to bachelors' students. This is maybe because bachelor students are still starting adulthood and the process of earning their financial independence, therefore attributing more value to things like big salaries and compensation packages. Lastly, the more credible Facebook is perceived, the higher intentions to apply for Computorial are. Possibly, Facebook job ads are generally more focused on economic value elements with above-average salaries. People that perceive these ads as credible tend to be enticed by these elements.

In the fifth scenario (Massive Code), the more value respondents attribute to the economic value dimension, the less they want to apply for this scenario. This may be due to the fact that this scenario is focused on the development value aspects and therefore people valuing economic elements are less attracted to development value elements. Women have more intentions to apply than men, which was expected, considering this scenario portrays development value and

women attributed more value to this dimension than men. Additionally, master students have fewer intentions to apply in this scenario when compared to bachelors' students. The reasons behind these results are likely the same presented in the first scenario where women also had superior intentions to apply over men and bachelor's students had superior intentions to apply than master students. Lastly, the more people perceive LinkedIn and campus fairs as credible, the more they want to apply for this scenario. There seems to be a link between these media channels and the development value elements portrayed by the scenario. Naturally, these channels are great for people looking for career-enhancing experiences and feeling good about working at a particular organization, since they allow users to carefully select their employers from a wide pool of companies.

In conclusion, H4a, H4c and H4e were not verified and the presented models varied from 3,6% to 16,7% (R^2) of variance explained by the independent variables. The values were not higher because intentions to apply for each scenario are also explained by other variables that were not considered in the models (e.g. the company being close from home, age, etc). It is also important to notice that the justification of some presented results are mere assumptions and ideas, and further research is required.

H6: *The usability of social media networks is significantly higher than the usability of traditional media channels.*

Social media is well-positioned to alter traditional practices (Langlois, 2014) and companies using it for recruitment are more attractive (Piric et al., 2018) and perceived as evolving and open to technological change (Dutta, 2014). For companies targeting millennials, online recruitment might be a strategic way to reach them (Brandão, Silva, & dos Santos, 2019), especially millennial IT students that highly value technology (Tambe, Ye, & Cappelli cited by Frick, 2016). But even if social media is cheaper and faster to reach, traditional media is less impersonal and enables more strategic access (Brandão et al., 2019). There seems to be a tendency for digital channels to gain more importance in comparison with traditional ones (e.g. Gregorka, 2017). Results show a very high preference for LinkedIn and campus fairs similarly to the results of Sinha and Thaly (2013) as well as word of mouth from a company employee. The fourth most selected media was Facebook, then Twitter and lastly Newspapers. The reason behind the 3 most used media channels may be that campus fairs have multiple uses and applications for both employers and potential job applicants (Mosley, 2014; Russel & Brannan, 2016), WOM from a company employee is highly attractive due to its credibility (Van Hoye, 2007 cited by Piric et al., 2018; Cable and Yu, 2006; Sullivan, 2013 cited by Poeppelman, 2014)

and LinkedIn caters for every stage of the recruitment funnel (Mosley, 2014). Different studies have also placed LinkedIn well ahead of Facebook which in turn is well ahead of Twitter (Chinthakayala et al., 2014), making LinkedIn the world's largest professional online service (Lucie, 2016; Bullhom, 2014; Silver Swan Recruitment, 2018). In addition, since IT students are mostly passive candidates prone to technology, LinkedIn was expected to be the chosen main tool (The Economist, 2014 cited by Lucie, 2016; SHRM, 2015 cited by Dhawan, 2016). Newspapers low usability was also expected due to the nature of the sample and recent studies (e.g. Sinha & Thaly, 2013). Since the most picked combination of media had 2 traditional and only 1 social media channel and the second most picked combination of media had 2 social media channels and only 1 traditional media channel, it is not possible to conclude that one has significantly higher usability than the other (H6 is not verified). Therefore, in spite of the tendency for digital media to gain importance (Gregorka, 2017), a multi-channel approach is advised since it is the only way to reach every talented candidate, as there are still many good potential applicants only using traditional or more digital media (Sinha & Thaly, 2013; Brandão et al., 2019).

H7: *The usability of channels IT students consider to be more important is significantly higher than the usability of channels IT students use the most.*

Since there were no significant differences between the selected media channels in the questions 1 and 2 of section VII, the channels IT students use the most and the channels IT students consider to be more important are not different, therefore H7 is not verified. Lastly, there is a lack of studies from which results can compare with this hypothesis.

H8: *There are significant differences between traditional media channels' credibility and social media networks' for at least one combination of media channels.*

The introduction of online channels has changed people's opinion of traditional media credibility (Kiousis, 2001). When it comes to advertising, traditional media channels had significantly higher levels of credibility than new media (Jordaan, Ehlers, & Grové, 2011). These findings were supported by multiple studies cited by the same authors (Anderson et al., 2007, Dotson & Hyatt, 2005, Wolburg & Pokrywczynski, 2001 cited by Jordaan et al., 2011). In different contexts, social media channels are also considered to be the least credible sources of information (e.g. Ho, Leong, Looi, & Chuah, 2019). However, contradictory research findings were found in millennial studies (Jordaan et al., 2011; Calisir, 2003, Seock & Chen-Yu, 2007, Tsang et al., 2004, cited by Jordaan et al., 2011).

Results show that LinkedIn, campus fairs and WOM from a company employee were all equally very credible in the minds of IT students. Conversely, Facebook and Twitter were the least credible media channels for IT students. WOM from a company employee and campus fairs were expected to be perceived as credible, since oral media like face to face interactions are usually rated with the highest richness and credibility (Cable & Yu, 2006; Reis & Mendes, 2019; Sullivan, 2013 cited by Poeppelman, 2014). As for LinkedIn, it was unexpected that IT students would rate a social media network as highly in credibility since the most common case of online recruitment fraud is employment scam (Vidros et al., 2017). Nevertheless, it seems like it is the only exception, probably because the remaining social media networks are used beyond the professional field which allows for more deceptive behaviors to occur. As for newspapers, they remain relatively credible even for this young generation (more credible than Facebook and Twitter but less credible than WOM, campus fairs and LinkedIn). There seems to be a link between credibility and usability since the media that is mostly used matches the media that is perceived as mostly credible. Concluding, since there are significant differences between at least one pair of channels, H8 is verified.

H9: *There are significant differences between traditional media channels' deceptive behaviour and social media networks' for at least one combination of media channels.*

Results show that LinkedIn, campus fairs and WOM from a company employee are perceived as less likely to have deceptive behaviours, then newspapers and lastly Twitter and Facebook which are perceived as more prone to show deceptive behaviour. These results are in accordance with the previously shown results, as the media channels perceived to be the most credible are also the media channels that IT students consider less likely to have deceptive behaviours. Therefore, there seems to be a link between usability, credibility and deception. Nevertheless, in this analysis the means of Facebook and Twitter are not significantly different, unlike the credibility analysis where Facebook was perceived as significantly more credible than Twitter. With the given results, it was expected that Facebook would have a significantly lower mean than Twitter, meaning that Facebook is perceived as having significantly less probability of deceptive behaviours. Since this was not the case, it might indicate that in reality, IT students perceive Twitter and Facebook as equally credible. In conclusion, there are significant differences between at least one pair of media channels, thus H9 is verified. Lastly, there is a lack of studies from which results can compare with this hypothesis.

Chapter V. CONCLUSIONS

Developing a unique employee value proposition is a vital management task (Bratton & Gold, 2012 cited by Edlinger, 2015) that represents the central message of the employer brand (Eisenberg et al.2001 cited by Sengupta et al.,2015) as well as the unique employment offering (Sengupta et al., 2015). Since not all employees are looking for the same offering (Cascio & Graham, 2016), companies need to find the EB message that can reach the best and most qualified employees (Backhaus, 2016). This being, this study helps companies in the Portuguese IT sector shaping their EVP (first step of the EB process; Backhaus & Tikoo, 2004) through the analysis of the employer attractiveness dimensions IT students value the most as well as their intentions to apply towards advertisements portraying these dimensions. Results showed that the most valued dimensions were social, development and economic value. Thus, Portuguese IT companies looking to hire young graduates should develop and adjust their EVP's in a way that highlights these dimensions of employer attractiveness. For instance, providing good promotion opportunities, career-enhancing experiences and ensuring a pleasant social environment with companionship and mutual help.

While employer attractiveness dimensions are useful for companies to develop their EVP (first step of EB process), measuring IT students' intentions to apply for a job is useful for firms to decide how to correctly market their EVP to the outside with external marketing activities (second step of EB process; Backhaus & Tikoo, 2004). Since this was measured through job advertisements matching each dimension, it was possible to verify which dimensions work better when marketed to the outside in comparison with the dimensions that are most valued. Curiously, the dimensions that were most valued by IT students were different from the dimensions they would apply for in the job advertisement scenarios. This means that although they value certain employer attractiveness elements more, these are not the elements that attract them the most. Results showed that all dimensions are much less attractive when displayed in a job ad with the exception of the application value. Thus, when comparing the means of every dimension, Portuguese IT companies may have to focus their external marketing efforts in the application and economic value dimensions. For instance, making job advertisements highlighting the compensation package and the care for customers and society. Therefore, some employer attractiveness dimensions are more suited to attract potential employees and should be highlighted in job advertisements while some dimensions are more suited to retain current and future employees and should be highlighted in the internal marketing efforts (third step of the EB process, Backhaus & Tikoo, 2004). The development of the EVP should ultimately

comprise as much employer attractiveness dimensions as possible (since they are all important; Berthon et al., 2005) but with different points of focus during the employer branding process. Moreover, companies should never make the mistake of just focusing on the dimensions that attract potential employees without being able to fulfill the promises made during the recruitment stage (Cable, Aiman-Smith, Mulvey, & Edwards, 2000; Martin, 2008 cited by Cascio & Graham, 2016; Moroko & Uncles, 2008).

When analysing the effects of employer attractiveness in IT students' intentions to apply for a job, the most impactful dimension was the economic value (impactful in three of the scenarios) and only economic, social and application had an impact in IT students' intentions to apply for a job in the scenarios. When it comes to the characteristics of the sample, women were significantly more attracted to every dimension than men, with the exception of interest value and showed higher intentions to apply for a job in most of the scenarios. On the other hand, last year master students valued interest value significantly less than first-year bachelor students and showed lesser intentions to apply for most of the scenarios. Lastly, the perceived credibility of Facebook, campus fairs and LinkedIn also had significant importance in explaining IT students' intentions to apply for a job.

Regarding media channels, the ones with higher usability are also the ones that were perceived as more credible and with less likelihood of deception. There was a clear preference for campus fairs, LinkedIn and word-of-mouth from a company employee. Companies are advised to follow a multi-channel approach (Sinha and Thaly, 2013) since no channel alone can reach all of the target audience. Results indicate that they should focus on at least these three channels for attracting IT students. Nevertheless, since these are already widely used channels, it is important to venture out to new strategies as mentioned previously (Dhawan, 2016).

In conclusion, even though a multi-channel approach is advised (Sinha and Thaly, 2013) and all dimensions are important (Berthon et al., 2005), in a tight talent market with limited resources (Dhawan, 2016), it is important for firms to choose wisely which employer attractiveness dimensions and channels to prioritize. This study can help them make those decisions in order to maximize the return on their investment.

A limitation of this study is the nature of the sample. Since only non-probabilistic techniques were used, the probability of each case being selected from the total population is unknown (Anderson, 2009; Saunders et al., 2012). This means that it is not possible to make statistical inferences about the entire Portuguese population on statistical grounds, although it is still a suitable method to answer the presented research questions and allows for a good "educated

guess" (Saunders et al., 2012) considering that no differences were found in students between universities and that their preferences regarding media and employer attractiveness dimensions are born from generational and working field factors as seen from literature. Future research could replicate this study using probability sampling techniques to increase validity and reliability. Another limitation is that the survey was cross-sectional, thus not examining the studied elements over time. This means that IT students' preferences may vary over time or even not turning into their actual employment choices. Future research could replicate this study using a longitudinal approach in order to allow for causal inferences. Moreover, although this study was conducted in English, the questionnaires were applied in Portuguese to ensure the richness of data, which opens the possibility for slight content changes. Future research could replicate this study to students from different fields and with different cultures. It would also be interesting to apply the developed instrument to experienced IT professionals in the field and compare the results.

The reasons to why certain variables (dimensions, sample characteristics or perceived media credibility) impact IT students' intentions to apply for a job, why men differ from women and master students differ from bachelor students in the dimension analysis (weather it is because of aging or the university effect for instance) are all indicators for future studies. Furthermore, the differences between the perceived value of the dimensions in the closed questions and the attributed value in the scenarios should also be analysed with the purpose of finding out why application value increased in value when advertised and all the remaining dimensions decreased. Lastly, it would also be relevant to confirm if Facebook and Twitter are indeed increasing in usability for professional purposes as trends suggest.

Concluding, this study marks the first step for solving a major issue in the portuguese IT sector. Its findings can help companies make the right decisions to attract and retain millennials in this field, which is the key to win the "war for talent". Furthermore, it offers a great starting point for future research and a deeper understanding of a worldwide situation caused by digital revolution, while also contributing to HR, media channel's and employer branding research.

Chapter VI. REFERENCES AND APPENDIXES

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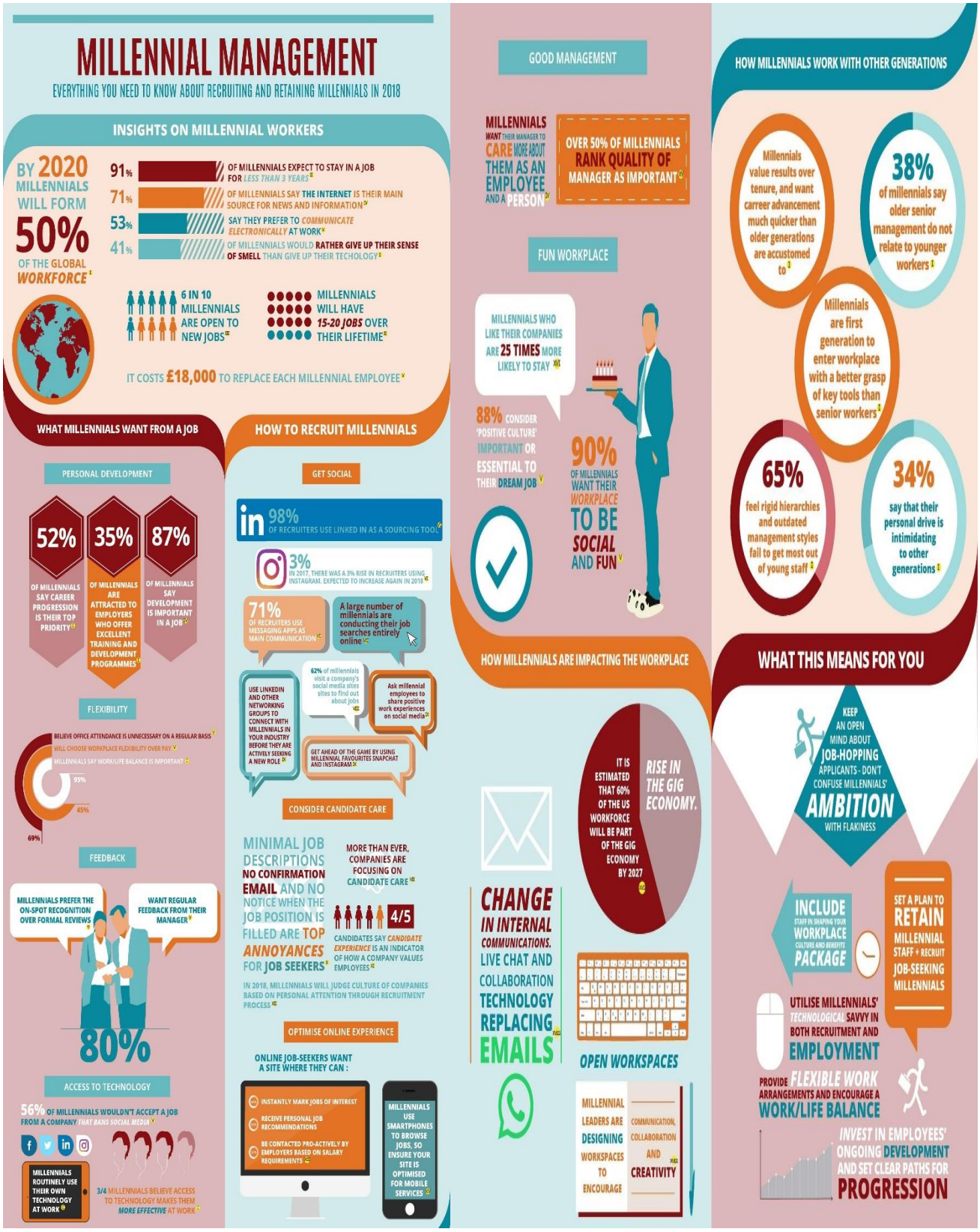
6.2. Appendixes

6.2.1. Appendix 1 - Summary of highlighted HR practices to enhance a company's EB (based on Cascio & Graham, 2016)

Practices	Description
Recruitment	The use of realistic job previews (author citations: Landis, Earnest, & Allen, 2014; Popovich & Wanous, 1982). Which means not only telling applicants the benefits of a job (for instance, salary), but also mention the unpleasant aspects (for example, working on weekends sometimes). By lowering unrealistic positive expectations of job applicants prior to the hire, job satisfaction, survival, and performance will increase. Even though job acceptance rates might decrease, it will ensure the right attraction of talent and retention, and stress key feature of the work environment that are valued.
Onboarding	Helping new employees to become familiar with the new work environment is critically important (most turnover occurs in the first months of the job). During this period the employee is more receptive to cues about the organisational environment (e.g. examples from senior people, rewards and punishments that flow from the employee's efforts). Structured activities covering the first 90 days lead to higher productivity, levels of engagement, revenue, and improved customer and employee retention.
Training and Development	Training and development (T&D) opportunities are important to all generations (particularly to young adults at the early stages of their careers), having an overall positive effect on job-related behaviours and performance (author citations: Arthur, Bennet, Edens, & Bell, 2003; Brown & Stizmann, 2011). Furthermore, positive training experiences directly enhance an employer's brand, and four characteristics of effective practices can be distinguishes (author citations: Colvin, 2009; Rifkin, 2011): Top management is committed to T&D as part of the corporate culture; Trainning is tied to business strategy and objectives; Organisation environments are feedback rich; The company provides sufficient time and money for training.(Cascio & Graham, 2016)
Performance Management	Frequent communication and feedback should be done over once-a-year performance appraisal (especially for millennials). This is a key feature of a positive employer brand.
Rewards	"…*The rewards offered should be consistent with the overall strategy of an organization, and they should be tailored to attract, retain, and motivate the kinds of talent that is most desirable by a given organization"* (Cascio & Graham, 2016:189). Additionally, the rewards offered (and the way they are communicated) should be consistent with the image and Employer brand the organisation is trying to convey, and different mixes of total rewards appeal to different talent segments.
Ways to enhance the Employer Brand	• The use of anonymous surveys, suggestion boxes, and exit interviews (author citation: Spain & Groysberg, 2016) to get inputs before undertaking major internal and external communication efforts;

	• Ensure everyone in the company is aligned with the EB's message and development (this message should also be aligned with the company's strategy and objectives, as well as authentic, honest and consistent); • The organisation's internal and external actions (along with its values) should convey the brand message, and communication methods should be convenient and easy to use, with clear and current information (for example, the use of video testimonials of employees); • Make employees part of the Employer brand, share the message with them, and educate them about how to portray it appropriately. • Constantly monitor the organisation's EB (for example, with surveys) so the employer brand message is consistent both inside and outside the organisation. Employer brand management requires constant care, time and commitment.

6.2.2. Appendix 2 - Silver Swan Recruitment Millennial survey (2018)



6.2.3. Appendix 3 - Effectiveness of different media channels according to Mosley (2014); my authorship

Background and Conclusions	*"The effects of technological transformation on candidate behaviour are already being reflected in organizations' future media planning."* Mosley's global employer brand survey (2014:168), along with other used sources, confirmed a significant shift towards social media and away from print, third-party recruiters and job boards. Furthermore, career websites, employee referrals, and professional networks also have a major impact in EB and are also worth investing.
Media Channels	**Behaviours**
Career Websites (CW)	CW remain a predominant channel, considering that organizations have complete control over it. It constitutes a multi-function platform that can provide a rich brand experience through multimedia, alongside with linkages to the organization's social media channels, and the possibility for candidates to search for relevant job vacancies and apply. Furthermore, career websites are likely to retain a central role, if they keep up with the changing behaviours and expectations of potential candidates. In order to do this, several areas must be addressed: • Video: people generally prefer to hear and see information than read it; if the CW is text heavy and video light it's likely to be less effective in engaging potential candidates, since video can convey the personality and feel of a potential employer far more effectively (for example, video employee profile); video will increase the page ranking on google (search engine optimization; having a youtube channel can also help). • Social Functionality: Most leading CW provide links to their social sites. • Mobile friendly design: Smartphones have become the majority mobile device across the world; • Search friendly Content (to help potential candidates to find the CW even if they never heard of the organization); • Contextual content: option routes through the website (for instance, separating graduates from experienced potential candidates, including relevant information); • Personalization: Displaying content on the website that people are most interested in based on their past visits (like on Amazon); • Gamification: Online interactive games to know the company;
Employee Referral	According to the research, employee referrals are the most efficient recruitment channel, as well as one of the most effective channels in terms of quality and longevity of hires. These candidates are pre-screened by the company's own employees.
Professional Networks	LinkedIn is the dominant player within the recruitment industry.

Facebook and Twitter (other Social Media)	Facebook has considerably more members than LinkedIn, and companies can generate millions of fans by managing their page effectively. Its strengths lie in brand building and referral generation. Along with Facebook, Twitter is rated as having much lower impact on hires than LinkedIn, but it is also rated higher for showcasing the employer brand, generating referrals and getting a feel for talent market.
Job Boards	Even though job boards may appear to be declining, they are still a very effective source of information about potential employers. On the other hand, job boards lack in quality when it comes to the applicants they attract.
Third-party contingency	There is no consensus about weather LinkedIn will eradicate the need for third-party recruitment agencies, or whether they will always be needed, particularly for senior roles.
Campus Marketing	Campus presentations, career fairs and employer sponsored lectures and events must be included to ensure an effective brand building.

6.2.4. Appendix 4 – Relevant social media strategies and tips from literature; my authorship

In her article about Millennials, Roepe (2017) provides seven tips for recruiters are highlighted: Use social media to project your company's values and mission, highlight your best employees, and showcase organization-led volunteer opportunities that support the local community; Be aware of what's being said about your organisation on social media and respond when necessary; Partner with universities, colleges, and friends and families of workers to help get the word out about your company; Tie social media messaging to your organization's values, particularly if they are identified on your website. If diversity is prized, reflect that in the staff images on your social network pages; Work with your public relations and marketing departments to create an appealing narrative around your organization; Encourage workers to share creative photos that align with the company's values and mission; Be authentic and don't rely exclusively on the HR and PR departments to take and post photos (Roepe, 2017).
On his journal section entitled Staffing Matters, David Coombes (2018) gives three tips on how to effectively use social media: Firstly, companies should understand their audience. If your Facebook page has more than 400 followers, you're charged to reach them. Although, the insight section shows demographic, geographic and behavioural data of your audience. By using this information, companies can understand followers and create a promotional post aimed at the people they want to recruit in the areas they want to recruit. This can also be applied for Twitter, Ad-words, YouTube and LinkedIn. Secondly, companies should define a budget for targeted campaigns on social media. These campaigns should reach the right audience with the right proposition. Spending a small amount of money on a recruitment advert to check the response is a good way to prevent sending a fortune to reach the wrong audience. The used metric should be the quality of candidates applying, and not likes/comments/shares. Lastly, companies should choose the social platform in accordance to the audience they want to reach (Coombes, 2018).
According to different sources, companies can benefit from using different social media sources and venture out (Campeau, 2018; Dhawan, 2016; Kaur, Sharma, Kaur, & Sharma, 2015). If most companies are already

aware that social media is the primary tool in the hunt for passive talent (84%), there is surely a high percentage competing for the same pool of talent on the most popular social media platforms: LinkedIn, Facebook, Twitter (Dhawan, 2016). Aside from other major career sites (like Monster or Workopolis), LinkedIn should not be the only social media platform used, although it should be used in a proactive way to track down ideal candidates rather than just posting a job opening (Campeau, 2018) . Thus, companies should use platforms that are connected with the industry they are recruiting, like StackOverflow for developers or Doximity for the medical field (Dhawan, 2016). The average internet user has more than five social media accounts (Global Web Inc. survey cited by (Campeau, 2018). In addition, less popular websites like Quora can also be effective, and companies will benefit from generating and nurturing their own talent channels and network with their audience (for instance, partnerships with colleges and LinkedIn targeted posting; Dhawan, 2016). Organisations should also use their social media pages as a platform to host discussions about the company, its industry and other topics that might interest the target audience (Kaur et al., 2015).

When it comes to content, unscripted video testimonials from current employees, tweets, photos from sponsored charity events, or Facebook posts of employee awards and recognition can do wonders, as long as they're authentic (Campeau, 2018). Additionally, the inclusion of videos, information about benefits, and current job openings can also help a company's social media page connecting with people. YouTube can also be used to showcase videos that highlight the key aspects of the company's culture and employer brand (Kaur et al., 2015).

Along with social media, hiring tech also has been revolutionising recruiting. The use of skype and video interviews, virtual reality (for instance, skill testing games for candidates), and artificial intelligence (for instance, chatbots to quickly search candidates and reach them) also influences the way companies connect with candidates and employer brand is displayed (Campeau, 2018; Hollmer, 2018).

Margery Weinstein also provided some tips for employers on social media:

Have recruiters set up LinkedIn profiles promoting your company's messaging and identity, and communicating new job opportunities; Let job seekers who may not have realized they could have a career at your company know about job roles that match their specific skills and experience; Link to, and re-post, positive posts about your company created by your employees, so potential future employees can see the kind of experience they could have working for your company; Make the most of supportive reviews of your company on sites such as Glassdoor, and respond to critical reviews, encouraging the reviewer to get in touch with you to learn more about your company; Optimize multiple social media platforms by posting links on LinkedIn to content on other sites such as Facebook and Twitter (Weinstein, 2017). Furthermore, there are innovative ways to find passive talent, by using new technologies that apply social media site data and key word search on applicants' resumes, like Google+ (Poeppelman, 2014).

"People don't come to social media to read, they come to interact" (Hunt, 2010). The best way to create social media content is to provide information rather than self-serving posts. Employees should also be informed about social media outreach since their comments can affect the company's brand (Hunt, 2010). Further social media strategies can be highlighted: Attract interest "virally" through authentic, professional posts and texts evoking emotions; Take advantage of famous social media like LinkedIn or Facebook in combination with supporting internet tools (e.g. QR codes and applications); For monitoring and measurement of the social media strategy, apply tools like Hootsuite, Google Analytics, or Brandwatch (Kaiser, 2013).

6.2.5. Appendix 5 - Comprehensive list of reasons why LinkedIn has potential to be the number one recruiting portal in the future by John Sullivan, 2012 (edited by Mosley, 2014:178-179).

Comprehensive list of reasons why LinkedIn has potential to be the number one recruiting portal in the future by John Sullivan, 2012 (edited by Mosley, 2014:178-179):

1- **It has a high passive to active member ratio** – If you're seeking the roughly 80% of prospects who are not actively looking for a job, the majority of LinkedIn members.
2- **The number of members continues to increase** – Establishing a LinkedIn profile has now become standard professional practice across most leading talent markets.
3- **Its database quality can be verified** – You can verify the quality of their database by checking the percentage of your own best employees on LinkedIn.
4- **It is referral-friendly** – LinkedIn makes it easy for your employees to identify and connect with others in the same profession that may eventually become an employee referral.
5- **Its profiles are easily comparable and searchable** – The consistency of LinkedIn profiles makes it easier for recruiters and hiring managers to compare different prospects.
6- **Its profiles are accurate** – Because their profiles are seen by so many colleagues, it's much harder for an individual to "get by" with a profile that contains inaccurate information.
7- **LinkedIn can help you identify when someone is about to begin looking** – Certain actions like updating their profile or joining new groups may signal that someone is about to enter "job search mode".
8- **LinkedIn makes it easy to apply** – Allowing individuals to apply instantly for a job without having to update their resume is a powerful advantage.
9- **It has job-posting capability** – LinkedIn makes it easy to post and distribute current job openings to prospects.
10- **It provides recommendations and facilitates introductions** – LinkedIn's recommendations feature can provide additional insights based on what others have experienced when working with them.
11- **It facilitates event recruiting** – LinkedIn's events tool can help you learn what current events are being attended by your target audience. It can also be used to publicize your own events.

12- **It includes executive search capability** – Because many executives have LinkedIn profiles, the LinkedIn database may allow your internal recruiters to replace some external executive searches.
13- **It offers a powerful talent management research capability** – LinkedIn provides you with the ability to conduct valuable research into internal movement and retention patterns.
14- **It offers many professional learning groups** – There are more than a million professional groups that can enable people to share ideas and to test new approaches.
15- **It provides an easy reference snapshot** – Many professionals use LinkedIn to get a quick snapshot of someone who's contacted them or whose name they've come across.
16- **It supports employer brand building** – LinkedIn provides the capability for firms to create their own company page and to populate the page with materials that help to build their employment brand.
17- **It allows you to poll** – LinkedIn's polling feature can provide you with valuable and current information and also signals that you are a key information source on a particular topic.
18- **It is integrated with many other services** – LinkedIn is at least partially integrated with many other vendors like SlideShare, Twitter, Taleo, Amazon, and Windows Live Messenger.
19- **It allows InMail for communications** – LinkedIn has its own internal e-mail tool for sending messages.
20- **It provides an advertising capability** – Although its advertising approach is not as strong as other portals, LinkedIn provides the capability of strategically placing ads covering your products or jobs.

6.2.6. Appendix 6 - Sample characterization: students per university year within university attendance cross table; students' professional situation within university year cross table.

Tabulação cruzada Universidade * Habilitação Literária (Frequência)

			Habilitação Literária (Frequência)							
			Licenciatura - 1º ano	Licenciatura - 2º ano	Licenciatura - 3º ano	Mestrado 1º ano	Mestrado 2º ano	Outra	12º ano ou Curso Profissional	Total
Universidade	ISCTE-IUL	Contagem	67	24	38	24	8	9	2	172
		% em Universidade	39,0%	14,0%	22,1%	14,0%	4,7%	5,2%	1,2%	100,0%
	Instituto Superior Técnico	Contagem	26	28	34	38	29	1	2	158
		% em Universidade	16,5%	17,7%	21,5%	24,1%	18,4%	0,6%	1,3%	100,0%
	FCT-NOVA	Contagem	42	32	23	23	6	1	2	129
		% em Universidade	32,6%	24,8%	17,8%	17,8%	4,7%	0,8%	1,6%	100,0%
	Outra	Contagem	7	4	6	3	12	2	2	36
		% em Universidade	19,4%	11,1%	16,7%	8,3%	33,3%	5,6%	5,6%	100,0%
Total		Contagem	142	88	101	88	55	13	8	495
		% em Universidade	28,7%	17,8%	20,4%	17,8%	11,1%	2,6%	1,6%	100,0%

Tabulação cruzada Habilitação Literária (Frequência) * Situação Profissional

			Situação Profissional			
			Estudante	Trabalhador-estudante	Outra	Total
Habilitação Literária (Frequência)	Licenciatura - 1º ano	Contagem	135	7	0	142
		% em Habilitação Literária (Frequência)	95,1%	4,9%	0,0%	100,0%
	Licenciatura - 2º ano	Contagem	84	4	0	88
		% em Habilitação Literária (Frequência)	95,5%	4,5%	0,0%	100,0%
	Licenciatura - 3º ano	Contagem	79	18	4	101
		% em Habilitação Literária (Frequência)	78,2%	17,8%	4,0%	100,0%
	Mestrado 1º ano	Contagem	67	20	1	88
		% em Habilitação Literária (Frequência)	76,1%	22,7%	1,1%	100,0%
	Mestrado 2º ano	Contagem	41	11	3	55
		% em Habilitação Literária (Frequência)	74,5%	20,0%	5,5%	100,0%
	Outra	Contagem	6	4	3	13
		% em Habilitação Literária (Frequência)	46,2%	30,8%	23,1%	100,0%
	12º ano ou Curso Profissional	Contagem	6	2	0	8
		% em Habilitação Literária (Frequência)	75,0%	25,0%	0,0%	100,0%
Total		Contagem	418	66	11	495
		% em Habilitação Literária (Frequência)	84,4%	13,3%	2,2%	100,0%

6.2.7. Appendix 7 - Intrument used to collect primary data (questionnaire of the study).

Atratividade dos empregadores na área de IT

Nos dias de hoje, a procura de jovens talentos na área das tecnologias de informação (IT) continua a aumentar, constituindo-se um desafio para os empregadores.
Este estudo visa averiguar as preferências de potenciais candidatos na área de IT relativamente às características de oferta dos empregadores e canais de divulgação.
O presente questionário tem como finalidade a recolha de dados para a dissertação final do Mestrado em Gestão do ISCTE – Instituto Universitário de Lisboa. É garantida absoluta confidencialidade e anonimato dos participantes, sendo que a sua participação é crucial. Não existem respostas certas ou erradas. Por favor assinale a resposta que considerar mais adequada.

Caso exista alguma dúvida relativa ao seguinte questionário, não hesite em contactar lrnss@iscte-iul.pt .

Muito Obrigado pela sua colaboração!

I - Anúncio de Emprego

Leia atentamente o seguinte anúncio de emprego:

HEYDEVELOPER

Especialista na área de IT (m/f)

A HEYDEVELOPER visiona um mundo de tecnologias cloud e mobile. Um mundo cheio de possibilidades. Um mundo em que inovadores apaixonados colaboram para delegar a cada pessoa, a capacidade de atingir mais. Somos um vislumbre para o futuro, reinventando a forma como trabalhamos, aprendemos e operamos.

Através da nossa vasta experiência em tecnologias de informação, ajudamos pessoas e empresas a chegar ao topo do seu potencial. Produzimos software com elevado valor acrescentado capaz de abastecer as mais complexas soluções de IT.

És uma pessoa apaixonada por tecnologia? Na HEYDEVELOPER valorizamos a tua criatividade na descoberta de novas formas e métodos de resolução de problemas, num ambiente novo e extremamente desafiante.

Requisitos:
-Licenciatura (frequência) ou Mestrado (preferencial) na área das Tecnologias de Informação;

Perante a descrição constante no cenário anterior, indique a sua concordância face às seguintes afirmações:

1. Considero a HEYDEVELOPER um empregador de excelência.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

2. Considero esta empresa um empregador de excelência, apesar da HEYDEVELOPER não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

3. Considero esta empresa um empregador de excelência, apesar da HEYDEVELOPER não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

4. Considero esta empresa um empregador de excelência, apesar da HEYDEVELOPER ter políticas salariais e de carreiras inferiores às praticadas no mercado.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

5. Considero esta empresa um empregador de excelência, apesar da HEYDEVELOPER não potenciar a realização pessoal, nem permitir criar valor para o percurso profissional.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

II - Anúncio de Emprego

Leia atentamente o seguinte anúncio de emprego:

Especialista na área de IT (m/f)

O Software Wizard é um serviço de encontros em que as pessoas conhecem a sua alma gémea. Acreditamos que a melhor experiência é proporcionada por um ambiente feliz e sorridente. Depois das pessoas se encontrarem na nossa aplicação, oferecemos uma vasta gama de possibilidades, desde jantares no Douro a viagens pela Europa.

Mais do que uma organização, somos como família. Aqui irás encontrar um ambiente de trabalho cooperativo com colegas e superiores que te apoiam em todas as dificuldades.

Oferecemos um horário de trabalho flexível, temos salas de repouso e todas as semanas existem atividades de team-building. Junta-te a nós!

O que procuramos?
-Licenciatura (frequência) ou Mestrado (preferencial) na área das Tecnologias de Informação;

Perante a descrição constante no cenário anterior, indique a sua concordância face às seguintes afirmações:

1. Considero a SoftwareWizard um empregador de excelência.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

2. Considero esta empresa um empregador de excelência, apesar da SoftwareWizard não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

3. Considero esta empresa um empregador de excelência, apesar da SoftwareWizard não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

4. Considero esta empresa um empregador de excelência, apesar da SoftwareWizard ter políticas salariais e de carreiras inferiores às praticadas no mercado.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

5. Considero esta empresa um empregador de excelência, apesar da SoftwareWizard não potenciar a realização pessoal, nem permitir criar valor para o percurso profissional.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

III - Anúncio de Emprego

Leia atentamente o seguinte anúncio de emprego:

Especialista na área de IT (m/f)

Na QuickBot revolucionamos e moldamos o mundo da logística. A nossa missão consiste em ligar as pessoas, melhorando as suas vidas e suprindo as suas necessidades através da nossa frota de veículos, especialmente equipados para chegar ao lugar certo à hora certa.

No projeto GoTech aplicamos as mais diversas soluções tecnológicas à distribuição logística, desde drones a software com controlo de inventários. 30% dos lucros deste projeto irão diretamente para ajuda humanitária.

Terás a oportunidade de programar na tua linguagem favorita, uma vez que recrutamos para todo o tipo de linguagens de programação. Através do nosso programa de coaching terás também alguém para facilitar a tua integração e partilhar conhecimentos, assim como o poderás fazer após algum tempo na empresa.

Requisitos:
-Licenciatura (frequência) ou Mestrado (preferencial) na área das Tecnologias de Informação;

Perante a descrição constante no cenário anterior, indique a sua concordância face às seguintes afirmações:

1. Considero a QuickBot um empregador de excelência.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

2. Considero esta empresa um empregador de excelência, apesar da QuickBot não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

3. Considero esta empresa um empregador de excelência, apesar da QuickBot não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

4. Considero esta empresa um empregador de excelência, apesar da QuickBot ter políticas salariais e de carreiras inferiores às praticadas no mercado.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

5. Considero esta empresa um empregador de excelência, apesar da QuickBot não potenciar a realização pessoal, nem permitir criar valor para o percurso profissional.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

IV - Anúncio de Emprego

Leia atentamente o seguinte anúncio de emprego:

COMPUTORIAL

Especialista na área de IT (m/f)

Os colaboradores da COMPUTORIAL permitem aos nossos clientes prosperar nos seus objetivos financeiros. Através de algoritmos sofisticados e estratégias de investimento, conseguimos produzir uma experiência intuitiva e de sucesso para o utilizador. Junta-te a nós e ajuda-nos a criar um mapa para a liberdade financeira!

Aquilo que oferecemos:
- Salário acima da média praticada no mercado;
- Seguro de saúde e seguro de vida gratuitos;
- Conta Netflix e Spotify Premium;
- Desconto de 40% nas marcas dos nossos parceiros (inclui Nike, Apple e Galp);
- Rápida progressão de carreira com oportunidades de mobilidade internacional;

Aquilo que procuramos:
-Licenciatura (frequência) ou Mestrado (preferencial) na área das Tecnologias de Informação;

Perante a descrição constante no cenário anterior, indique a sua concordância face às seguintes afirmações:

1. Considero a COMPUTORIAL um empregador de excelência.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

2. Considero esta empresa um empregador de excelência, apesar da COMPUTORIAL não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

3. Considero esta empresa um empregador de excelência, apesar da COMPUTORIAL não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

4. Considero esta empresa um empregador de excelência, apesar da COMPUTORIAL não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

5. Considero esta empresa um empregador de excelência, apesar da COMPUTORIAL não potenciar a realização pessoal, nem permitir criar valor para o percurso profissional.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

V - Anúncio de Emprego

Leia atentamente o seguinte anúncio de emprego:

Especialista na área de IT (m/f)

A MassiveCode resolve um colossal problema para uma indústria com mais de 7000 anos. Os dados do setor da Construção estão presos em plantas e diagramas no formato papel. Isto origina custos de 9 biliões de euros todos os anos em trabalho a partir de planeamentos desatualizados.

Estamos a mudar esta realidade! Construímos software poderoso para ajudar empreiteiros, proprietários, designers e arquitetos por todo o mundo a acabar os seus projetos a tempo e dentro do orçamento estabelecido.

Somos líderes neste novo mercado, e fomos reconhecidos pelo prémio Best Brand 2019. A nossa reputação traz valor a qualquer colaborador que passe pela MassiveCode e a formação especializada que proporcionamos diariamente é dada pelos melhores especialistas do mundo.

Requisitos:
-Licenciatura (frequência) ou Mestrado (preferencial) na área das Tecnologias de Informação;

Perante a descrição constante no cenário anterior, indique a sua concordância face às seguintes afirmações:

1. Considero a MassiveCode um empregador de excelência.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

2. Considero esta empresa um empregador de excelência, apesar da MassiveCode não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

3. Considero esta empresa um empregador de excelência, apesar da MassiveCode não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

4. Considero esta empresa um empregador de excelência, apesar da MassiveCode não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

5. Considero esta empresa um empregador de excelência, apesar da MassiveCode ter políticas salariais e de carreiras inferiores às praticadas no mercado.

	1	2	3	4	5	
Discordo totalmente	◯	◯	◯	◯	◯	Concordo totalmente

VI - Atratividade do empregador

Leia atentamente a seguinte questão:

Qual o grau de importância que atribui aos seguintes itens na escolha de um potencial empregador?

	1- Nada importante	2	3	4	5- Muito importante
Pertencer a uma organização com um ambiente de trabalho desafiante	○	○	○	○	○
Pertencer a uma organização que adota práticas de trabalho atuais e que está a par das tendências do futuro	○	○	○	○	○
Pertencer a uma organização que valoriza e faz uso da minha criatividade	○	○	○	○	○
Pertencer a uma organização que desenvolve produtos e serviços de alta qualidade	○	○	○	○	○
Pertencer a uma organização que desenvolve produtos e serviços inovadores	○	○	○	○	○
A existência de boas relações com a chefia	○	○	○	○	○
A existência de boas relações com os colegas	○	○	○	○	○
Pertencer a uma organização onde posso contar com o apoio e incentivo dos colegas	○	○	○	○	○
Pertencer a uma organização com um ambiente de trabalho feliz	○	○	○	○	○
Pertencer a uma organização com um papel ativo na sociedade	○	○	○	○	○
Pertencer a uma organização onde terei oportunidade de colocar em prática os conhecimentos adquiridos no ensino superior	○	○	○	○	○
Pertencer a uma organização onde terei oportunidade de passar o conhecimento adquirido a outros	○	○	○	○	○

Pertencer a uma organização onde sinto que pertenço e sou aceite	○	○	○	○	○
Pertencer a uma organização orientada para o serviço ao cliente	○	○	○	○	○
Pertencer a uma organização que proporciona oportunidades de progressão de carreira	○	○	○	○	○
Pertencer a uma organização com oferta salarial acima da média do mercado	○	○	○	○	○
Pertencer a uma organização com um pacote remuneratório global atrativo	○	○	○	○	○
Sentir-me bem comigo mesmo(a) por trabalhar numa determinada organização	○	○	○	○	○
Sentir-me mais auto-confiante por trabalhar numa determinada organização	○	○	○	○	○
Adquirir experiência que acrescenta valor ao meu percurso profissional	○	○	○	○	○

VII - Utilização de Canais

Por favor responda às seguintes questões:

1. Na perspetiva do empregador, dos canais apresentados, quais considera mais adequados para divulgação de oportunidades de trabalho? Por favor, assinale os 3 canais que considerar mais adequados.

- [ ] LinkedIn
- [ ] Facebook
- [ ] Twitter
- [ ] Feiras de Emprego
- [ ] Jornais
- [ ] Partilha direta de um colaborador da empresa

2. Na sua perspetiva, dos canais de divulgação apresentados, quais privilegia na procura de emprego? Por favor, assinale os 3 canais que considerar mais importantes.

- [ ] LinkedIn
- [ ] Facebook
- [ ] Twitter
- [ ] Feiras de Emprego
- [ ] Jornais
- [ ] Partilha direta de um colaborador da empresa

3. Qual é o grau de credibilidade que atribui a cada um destes canais na divulgação de vagas?

	1- Nada credível	2	3	4	5- Muito credível
LinkedIn	○	○	○	○	○
Facebook	○	○	○	○	○
Twitter	○	○	○	○	○
Feiras de Emprego	○	○	○	○	○
Jornais	○	○	○	○	○
Partilha direta de um colaborador da empresa	○	○	○	○	○

4. Conhece situações de anúncios de emprego divulgados de forma indevida ou enganosa?

- ○ Sim → **Passe para a próxima pergunta (VIII)**
- ○ Não → **Passe para os dados biográficos (IX)**

VIII - Divulgação indevida

Para os diferentes canais apresentados, qual a probabilidade de ocorrência de situações de anúncios de emprego divulgados de forma indevida ou enganosa?

	1-Raramente	2	3	4	5-Muito Frequentemente
LinkedIn	○	○	○	○	○
Facebook	○	○	○	○	○
Twitter	○	○	○	○	○
Feiras de Emprego	○	○	○	○	○
Jornal	○	○	○	○	○
Partilha direta de um colaborador da empresa	○	○	○	○	○

IX - Dados Biográficos

Relembramos que é garantida absoluta e total confidencialidade dos participantes, sendo que a sua participação é crucial para a melhoria futura das condições de trabalho oferecidas pelas empresas.

Sexo:

- ○ Masculino
- ○ Feminino

Universidade:

- ○ ISCTE-IUL
- ○ Instituto Superior Técnico (IST)
- ○ FCT-NOVA
- ○ Outra: _____

Habilitação Literária (Frequência):

- ○ Licenciatura - 1ºano
- ○ Licenciatura- 2ºano
- ○ Licenciatura- 3ºano
- ○ Mestrado- 1ºano
- ○ Mestrado- 2ºano
- ○ Outra: _____

Situação Profissional:

- ○ Estudante
- ○ Trabalhador-estudante
- ○ Outra: _____

Muito Obrigado pela sua colaboração!

6.2.8. Appendix 8 - Principal Component analysis – decision tables.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,856
Bartlett's Test of Sphericity	Approx. Chi-Square	3194,110
	df	190
	Sig.	,000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,738	28,690	28,690	5,738	28,690	28,690	3,005	15,025	15,025
2	2,040	10,199	38,889	2,040	10,199	38,889	2,711	13,553	28,579
3	1,653	8,265	47,154	1,653	8,265	47,154	2,221	11,105	39,683
4	1,377	6,886	54,041	1,377	6,886	54,041	2,002	10,009	49,692
5	1,097	5,486	59,526	1,097	5,486	59,526	1,967	9,834	59,526
6	,946	4,729	64,255						
7	,767	3,837	68,093						
8	,734	3,669	71,762						
9	,672	3,360	75,122						
10	,632	3,161	78,283						
11	,561	2,806	81,090						
12	,553	2,766	83,856						
13	,510	2,552	86,408						
14	,468	2,338	88,746						
15	,445	2,226	90,972						
16	,422	2,108	93,080						
17	,387	1,935	95,015						
18	,386	1,928	96,943						
19	,323	1,617	98,560						
20	,288	1,440	100,000						

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
1-ATD-Pertencer a uma organização com um ambiente de trabalho desafiante	1,000	,464
2-PTA-Pertencer a uma organização que adota práticas de trabalho atuais e que está a par das tendências do futuro	1,000	,599
3-VFUC-Pertencer a uma organização que valoriza e faz uso da minha criatividade	1,000	,512
4-DPSAQ-Pertencer a uma organização que desenvolve produtos e serviços de alta qualidade	1,000	,479
5-DPSI-Pertencer a uma organização que desenvolve produtos e serviços inovadores	1,000	,600
6-EBRC-A existência de boas relações com a chefia	1,000	,582
7-EBRCL-A existência de boas relações com os colegas	1,000	,678
8-AIC-Pertencer a uma organização onde posso contar com o apoio e incentivo dos colegas	1,000	,685
9-ATF-Pertencer a uma organização com um ambiente de trabalho feliz	1,000	,598
10-PAS-Pertencer a uma organização com um papel ativo na sociedade	1,000	,567
11-OPCAV-Pertencer a uma organização onde terei oportunidade de colocar em prática os conhecimentos adquiridos no ensino superior	1,000	,515
12-OPCO-Pertencer a uma organização onde terei oportunidade de passar o conhecimento adquirido a outros	1,000	,606
13-OPA-Pertencer a uma organização onde sinto que pertenço e sou aceite	1,000	,529
14-OOSC-Pertencer a uma organização orientada para o serviço ao cliente	1,000	,600
15-POPC-Pertencer a uma organização que proporciona oportunidades de progressão de carreira	1,000	,468
16-OSAMM-Pertencer a uma organização com oferta salarial acima da média do mercado	1,000	,753
17-PRGA-Pertencer a uma organização com um pacote remuneratório global atrativo	1,000	,747
18-SIBE-Sentir-me bem comigo mesmo(a) por trabalhar numa determinada organização	1,000	,694
19-SMAC-Sentir-me mais auto-confiante por trabalhar numa determinada organização	1,000	,700
20-AEAV-Adquirir experiência que acrescenta valor ao meu per7	1,000	,529

Extraction Method: Principal Component Analysis.

Rotated Component Matrix[a]

	Component				
	1	2	3	4	5
8-AIC-Pertencer a uma organização onde posso contar com o apoio e incentivo dos colegas	,811	,014	,145	,073	,023
7-EBRCL-A existência de boas relações com os colegas	,800	,138	,025	,128	,040
9-ATF-Pertencer a uma organização com um ambiente de trabalho feliz	,735	,075	,114	,127	,150
6-EBRC-A existência de boas relações com a chefia	,713	,175	-,008	,100	,183
13-OPA-Pertencer a uma organização onde sinto que pertenço e sou aceite	,546	,179	,233	,375	,063
2-PTA-Pertencer a uma organização que adota práticas de trabalho atuais e que está a par das tendências do futuro	,111	,744	,025	,177	,040
5-DPSI-Pertencer a uma organização que desenvolve produtos e serviços inovadores	,109	,702	,290	,053	,094
3-VFUC-Pertencer a uma organização que valoriza e faz uso da minha criatividade	,244	,651	,128	,085	,068
4-DPSAQ-Pertencer a uma organização que desenvolve produtos e serviços de alta qualidade	,097	,635	,192	,079	,150
1-ATD-Pertencer a uma organização com um ambiente de trabalho desafiante	-,033	,623	,075	,257	-,053
14-OOSC-Pertencer a uma organização orientada para o serviço ao cliente	,061	,041	,765	,071	,060
12-OPCO-Pertencer a uma organização onde terei oportunidade de passar o conhecimento adquirido a outros	,146	,182	,729	,139	-,030
10-PAS-Pertencer a uma organização com um papel ativo na sociedade	,260	,243	,663	,000	,006
11-OPCAV-Pertencer a uma organização onde terei oportunidade de colocar em prática os conhecimentos adquiridos no ensino superior	-,119	,207	,573	,338	,126
18-SIBE-Sentir-me bem comigo mesmo(a) por trabalhar numa determinada organização	,208	,193	,122	,773	-,004
19-SMAC-Sentir-me mais auto-confiante por trabalhar numa determinada organização	,209	,115	,271	,745	,122
20-AEAV-Adquirir experiência que acrescenta valor ao meu per7	,169	,323	,006	,587	,226
16-OSAMM-Pertencer a uma organização com oferta salarial acima da média do mercado	,093	,039	-,020	,020	,862
17-PRGA-Pertencer a uma organização com um pacote remuneratório global atrativo	,131	-,002	,115	,050	,845
15-POPC-Pertencer a uma organização que proporciona oportunidades de progressão de carreira	,130	,263	,029	,245	,567

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 6 iterations.

6.2.9. Appendix 9 - Reliability analysis/ Cronbach alfas of the principal components.

Interest Value:

Reliability Statistics

Cronbach's Alpha	N of Items
,754	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1-ATD-Pertencer a uma organização com um ambiente de trabalho desafiante	16,47	5,892	,450	,737
2-PTA-Pertencer a uma organização que adota práticas de trabalho atuais e que está a par das tendências do futuro	16,00	5,967	,574	,693
3-VFUC-Pertencer a uma organização que valoriza e faz uso da minha criatividade	16,10	5,903	,496	,719
4-DPSAQ-Pertencer a uma organização que desenvolve produtos e serviços de alta qualidade	16,24	5,957	,507	,715
5-DPSI-Pertencer a uma organização que desenvolve produtos e serviços inovadores	16,36	5,596	,585	,686

Social Value:

Reliability Statistics

Cronbach's Alpha	N of Items
,824	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
6-EBRC-A existência de boas relações com a chefia	17,69	4,993	,593	,797
7-EBRCL-A existência de boas relações com os colegas	17,47	5,036	,674	,773
8-AIC-Pertencer a uma organização onde posso contar com o apoio e incentivo dos colegas	17,65	4,781	,667	,774
9-ATF-Pertencer a uma organização com um ambiente de trabalho feliz	17,48	5,123	,629	,786
13-OPA-Pertencer a uma organização onde sinto que pertenço e sou aceite	17,54	5,372	,531	,813

Application value:

Reliability Statistics

Cronbach's Alpha	N of Items
,711	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
10-PAS-Pertencer a uma organização com um papel ativo na sociedade	10,34	5,342	,483	,657
11-OPCAV-Pertencer a uma organização onde terei oportunidade de colocar em prática os conhecimentos adquiridos no ensino superior	10,37	5,414	,440	,683
12-OPCO-Pertencer a uma organização onde terei oportunidade de passar o conhecimento adquirido a outros	10,42	5,157	,582	,601
14-OOSC-Pertencer a uma organização orientada para o serviço ao cliente	11,02	4,892	,495	,652

Development value:

Reliability Statistics

Cronbach's Alpha	N of Items
,718	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
18-SIBE-Sentir-me bem comigo mesmo(a) por trabalhar numa determinada organização	8,59	1,610	,609	,542
19-SMAC-Sentir-me mais auto-confiante por trabalhar numa determinada organização	8,88	1,374	,610	,542
20-AEAV-Adquirir experiência que acrescenta valor ao meu per7	8,53	2,115	,424	,754

Economic value:

Reliability Statistics

Cronbach's Alpha	N of Items
,709	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
15-POPC-Pertencer a uma organização que proporciona oportunidades de progressão de carreira	8,50	2,030	,389	,768
16-OSAMM-Pertencer a uma organização com oferta salarial acima da média do mercado	8,72	1,469	,602	,520
17-PRGA-Pertencer a uma organização com um pacote remuneratório global atrativo	8,79	1,392	,611	,506

6.2.10. Appendix 10 – Employer attractiveness correlations.

Correlations

		Interest Value	Social Value	Application Value	Economic Value	Development Value
Interest Value	Pearson Correlation	1	,356**	,442**	,240**	,478**
	Sig. (2-tailed)		0,000	0,000	0,000	0,000
Social Value	Pearson Correlation		1	,316**	,303**	,467**
	Sig. (2-tailed)			0,000	0,000	0,000
Application Value	Pearson Correlation			1	,176**	,412**
	Sig. (2-tailed)				0,000	0,000
Economic Value	Pearson Correlation				1	,295**
	Sig. (2-tailed)					0,000
Development Value	Pearson Correlation					1

**. Correlation is significant at the 0.01 level (2-tailed). N=495

Interest Value:

Correlations

		HDEE-Considero a HEYDEVELOPER um empregador de excelência.	HDSV-HEYDEVELOPER não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	HDAV-HEYDEVELOPER não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	HDEV-HEYDEVELOPER ter políticas salariais e de carreiras inferiores às praticadas no mercado.	HDDV-HEYDEVELOPER não potenciar a realização pessoal, nem permitir criar valor para ...
HDEE-Considero a HEYDEVELOPER um empregador de excelência.	Pearson Correlation	1	,098*	0,017	,090*	-0,048
	Sig. (2-tailed)		0,029	0,710	0,045	0,283
HDSV-HEYDEVELOPER não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	Pearson Correlation		1	,554**	,525**	,531**
	Sig. (2-tailed)			0,000	0,000	0,000
HDAV-HEYDEVELOPER não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	Pearson Correlation			1	,484**	,544**
	Sig. (2-tailed)				0,000	0,000
HDEV-HEYDEVELOPER ter políticas salariais e de carreiras inferiores às praticadas no mercado.	Pearson Correlation				1	,606**
	Sig. (2-tailed)					0,000
	N					495
HDDV-HEYDEVELOPER não potenciar a realização pessoal, nem permitir criar valor para ...	Pearson Correlation					1

*. Correlation is significant at the 0.05 level (2-tailed). N=495

**. Correlation is significant at the 0.01 level (2-tailed).

Social Value:

Correlations

		SWEE-Considero a SoftwareWizard um empregador de excelência.	SWIV-SoftwareWizard não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	SWAV-SoftwareWizard não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	SWEV-SoftwareWizard ter políticas salariais e de carreiras inferiores às praticadas no mercado.	SWDV-SoftwareWizard não potenciar a realização pessoal, nem permitir criar valor para...
SWEE-Considero a SoftwareWizard um empregador de excelência.	Pearson Correlation	1	,155**	,091*	0,068	0,002
	Sig. (2-tailed)		0,001	0,043	0,131	0,956
SWIV-SoftwareWizard não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	Pearson Correlation		1	,547**	,431**	,424**
	Sig. (2-tailed)			0,000	0,000	0,000
SWAV-SoftwareWizard não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	Pearson Correlation			1	,440**	,490**
	Sig. (2-tailed)				0,000	0,000
SWEV-SoftwareWizard ter políticas salariais e de carreiras inferiores às praticadas no mercado.	Pearson Correlation				1	,571**
	Sig. (2-tailed)					0,000
SWDV-SoftwareWizard não potenciar a realização pessoal, nem permitir criar valor para...	Pearson Correlation					1

**. Correlation is significant at the 0.01 level (2-tailed). N= 495

*. Correlation is significant at the 0.05 level (2-tailed).

Application Value:

Correlations

		QBEE-Considero a QuickBot um empregador de excelência.	QBIV-QuickBot não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	QBSV-QuickBot não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	QBEV-QuickBot ter políticas salariais e de carreiras inferiores às praticadas no mercado.	QBDV-QuickBot não potenciar a realização pessoal, nem permitir criar valor para ...
QBEE-Considero a QuickBot um empregador de excelência.	Pearson Correlation	1	,121**	0,039	,141**	-0,015
	Sig. (2-tailed)		0,007	0,381	0,002	0,733
QBIV-QuickBot não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	Pearson Correlation		1	,494**	,378**	,548**
	Sig. (2-tailed)			0,000	0,000	0,000
QBSV-QuickBot não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	Pearson Correlation			1	,446**	,584**
	Sig. (2-tailed)				0,000	0,000
QBEV-QuickBot ter políticas salariais e de carreiras inferiores às praticadas no mercado.	Pearson Correlation				1	,538**
	Sig. (2-tailed)					0,000
QBDV-QuickBot não potenciar a realização pessoal, nem permitir criar valor para ...	Pearson Correlation					1

**. Correlation is significant at the 0.01 level (2-tailed). N=495

Economic value:

Correlations

		CPEE-Considero a COMPUTORIAL um empregador de excelência.	CPIV-COMPUTORIAL não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	CPSV-COMPUTORIAL não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	CPAV-COMPUTORIAL não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	CPDV-COMPUTORIAL não potenciar a realização pessoal, nem permitir criar valor para ..
CPEE-Considero a COMPUTORIAL um empregador de excelência.	Pearson Correlation	1	,123**	0,043	0,062	-0,036
	Sig. (2-tailed)		0,006	0,339	0,169	0,420
CPIV-COMPUTORIAL não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	Pearson Correlation		1	,575**	,609**	,538**
	Sig. (2-tailed)			0,000	0,000	0,000
CPSV-COMPUTORIAL não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	Pearson Correlation			1	,626**	,517**
	Sig. (2-tailed)				0,000	0,000
CPAV-COMPUTORIAL não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	Pearson Correlation				1	,569**
	Sig. (2-tailed)					0,000
CPDV-COMPUTORIAL não potenciar a realização pessoal, nem permitir criar valor para ..	Pearson Correlation					1

**. Correlation is significant at the 0.01 level (2-tailed). N= 495

Development value:

Correlations

		MCEE-Considero a MassiveCode um empregador de excelência.	MCIV-MassiveCode não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	MCSV-MassiveCode não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	MCAV-MassiveCode não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	MCEV-MassiveCode ter políticas salariais e de carreiras inferiores às praticadas no mercado.
MCEE-Considero a MassiveCode um empregador de excelência.	Pearson Correlation	1	,091*	,162**	,116**	,136**
	Sig. (2-tailed)		0,044	0,000	0,010	0,002
MCIV-MassiveCode não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	Pearson Correlation		1	,480**	,598**	,402**
	Sig. (2-tailed)			0,000	0,000	0,000
MCSV-MassiveCode não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	Pearson Correlation			1	,530**	,607**
	Sig. (2-tailed)				0,000	0,000
MCAV-MassiveCode não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	Pearson Correlation				1	,383**
	Sig. (2-tailed)					0,000
MCEV-MassiveCode ter políticas salariais e de carreiras inferiores às praticadas no mercado.	Pearson Correlation					1

*. Correlation is significant at the 0.05 level (2-tailed). N=495

**. Correlation is significant at the 0.01 level (2-tailed).

6.2.11. Appendix 11 - Descriptive statistics for scenario questions, for N =495.

Descriptive Statistics

	Mean	Std. Deviation
HDEE-Considero a HEYDEVELOPER um empregador de excelência.	3,41	,790
HDSV-HEYDEVELOPER não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	2,19	,872
HDAV-HEYDEVELOPER não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	2,23	,922
HDEV-HEYDEVELOPER ter políticas salariais e de carreiras inferiores às praticadas no mercado.	2,18	,919
HDDV-HEYDEVELOPER não potenciar a realização pessoal, nem permitir criar valor para ...	1,95	,939
SWEE-Considero a SoftwareWizard um empregador de excelência.	3,59	,913
SWIV-SoftwareWizard não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	2,59	,979
SWAV-SoftwareWizard não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	2,45	1,007
SWEV-SoftwareWizard ter políticas salariais e de carreiras inferiores às praticadas no mercado.	2,24	,911
SWDV-SoftwareWizard não potenciar a realização pessoal, nem permitir criar valor para...	2,17	,996
QBEE-Considero a QuickBot um empregador de excelência.	3,89	,834
QBIV-QuickBot não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	2,50	1,000
QBSV-QuickBot não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	2,22	,936
QBEV-QuickBot ter políticas salariais e de carreiras inferiores às praticadas no mercado.	2,36	,955
QBDV-QuickBot não potenciar a realização pessoal, nem permitir criar valor para ...	2,16	,975
CPEE-Considero a COMPUTORIAL um empregador de excelência.	4,11	,895
CPIV-COMPUTORIAL não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	2,79	1,093
CPSV-COMPUTORIAL não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	2,52	,996
CPAV-COMPUTORIAL não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	2,64	1,102
CPDV-COMPUTORIAL não potenciar a realização pessoal, nem permitir criar valor para ..	2,32	1,086
MCEE-Considero a MassiveCode um empregador de excelência.	3,64	,927
MCIV-MassiveCode não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	2,42	,976
MCSV-MassiveCode não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	2,35	,872
MCAV-MassiveCode não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	2,35	1,016
MCEV-MassiveCode ter políticas salariais e de carreiras inferiores às praticadas no mercado.	2,24	,908

6.2.12. Appendix 12 - Correlation matrix between dimensions and scenario questions

Correlations

		Social Value	Interest Value	Application Value	Development Value	Economic Value
HDEE-Considero a HEYDEVELOPER um empregador de excelência.	Pearson Correlation	,138**	,206**	,218**	,193**	,054
	Sig. (2-tailed)	,002	,000	,000	,000	,236
	N	495	495	495	492	492
HDSV-HEYDEVELOPER não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	Pearson Correlation	-,162**	-,024	,019	-,017	-,070
	Sig. (2-tailed)	,000	,593	,680	,705	,121
	N	495	495	495	492	492
HDAV-HEYDEVELOPER não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	Pearson Correlation	-,117**	-,135**	-,065	-,075	-,044
	Sig. (2-tailed)	,009	,003	,149	,095	,333
	N	495	495	495	492	492
HDEV-HEYDEVELOPER ter políticas salariais e de carreiras inferiores às praticadas no mercado.	Pearson Correlation	-,017	,054	,088	,024	-,203**
	Sig. (2-tailed)	,713	,233	,050	,598	,000
	N	495	495	495	492	492
HDDV-HEYDEVELOPER não potenciar a realização pessoal, nem permitir criar valor para ...	Pearson Correlation	-,114*	-,072	,030	-,077	-,171**
	Sig. (2-tailed)	,011	,110	,503	,089	,000
	N	495	495	495	492	492
SWEE-Considero a SoftwareWizard um empregador de excelência.	Pearson Correlation	,170**	,063	,087	,151**	,084
	Sig. (2-tailed)	,000	,164	,054	,001	,061
	N	495	495	495	492	492
SWIV-SoftwareWizard não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	Pearson Correlation	-,063	-,142**	-,091*	-,037	-,098*
	Sig. (2-tailed)	,160	,002	,044	,419	,030
	N	495	495	495	492	492
SWAV-SoftwareWizard não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	Pearson Correlation	-,123**	-,149**	-,186**	-,034	-,084
	Sig. (2-tailed)	,006	,001	,000	,450	,064
	N	495	495	495	492	492
SWEV-SoftwareWizard ter políticas salariais e de carreiras inferiores às praticadas no mercado.	Pearson Correlation	-,063	,020	,034	,026	-,154**
	Sig. (2-tailed)	,161	,665	,452	,561	,001
	N	495	495	495	492	492
SWDV-SoftwareWizard não potenciar a realização pessoal, nem permitir criar valor para...	Pearson Correlation	-,092*	-,067	-,062	-,047	-,110*
	Sig. (2-tailed)	,041	,139	,167	,294	,014
	N	495	495	495	492	492
QBEE-Considero a QuickBot um empregador de excelência.	Pearson Correlation	,146**	,198**	,170**	,221**	-,046
	Sig. (2-tailed)	,001	,000	,000	,000	,308
	N	495	495	495	492	492
QBIV-QuickBot não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	Pearson Correlation	-,098*	-,184**	-,057	-,085	-,122**
	Sig. (2-tailed)	,029	,000	,209	,061	,007
	N	495	495	495	492	492
QBSV-QuickBot não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	Pearson Correlation	-,267**	-,111*	-,044	-,093*	-,124**
	Sig. (2-tailed)	,000	,014	,324	,039	,006
	N	495	495	495	492	492
QBEV-QuickBot ter políticas salariais e de carreiras inferiores às praticadas no mercado.	Pearson Correlation	-,102*	,017	,082	-,015	-,184**
	Sig. (2-tailed)	,023	,712	,068	,743	,000
	N	495	495	495	492	492
QBDV-QuickBot não potenciar a realização pessoal, nem permitir criar valor para ...	Pearson Correlation	-,150**	-,123**	,016	-,092*	-,176**
	Sig. (2-tailed)	,001	,006	,715	,042	,000
	N	495	495	495	492	492
CPEE-Considero a COMPUTORIAL um empregador de excelência.	Pearson Correlation	,119**	,050	,035	,144**	,177**
	Sig. (2-tailed)	,008	,269	,438	,001	,000
	N	495	495	495	492	492
CPIV-COMPUTORIAL não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	Pearson Correlation	-,072	-,176**	-,182**	-,034	-,056
	Sig. (2-tailed)	,109	,000	,000	,450	,217
	N	495	495	495	492	492
CPSV-COMPUTORIAL não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	Pearson Correlation	-,174**	-,053	-,108*	-,041	-,026
	Sig. (2-tailed)	,000	,242	,017	,360	,560
	N	495	495	495	492	492
CPAV-COMPUTORIAL não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	Pearson Correlation	-,127**	-,143**	-,201**	-,106*	-,008
	Sig. (2-tailed)	,005	,001	,000	,019	,868
	N	495	495	495	492	492
CPDV-COMPUTORIAL não potenciar a realização pessoal, nem permitir criar valor para ..	Pearson Correlation	-,114*	-,088	-,010	-,050	-,057
	Sig. (2-tailed)	,011	,051	,821	,271	,205
	N	495	495	495	492	492
MCEE-Considero a MassiveCode um empregador de excelência.	Pearson Correlation	,088	,133**	,103*	,155**	-,042
	Sig. (2-tailed)	,050	,003	,021	,001	,352
	N	495	495	495	492	492
MCIV-MassiveCode não ter um ambiente desafiante nem preocupação com inovação e qualidade dos seus produtos.	Pearson Correlation	-,108*	-,154**	-,140**	-,091*	-,007
	Sig. (2-tailed)	,017	,001	,002	,044	,880
	N	495	495	495	492	492
MCSV-MassiveCode não ter um ambiente agradável e os colegas não se apoiarem nem encorajarem.	Pearson Correlation	-,161**	-,044	-,034	-,021	-,062
	Sig. (2-tailed)	,000	,331	,447	,638	,169
	N	495	495	495	492	492
MCAV-MassiveCode não se preocupar com o retorno para a sociedade nem com a partilha do conhecimento.	Pearson Correlation	-,183**	-,181**	-,173**	-,098*	-,006
	Sig. (2-tailed)	,000	,000	,000	,030	,888
	N	495	495	495	492	492
MCEV-MassiveCode ter políticas salariais e de carreiras inferiores às praticadas no mercado.	Pearson Correlation	-,078	,014	,004	-,003	-,145**
	Sig. (2-tailed)	,084	,759	,932	,946	,001
	N	495	495	495	492	492

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

6.2.13. Appendix 13 - ANOVA repeated measures for Dimensions and Scenarios.

ANOVA RM – dimensions and scenarios:

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	HDEE-Considero a HEYDEVELOPER um empregador de excelência. - Interest Value	-,64505	,88121	,03961	-,72287	-,56723	-16,286	494	,000
Pair 2	SWEE-Considero a SoftwareWizard um empregador de excelência. - Social Value	-,79222	,98375	,04422	-,87910	-,70535	-17,917	494	,000
Pair 3	QBEE-Considero a QuickBot um empregador de excelência. - Application Value	,37508	1,00696	,04526	,28616	,46401	8,287	494	,000
Pair 4	CPEE-Considero a COMPUTORIAL um empregador de excelência. - Economic Value	-,22087	,98207	,04428	-,30786	-,13387	-4,988	491	,000
Pair 5	MCEE-Considero a MassiveCode um empregador de excelência. - Development Value	-,69648	1,02912	,04640	-,78764	-,60532	-15,012	491	,000

ANOVA RM – Dimensions:

Within-Subjects Factors

Measure: MEASURE_1

domain	Dependent Variable
1	social
2	interest
3	application
4	development
5	economic

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser	Huynh-Feldt	Lower-bound
domain	,837	86,948	9	,000	,912	,920	,250

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept
Within Subjects Design: domain

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
domain	Sphericity Assumed	265,128	4	66,282	265,351	,000
	Greenhouse-Geisser	265,128	3,648	72,686	265,351	,000
	Huynh-Feldt	265,128	3,678	72,080	265,351	,000
	Lower-bound	265,128	1,000	265,128	265,351	,000
Error(domain)	Sphericity Assumed	490,588	1964	,250		
	Greenhouse-Geisser	490,588	1790,956	,274		
	Huynh-Feldt	490,588	1806,020	,272		
	Lower-bound	490,588	491,000	,999		

Pairwise Comparisons

Measure: MEASURE_1

(I) domain	(J) domain	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	,333*	,029	,000	,250	,415
	3	,879*	,034	,000	,783	,976
	4	,057	,027	,364	-,020	,133
	5	,057	,031	,631	-,029	,143
2	1	-,333*	,029	,000	-,415	-,250
	3	,547*	,032	,000	,457	,636
	4	-,276*	,028	,000	-,354	-,198
	5	-,276*	,033	,000	-,369	-,183
3	1	-,879*	,034	,000	-,976	-,783
	2	-,547*	,032	,000	-,636	-,457
	4	-,822*	,033	,000	-,915	-,730
	5	-,822*	,039	,000	-,931	-,714
4	1	-,057	,027	,364	-,133	,020
	2	,276*	,028	,000	,198	,354
	3	,822*	,033	,000	,730	,915
	5	4,441E-15	,032	1,000	-,091	,091
5	1	-,057	,031	,631	-,143	,029
	2	,276*	,033	,000	,183	,369
	3	,822*	,039	,000	,714	,931
	4	-4,441E-15	,032	1,000	-,091	,091

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Bonferroni.

ANOVA RM – Scenarios:

Within-Subjects Factors

Measure: MEASURE_1

domain	Dependent Variable
1	HDEE
2	SWEE
3	QBEE
4	CPEE
5	MCEE

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser	Huynh-Feldt	Lower-bound
domain	,928	36,802	9	,000	,967	,975	,250

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept
Within Subjects Design: domain

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
domain	Sphericity Assumed	146,645	4	36,661	73,909	,000
	Greenhouse-Geisser	146,645	3,867	37,918	73,909	,000
	Huynh-Feldt	146,645	3,902	37,585	73,909	,000
	Lower-bound	146,645	1,000	146,645	73,909	,000
Error(domain)	Sphericity Assumed	980,155	1976	,496		
	Greenhouse-Geisser	980,155	1910,497	,513		
	Huynh-Feldt	980,155	1927,454	,509		
	Lower-bound	980,155	494,000	1,984		

Pairwise Comparisons

Measure: MEASURE_1

(I) domain	(J) domain	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	-,182*	,043	,000	-,304	-,060
	3	-,475*	,039	,000	-,585	-,365
	4	-,697*	,046	,000	-,828	-,566
	5	-,226*	,045	,000	-,352	-,100
2	1	,182*	,043	,000	,060	,304
	3	-,293*	,046	,000	-,422	-,164
	4	-,515*	,046	,000	-,644	-,387
	5	-,044	,048	1,000	-,180	,091
3	1	,475*	,039	,000	,365	,585
	2	,293*	,046	,000	,164	,422
	4	-,222*	,044	,000	-,348	-,097
	5	,248*	,042	,000	,129	,368
4	1	,697*	,046	,000	,566	,828
	2	,515*	,046	,000	,387	,644
	3	,222*	,044	,000	,097	,348
	5	,471*	,047	,000	,337	,605
5	1	,226*	,045	,000	,100	,352
	2	,044	,048	1,000	-,091	,180
	3	-,248*	,042	,000	-,368	-,129
	4	-,471*	,047	,000	-,605	-,337

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Bonferroni.

6.2.14. Appendix 14 - Dimension analysis according with different sample characteristics (t-tests).

Gender:

Group Statistics

	Sexo	N	Mean	Std. Deviation	Std. Error Mean
Interest Value	Feminino	126	4,1222	,55654	,04958
	Masculino	369	4,0350	,59600	,03103
Social Value	Feminino	126	4,5333	,45396	,04044
	Masculino	369	4,3359	,57628	,03000
Application Value	Feminino	126	3,6230	,73535	,06551
	Masculino	369	3,4738	,71704	,03733
Economic Value	Feminino	126	4,4471	,51840	,04618
	Masculino	366	4,2960	,61647	,03222
Development Value	Feminino	126	4,4603	,57482	,05121
	Masculino	366	4,2914	,61691	,03225

Independent Samples Test

		Levene's Test for Equality of Variances F	Sig.	t-test for Equality of Means t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Interest Value	Equal variances assumed	,710	,400	1,443	493	,150	,08726	,06049	-,03159	,20611
	Equal variances not assumed			1,492	230,082	,137	,08726	,05849	-,02798	,20250
Social Value	Equal variances assumed	4,755	,030	3,492	493	,001	,19743	,05653	,08636	,30849
	Equal variances not assumed			3,921	272,399	,000	,19743	,05035	,09829	,29656
Application Value	Equal variances assumed	,041	,839	2,004	493	,046	,14921	,07447	,00290	,29553
	Equal variances not assumed			1,979	211,760	,049	,14921	,07540	,00058	,29784
Economic Value	Equal variances assumed	1,358	,244	2,467	490	,014	,15110	,06125	,03075	,27144
	Equal variances not assumed			2,683	255,591	,008	,15110	,05631	,04020	,26199
Development Value	Equal variances assumed	,077	,781	2,696	490	,007	,16888	,06264	,04580	,29196
	Equal variances not assumed			2,791	231,332	,006	,16888	,06052	,04965	,28811

Professional Situation:

Group Statistics

	Situação Profissional	N	Mean	Std. Deviation	Std. Error Mean
Interest Value	Estudante	418	4,0519	,58708	,02871
	Trabalhador-estudante	66	4,0970	,60383	,07433
Social Value	Estudante	418	4,3812	,55442	,02712
	Trabalhador-estudante	66	4,4212	,56583	,06965
Application Value	Estudante	418	3,5032	,72956	,03568
	Trabalhador-estudante	66	3,5644	,71159	,08759
Economic Value	Estudante	415	4,3149	,59334	,02913
	Trabalhador-estudante	66	4,3939	,62130	,07648
Development Value	Estudante	415	4,3398	,61338	,03011
	Trabalhador-estudante	66	4,3182	,54359	,06691

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Interest Value	Equal variances assumed	,143	,705	-,577	482	,564	-,04506	,07806	-,19844	,10833
	Equal variances not assumed			-,565	85,554	,573	-,04506	,07968	-,20347	,11335
Social Value	Equal variances assumed	,034	,853	-,543	482	,587	-,03999	,07364	-,18469	,10470
	Equal variances not assumed			-,535	85,894	,594	-,03999	,07474	-,18858	,10859
Application Value	Equal variances assumed	1,018	,313	-,635	482	,525	-,06120	,09632	-,25045	,12805
	Equal variances not assumed			-,647	87,989	,519	-,06120	,09458	-,24916	,12676
Economic Value	Equal variances assumed	,406	,524	-,999	479	,318	-,07908	,07914	-,23459	,07643
	Equal variances not assumed			-,966	84,942	,337	-,07908	,08184	-,24179	,08363
Development Value	Equal variances assumed	2,100	,148	,269	479	,788	,02158	,08009	-,13580	,17895
	Equal variances not assumed			,294	93,388	,769	,02158	,07337	-,12412	,16728

University year of attendance:

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Interest Value	Licenciatura - 1º ano	142	4,1775	,53480	,04488	4,0887	4,2662	2,40	5,00
	Licenciatura - 2º ano	88	4,0659	,68395	,07291	3,9210	4,2108	1,20	5,00
	Licenciatura - 3º ano	101	4,0287	,53932	,05366	3,9222	4,1352	2,60	5,00
	Mestrado 1º ano	88	3,9886	,58515	,06238	3,8647	4,1126	1,60	5,00
	Mestrado 2º ano	55	3,8691	,65231	,08796	3,6927	4,0454	2,20	5,00
	Total	474	4,0542	,59486	,02732	4,0005	4,1079	1,20	5,00
Social Value	Licenciatura - 1º ano	142	4,3539	,55773	,04680	4,2613	4,4464	2,40	5,00
	Licenciatura - 2º ano	88	4,3386	,65345	,06966	4,2002	4,4771	2,00	5,00
	Licenciatura - 3º ano	101	4,3965	,55264	,05499	4,2874	4,5056	2,80	5,00
	Mestrado 1º ano	88	4,4688	,48479	,05168	4,3660	4,5715	3,20	5,00
	Mestrado 2º ano	55	4,3927	,52347	,07058	4,2512	4,5342	2,80	5,00
	Total	474	4,3860	,55891	,02567	4,3355	4,4364	2,00	5,00
Application Value	Licenciatura - 1º ano	142	3,5023	,69651	,05845	3,3868	3,6179	1,75	5,00
	Licenciatura - 2º ano	88	3,4830	,81807	,08721	3,3096	3,6563	1,50	5,00
	Licenciatura - 3º ano	101	3,6716	,65041	,06472	3,5432	3,8000	1,75	5,00
	Mestrado 1º ano	88	3,3996	,71832	,07657	3,2474	3,5518	1,75	5,00
	Mestrado 2º ano	55	3,4136	,77909	,10505	3,2030	3,6243	1,00	4,75
	Total	474	3,5055	,72829	,03345	3,4397	3,5712	1,00	5,00
Economic Value	Licenciatura - 1º ano	141	4,2979	,65913	,05551	4,1881	4,4076	1,67	5,00
	Licenciatura - 2º ano	88	4,3258	,51782	,05520	4,2160	4,4355	3,00	5,00
	Licenciatura - 3º ano	100	4,3467	,59160	,05916	4,2293	4,4641	2,67	5,00
	Mestrado 1º ano	87	4,3602	,58229	,06243	4,2360	4,4843	2,67	5,00
	Mestrado 2º ano	55	4,3273	,63664	,08584	4,1552	4,4994	2,67	5,00
	Total	471	4,3284	,60159	,02772	4,2739	4,3828	1,67	5,00
Development Value	Licenciatura - 1º ano	141	4,3570	,54576	,04596	4,2661	4,4478	2,67	5,00
	Licenciatura - 2º ano	88	4,3561	,63083	,06725	4,2224	4,4897	2,33	5,00
	Licenciatura - 3º ano	100	4,3733	,60540	,06054	4,2532	4,4935	2,67	5,00
	Mestrado 1º ano	87	4,3065	,58671	,06290	4,1815	4,4316	2,67	5,00
	Mestrado 2º ano	55	4,2303	,72824	,09820	4,0334	4,4272	1,67	5,00
	Total	471	4,3362	,60455	,02786	4,2814	4,3909	1,67	5,00

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Interest Value	Based on Mean	1,161	4	469	,327
	Based on Median	,961	4	469	,428
	Based on Median and with adjusted df	,961	4	425,845	,429
	Based on trimmed mean	1,118	4	469	,347
Social Value	Based on Mean	1,644	4	469	,162
	Based on Median	1,333	4	469	,257
	Based on Median and with adjusted df	1,333	4	447,547	,257
	Based on trimmed mean	1,252	4	469	,288
Application Value	Based on Mean	1,575	4	469	,180
	Based on Median	1,234	4	469	,296
	Based on Median and with adjusted df	1,234	4	443,132	,296
	Based on trimmed mean	1,459	4	469	,213
Economic Value	Based on Mean	1,816	4	466	,125
	Based on Median	1,673	4	466	,155
	Based on Median and with adjusted df	1,673	4	452,670	,155
	Based on trimmed mean	1,662	4	466	,158
Development Value	Based on Mean	1,133	4	466	,340
	Based on Median	,901	4	466	,463
	Based on Median and with adjusted df	,901	4	423,180	,463
	Based on trimmed mean	,921	4	466	,452

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Interest Value	Between Groups	4,498	4	1,125	3,238	,012
	Within Groups	162,878	469	,347		
	Total	167,377	473			
Social Value	Between Groups	,960	4	,240	,767	,547
	Within Groups	146,794	469	,313		
	Total	147,754	473			
Application Value	Between Groups	4,284	4	1,071	2,037	,088
	Within Groups	246,598	469	,526		
	Total	250,882	473			
Economic Value	Between Groups	,253	4	,063	,174	,952
	Within Groups	169,846	466	,364		
	Total	170,100	470			
Development Value	Between Groups	,927	4	,232	,632	,640
	Within Groups	170,847	466	,367		
	Total	171,774	470			

Multiple Comparisons

Scheffe

Dependent Variable	(I) Habilitação Literária (Frequência)	(J) Habilitação Literária (Frequência)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Interest Value	Licenciatura - 1º ano	Licenciatura - 2º ano	,11156	,07995	,746	-,1357	,3588
		Licenciatura - 3º ano	,14875	,07671	,440	-,0885	,3860
		Mestrado 1º ano	,18883	,07995	,235	-,0584	,4361
		Mestrado 2º ano	,30837*	,09360	,029	,0189	,5978
	Licenciatura - 2º ano	Licenciatura - 1º ano	-,11156	,07995	,746	-,3588	,1357
		Licenciatura - 3º ano	,03720	,08594	,996	-,2286	,3030
		Mestrado 1º ano	,07727	,08884	,944	-,1975	,3520
		Mestrado 2º ano	,19682	,10130	,438	-,1164	,5101
	Licenciatura - 3º ano	Licenciatura - 1º ano	-,14875	,07671	,440	-,3860	,0885
		Licenciatura - 2º ano	-,03720	,08594	,996	-,3030	,2286
		Mestrado 1º ano	,04008	,08594	,994	-,2257	,3058
		Mestrado 2º ano	,15962	,09876	,625	-,1458	,4650
	Mestrado 1º ano	Licenciatura - 1º ano	-,18883	,07995	,235	-,4361	,0584
		Licenciatura - 2º ano	-,07727	,08884	,944	-,3520	,1975
		Licenciatura - 3º ano	-,04008	,08594	,994	-,3058	,2257
		Mestrado 2º ano	,11955	,10130	,845	-,1937	,4328
	Mestrado 2º ano	Licenciatura - 1º ano	-,30837*	,09360	,029	-,5978	-,0189
		Licenciatura - 2º ano	-,19682	,10130	,438	-,5101	,1164
		Licenciatura - 3º ano	-,15962	,09876	,625	-,4650	,1458
		Mestrado 1º ano	-,11955	,10130	,845	-,4328	,1937

*. The mean difference is significant at the 0.05 level.

6.2.15. Appendix 15- Intentions to apply for every scenario – Multiple linear regression tests.

HeyDeveloper:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	,409[b]	,167	,140	,727	1,935

b. Predictors: (Constant), Habilitação Literária (Frequência), Economic Value, sexo, situação profissional, Application Value, Social Value, Interest Value, Development Value, Grau de credibilidade que atribui LinkedIn, Grau de credibilidade que atribui Facebook, Grau de credibilidade que atribui Jornais, Grau de credibilidade que atribui Partilha direta, Grau de credibilidade que atribui Feiras de Emprego, Grau de credibilidade que atribui Twitter

c. Dependent Variable: HDEE-Considero a HEYDEVELOPER um empregador de excelência.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	45,286	14	3,235	6,114	,000[c]
	Residual	225,371	426	,529		
	Total	270,658	440			

a. Dependent Variable: HDEE-Considero a HEYDEVELOPER um empregador de excelência.

c. Predictors: (Constant), Habilitação Literária (Frequência), Economic Value, sexo, situação profissional, Application Value, Social Value, Interest Value, Development Value, Grau de credibilidade que atribui LinkedIn, Grau de credibilidade que atribui Facebook, Grau de credibilidade que atribui Jornais, Grau de credibilidade que atribui Partilha direta, Grau de credibilidade que atribui Feiras de Emprego, Grau de credibilidade que atribui Twitter

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
2	(Constant)	1,407	,449		3,134	,002		
	Social Value	,100	,078	,070	1,286	,199	,667	1,499
	Interest Value	,090	,073	,068	1,233	,218	,636	1,573
	Application Value	**,138**	,057	,128	2,445	**,015**	,716	1,397
	Development Value	,042	,076	,032	,546	,585	,562	1,779
	Economic Value	-,013	,063	-,010	-,210	,833	,835	1,198
	sexo	**,232**	,083	,129	2,778	**,006**	,905	1,105
	situação profissional	,098	,112	,040	,878	,381	,924	1,082
	Habilitação Literária (Frequência)	**-,125**	,027	-,220	-4,627	**,000**	,861	1,161
	Grau de credibilidade que atribui LinkedIn	,061	,048	,060	1,269	,205	,889	1,125
	Grau de credibilidade que atribui Facebook	,072	,045	,087	1,616	,107	,668	1,497
	Grau de credibilidade que atribui Twitter	-,035	,044	-,042	-,785	,433	,680	1,471
	Grau de credibilidade que atribui Feiras de Emprego	,052	,055	,048	,950	,343	,777	1,287
	Grau de credibilidade que atribui Jornais	,059	,041	,070	1,438	,151	,828	1,207
	Grau de credibilidade que atribui Partilha direta	,015	,051	,014	,292	,770	,865	1,156

a. Dependent Variable: HDEE-Considero a HEYDEVELOPER um empregador de excelência.

Software Wizard:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	,259[b]	,067	,036	,913	1,995

b. Predictors: (Constant), Habilitação Literária (Frequência), Economic Value, sexo, situação profissional, Application Value, Social Value, Interest Value, Development Value, Grau de credibilidade que atribui LinkedIn, Grau de credibilidade que atribui Facebook, Grau de credibilidade que atribui Jornais, Grau de credibilidade que atribui Partilha direta, Grau de credibilidade que atribui Feiras de Emprego, Grau de credibilidade que atribui Twitter

c. Dependent Variable: SWEE-Considero a SoftwareWizard um empregador de excelência.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	25,531	14	1,824	2,186	,008[c]
	Residual	355,385	426	,834		
	Total	380,916	440			

a. Dependent Variable: SWEE-Considero a SoftwareWizard um empregador de excelência.

c. Predictors: (Constant), Habilitação Literária (Frequência), Economic Value, sexo, situação profissional, Application Value, Social Value, Interest Value, Development Value, Grau de credibilidade que atribui LinkedIn, Grau de credibilidade que atribui Facebook, Grau de credibilidade que atribui Jornais, Grau de credibilidade que atribui Partilha direta, Grau de credibilidade que atribui Feiras de Emprego, Grau de credibilidade que atribui Twitter

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
2	(Constant)	1,453	,564		2,576	,010		
	Social Value	**,213**	,098	,124	2,171	**,031**	,667	1,499
	Interest Value	-,081	,092	-,052	-,885	,377	,636	1,573
	Application Value	,039	,071	,030	,551	,582	,716	1,397
	Development Value	,096	,096	,062	,996	,320	,562	1,779
	Economic Value	,051	,079	,033	,649	,517	,835	1,198
	sexo	,150	,105	,070	1,430	,153	,905	1,105
	situação profissional	,052	,140	,018	,372	,710	,924	1,082
	Habilitação Literária (Frequência)	-,044	,034	-,065	-1,285	,200	,861	1,161
	Grau de credibilidade que atribui LinkedIn	-,039	,060	-,032	-,640	,523	,889	1,125
	Grau de credibilidade que atribui Facebook	,039	,056	,040	,691	,490	,668	1,497
	Grau de credibilidade que atribui Twitter	,031	,055	,032	,555	,579	,680	1,471
	Grau de credibilidade que atribui Feiras de Emprego	**,139**	,069	,107	2,025	**,044**	,777	1,287
	Grau de credibilidade que atribui Jornais	,015	,051	,016	,303	,762	,828	1,207
	Grau de credibilidade que atribui Partilha direta	,043	,064	,034	,668	,505	,865	1,156

a. Dependent Variable: SWEE-Considero a SoftwareWizard um empregador de excelência.

Quickbot:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	,372[b]	,139	,110	,784	1,934

b. Predictors: (Constant), Habilitação Literária (Frequência), Economic Value, sexo, situação profissional, Application Value, Social Value, Interest Value, Development Value, Grau de credibilidade que atribui LinkedIn, Grau de credibilidade que atribui Facebook, Grau de credibilidade que atribui Jornais, Grau de credibilidade que atribui Partilha direta, Grau de credibilidade que atribui Feiras de Emprego, Grau de credibilidade que atribui Twitter

c. Dependent Variable: QBEE-Considero a QuickBot um empregador de excelência.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	42,121	14	3,009	4,896	,000[c]
	Residual	261,775	426	,614		
	Total	303,896	440			

a. Dependent Variable: QBEE-Considero a QuickBot um empregador de excelência.

c. Predictors: (Constant), Habilitação Literária (Frequência), Economic Value, sexo, situação profissional, Application Value, Social Value, Interest Value, Development Value, Grau de credibilidade que atribui LinkedIn, Grau de credibilidade que atribui Facebook, Grau de credibilidade que atribui Jornais, Grau de credibilidade que atribui Partilha direta, Grau de credibilidade que atribui Feiras de Emprego, Grau de credibilidade que atribui Twitter

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
2	(Constant)	2,241	,484		4,631	,000		
	Social Value	,159	,084	,104	1,896	,059	,667	1,499
	Interest Value	,099	,079	,071	1,254	,211	,636	1,573
	Application Value	,088	,061	,077	1,450	,148	,716	1,397
	Development Value	,156	,082	,114	1,894	,059	,562	1,779
	Economic Value	**-,174**	,068	-,126	-2,568	**,011**	,835	1,198
	sexo	,142	,090	,075	1,581	,115	,905	1,105
	situação profissional	-,016	,120	-,006	-,131	,895	,924	1,082
	Habilitação Literária (Frequência)	**-,123**	,029	-,204	-4,210	**,000**	,861	1,161
	Grau de credibilidade que atribui LinkedIn	,071	,052	,066	1,375	,170	,889	1,125
	Grau de credibilidade que atribui Facebook	,039	,048	,045	,813	,417	,668	1,497
	Grau de credibilidade que atribui Twitter	,026	,047	,030	,541	,589	,680	1,471
	Grau de credibilidade que atribui Feiras de Emprego	,061	,059	,053	1,035	,301	,777	1,287
	Grau de credibilidade que atribui Jornais	-,003	,044	-,003	-,061	,951	,828	1,207
	Grau de credibilidade que atribui Partilha direta	-,024	,055	-,021	-,444	,658	,865	1,156

a. Dependent Variable: QBEE-Considero a QuickBot um empregador de excelência.

Computorial:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	,342[b]	,117	,088	,859	2,141

b. Predictors: (Constant), Habilitação Literária (Frequência), Economic Value, sexo, situação profissional, Application Value, Social Value, Interest Value, Development Value, Grau de credibilidade que atribui LinkedIn, Grau de credibilidade que atribui Facebook, Grau de credibilidade que atribui Jornais, Grau de credibilidade que atribui Partilha direta, Grau de credibilidade que atribui Feiras de Emprego, Grau de credibilidade que atribui Twitter

c. Dependent Variable: CPEE-Considero a COMPUTORIAL um empregador de excelência.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	41,774	14	2,984	4,043	,000[c]
	Residual	314,367	426	,738		
	Total	356,141	440			

a. Dependent Variable: CPEE-Considero a COMPUTORIAL um empregador de excelência.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
2	(Constant)	2,375	,530		4,477	,000		
	Social Value	,086	,092	,052	,937	,349	,667	1,499
	Interest Value	-,139	,086	-,092	-1,605	,109	,636	1,573
	Application Value	-,082	,067	-,066	-1,221	,223	,716	1,397
	Development Value	,170	,090	,114	1,879	,061	,562	1,779
	Economic Value	**,218**	,074	,146	2,935	**,004**	,835	1,198
	sexo	**,251**	,098	,122	2,544	**,011**	,905	1,105
	situação profissional	,136	,132	,049	1,030	,303	,924	1,082
	Habilitação Literária (Frequência)	**-,112**	,032	-,171	-3,492	**,001**	,861	1,161
	Grau de credibilidade que atribui LinkedIn	,102	,057	,087	1,794	,073	,889	1,125
	Grau de credibilidade que atribui Facebook	**,123**	,053	,129	2,318	**,021**	,668	1,497
	Grau de credibilidade que atribui Twitter	,053	,052	,056	1,018	,309	,680	1,471
	Grau de credibilidade que atribui Feiras de Emprego	,015	,065	,012	,235	,814	,777	1,287
	Grau de credibilidade que atribui Jornais	-,034	,048	-,036	-,714	,476	,828	1,207
	Grau de credibilidade que atribui Partilha direta	-,014	,060	-,011	-,229	,819	,865	1,156

a. Dependent Variable: CPEE-Considero a COMPUTORIAL um empregador de excelência.

Massive Code:

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	51,745	14	3,696	4,752	,000[c]
	Residual	331,362	426	,778		
	Total	383,107	440			

a. Dependent Variable: MCEE-Considero a MassiveCode um empregador de excelência.

c. Predictors: (Constant), Habilitação Literária (Frequência), Economic Value, sexo, situação profissional, Application Value, Social Value, Interest Value, Development Value, Grau de credibilidade que atribui LinkedIn, Grau de credibilidade que atribui Facebook, Grau de credibilidade que atribui Jornais, Grau de credibilidade que atribui Partilha direta, Grau de credibilidade que atribui Feiras de Emprego, Grau de credibilidade que atribui Twitter

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	,368[b]	,135	,107	,882	1,908

b. Predictors: (Constant), Habilitação Literária (Frequência), Economic Value, sexo, situação profissional, Application Value, Social Value, Interest Value, Development Value, Grau de credibilidade que atribui LinkedIn, Grau de credibilidade que atribui Facebook, Grau de credibilidade que atribui Jornais, Grau de credibilidade que atribui Partilha direta, Grau de credibilidade que atribui Feiras de Emprego, Grau de credibilidade que atribui Twitter

c. Dependent Variable: MCEE-Considero a MassiveCode um empregador de excelência.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
2	(Constant)	1,740	,545		3,196	,001		
	Social Value	,110	,095	,064	1,166	,244	,667	1,499
	Interest Value	,075	,089	,048	,847	,398	,636	1,573
	Application Value	,033	,069	,026	,487	,626	,716	1,397
	Development Value	,112	,093	,073	1,211	,227	,562	1,779
	Economic Value	**-,156**	,076	-,101	-2,044	**,042**	,835	1,198
	sexo	**,308**	,101	,144	3,047	**,002**	,905	1,105
	situação profissional	,055	,135	,019	,407	,684	,924	1,082
	Habilitação Literária (Frequência)	**-,093**	,033	-,138	-2,839	**,005**	,861	1,161
	Grau de credibilidade que atribui LinkedIn	**,143**	,058	,117	2,451	**,015**	,889	1,125
	Grau de credibilidade que atribui Facebook	,077	,054	,078	1,410	,159	,668	1,497
	Grau de credibilidade que atribui Twitter	,056	,053	,057	1,049	,295	,680	1,471
	Grau de credibilidade que atribui Feiras de Emprego	**,156**	,066	,120	2,345	**,020**	,777	1,287
	Grau de credibilidade que atribui Jornais	,049	,049	,049	,988	,324	,828	1,207
	Grau de credibilidade que atribui Partilha direta	-,102	,062	-,080	-1,654	,099	,865	1,156

a. Dependent Variable: MCEE-Considero a MassiveCode um empregador de excelência.

6.2.16. Appendix 16 – Qui-Square tests for homogeneity of distributions.

Qui-Square test for homogeneity of distributions between questions 1 and 2:

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	**.310[a]**	**5**	**.997**
Likelihood Ratio	.310	5	.997
Linear-by-Linear Association	.001	1	.974
N of Valid Cases	593		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 7,99.

Qui-Square test for homogeneity of distributions between media channels in question 1:

Test Statistics

	Canal
Chi-Square	143,747[a]
df	5
Asymp. Sig.	,000

a. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 49,5.

Canal

	Observed N	Expected N	Residual
Linked In	92	49,5	42,5
Facebook	24	49,5	-25,5
Twitter	9	49,5	-40,5
Feiras	82	49,5	32,5
Jornais	14	49,5	-35,5
Partilha	76	49,5	26,5
Total	297		

Qui-Square test for homogeneity of distributions between media channels in question 2:

Test Statistics

	Canal
Chi-Square	144,108[a]
df	5
Asymp. Sig.	,000

a. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 49,3.

Canal

	Observed N	Expected N	Residual
Linked In	92	49,3	42,7
Facebook	25	49,3	-24,3
Twitter	7	49,3	-42,3
Feiras	82	49,3	32,7
Jornais	15	49,3	-34,3
Partilha	75	49,3	25,7
Total	296		

6.2.17. Appendix 17 - Deception and Credibility media channel analysis.

ANOVA RM for Credibility of channels:

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser	Epsilon[b] Huynh-Feldt	Epsilon[b] Lower-bound
canais	,635	212,786	14	,000	,834	,842	,200

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept
Within Subjects Design: canais

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
canais	Sphericity Assumed	2837,594	5	567,519	919,409	,000
	Greenhouse-Geisser	2837,594	4,168	680,779	919,409	,000
	Huynh-Feldt	2837,594	4,210	673,996	919,409	,000
	Lower-bound	2837,594	1,000	2837,594	919,409	,000
Error(canais)	Sphericity Assumed	1450,573	2350	,617		
	Greenhouse-Geisser	1450,573	1959,034	,740		
	Huynh-Feldt	1450,573	1978,750	,733		
	Lower-bound	1450,573	470,000	3,086		

Pairwise Comparisons

Measure: MEASURE_1

(I) canais	(J) canais	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	2,053*	,054	,000	1,893	2,213
	3	2,399*	,055	,000	2,237	2,561
	4	,011	,042	1,000	-,113	,134
	5	1,091*	,055	,000	,928	1,254
	6	-,002	,043	1,000	-,129	,125
2	1	-2,053*	,054	,000	-2,213	-1,893
	3	,346*	,044	,000	,216	,476
	4	-2,042*	,052	,000	-2,196	-1,889
	5	-,962*	,055	,000	-1,124	-,799
	6	-2,055*	,056	,000	-2,221	-1,890
3	1	-2,399*	,055	,000	-2,561	-2,237
	2	-,346*	,044	,000	-,476	-,216
	4	-2,389*	,054	,000	-2,549	-2,228
	5	-1,308*	,057	,000	-1,477	-1,138
	6	-2,401*	,057	,000	-2,568	-2,235
4	1	-,011	,042	1,000	-,134	,113
	2	2,042*	,052	,000	1,889	2,196
	3	2,389*	,054	,000	2,228	2,549
	5	1,081*	,046	,000	,945	1,216
	6	-,013	,042	1,000	-,137	,112
5	1	-1,091*	,055	,000	-1,254	-,928
	2	,962*	,055	,000	,799	1,124
	3	1,308*	,057	,000	1,138	1,477
	4	-1,081*	,046	,000	-1,216	-,945
	6	-1,093*	,051	,000	-1,244	-,943
6	1	,002	,043	1,000	-,125	,129
	2	2,055*	,056	,000	1,890	2,221
	3	2,401*	,057	,000	2,235	2,568
	4	,013	,042	1,000	-,112	,137
	5	1,093*	,051	,000	,943	1,244

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Bonferroni.

ANOVA RM for Deception:

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser	Huynh-Feldt	Lower-bound
canais	,382	90,659	14	,000	,702	,732	,200

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept
Within Subjects Design: canais

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
canais	Sphericity Assumed	517,704	5	103,541	124,261	,000
	Greenhouse-Geisser	517,704	3,512	147,410	124,261	,000
	Huynh-Feldt	517,704	3,662	141,383	124,261	,000
	Lower-bound	517,704	1,000	517,704	124,261	,000
Error(canais)	Sphericity Assumed	399,962	480	,833		
	Greenhouse-Geisser	399,962	337,153	1,186		
	Huynh-Feldt	399,962	351,525	1,138		
	Lower-bound	399,962	96,000	4,166		

Pairwise Comparisons

Measure: MEASURE_1

(I) canais	(J) canais	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	-2,186*	,139	,000	-2,603	-1,769
	3	-2,062*	,145	,000	-2,498	-1,626
	4	,124	,096	1,000	-,166	,414
	5	-1,000*	,134	,000	-1,404	-,596
	6	-,216	,124	1,000	-,589	,156
2	1	2,186*	,139	,000	1,769	2,603
	3	,124	,087	1,000	-,138	,386
	4	2,309*	,126	,000	1,929	2,690
	5	1,186*	,142	,000	,759	1,612
	6	1,969*	,162	,000	1,483	2,455
3	1	2,062*	,145	,000	1,626	2,498
	2	-,124	,087	1,000	-,386	,138
	4	2,186*	,127	,000	1,803	2,568
	5	1,062*	,141	,000	,637	1,487
	6	1,845*	,163	,000	1,353	2,337
4	1	-,124	,096	1,000	-,414	,166
	2	-2,309*	,126	,000	-2,690	-1,929
	3	-2,186*	,127	,000	-2,568	-1,803
	5	-1,124*	,107	,000	-1,446	-,802
	6	-,340	,121	,088	-,704	,023
5	1	1,000*	,134	,000	,596	1,404
	2	-1,186*	,142	,000	-1,612	-,759
	3	-1,062*	,141	,000	-1,487	-,637
	4	1,124*	,107	,000	,802	1,446
	6	,784*	,128	,000	,398	1,169
6	1	,216	,124	1,000	-,156	,589
	2	-1,969*	,162	,000	-2,455	-1,483
	3	-1,845*	,163	,000	-2,337	-1,353
	4	,340	,121	,088	-,023	,704
	5	-,784*	,128	,000	-1,169	-,398

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Bonferroni.

6.2.18. Appendix 18- Post-Hoc dimension analysis.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PersonalInterest	4,3485	495	,44737	,02011
	ExternalInterest	3,7845	495	,55769	,02507

Paired Samples Test

		Paired Differences Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	PersonalInterest - ExternalInterest	,56400	,50815	,02284	,51912	,60887	24,694	494	,000

Correlations

		PersonalInterest	ExternalInterest
PersonalInterest	Pearson Correlation	1	,507**
	Sig. (2-tailed)		,000
	N	495	495
ExternalInterest	Pearson Correlation	,507**	1
	Sig. (2-tailed)	,000	
	N	495	495

**. Correlation is significant at the 0.01 level (2-tailed).