

An Investigation of how
Students and Recent Graduates
use Digital Marketing Tools
throughout their
Search for Employment

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Abstract

An Investigation of how Irish Students and Recent Graduates use Digital Marketing Tools throughout their Search for Employment

By Maeve Buffini

As technology develops constantly, the quantity and quality of the facilities it offers also grows. Technology and the Internet have become a crucial part of the majority of people's daily routines and they also play a major role in how businesses operate.

From reading current and up to date existing information around the topic, it was evident that there was a lot of research carried out on digital marketing and the tools involved. However, there was a limited amount of research already existing that focuses on how students and recent graduates use these tools to source employment. The study aims to develop the existing information on this topic and produce valuable information for marketers and employers from the job seeker's perspective. Specifically, this research seeks to investigate exactly what specific digital marketing tools students and recent graduates are using when they are looking for potential employment opportunities so marketers and employers know how to reach potential candidates in a more efficient and effective manner.

A quantitative method in the form of an electronic survey was used in order to collect data for the study. Forty-eight participants responded to the survey, and provided a significant amount of data. From the analysis, a number of findings and themes surfaced. Expectedly, it was found that overall, students and recent graduates actively use digital marketing tools when they are searching for employment. In relation to the job search, it was found that specific tools and devices are preferred during job seeking activities and it also became clear which specific tools marketers should use and combine in order to reach a higher percentage of best-fit candidates for any job vacancies.

Declaration

Submission of Thesis and Dissertation
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Chapter 1 - Introduction

Title/ Overall Research Topic

The overall research question being asked is 'How do students and recent graduates use digital marketing tools during their search for employment?'

Research Objectives

In order to examine this research question in greater detail, the following specific research objectives will be examined throughout this research:

1. To explore if students and recent graduates are using digital marketing tools to source employment.
2. To find out if students are proactively using digital marketing tools, are they reacting to marketing messages from employers, or are they doing both.
3. To identify what digital marketing tools are being used throughout the job search process. For example; Advertising, Company Blogs, Social Media, Websites, Email Newsletters.
4. To investigate which digital marketing tools are thought to be most useful during the job search process.
5. To identify which Social Network Sites are more useful for job search purposes. For example; Facebook, LinkedIn, Twitter, Snapchat, Pinterest.
6. To explore what electronic devices are being used throughout the search for employment and at what times.

Purpose of Research

The purpose of this research is to investigate if and how students and recent graduates explore job opportunities with the use of digital marketing tools and platforms. This new knowledge is intended to inform marketers and human resource managers as to how to reach the best-fit candidates for vacant positions. This research hopes to enhance the connection or engagement between job seekers and potential employers.

Structure of the Dissertation

Chapter 1: Introduction

The paper introduces the reader to (1) the key research topic of the dissertation. It also states the (2) the six research objectives, (3) the purpose of the research and finally, (4) an outline of the structure of the dissertation.

Chapter 2: Literature Review

There will then be a literature review, which looks closer at the necessary areas that need to be understood first in order to carry out more research. These topics are (1) Introduction to the Literature Review, (2) Evolution of Marketing into the Digital Space, (3) Digital Marketing – Social Media/Network, (4) Electronic Devices, Multi Screening and Multichannel Marketing, (5) Recruitment Process and Stages, (6) Job Seekers can be considered as a Consumer of Employment Opportunities, and the final topic that will be discussed, (7) Students and Graduates as Job Seekers.

Chapter 3: Research Methodology

Following the literature review, this chapter includes a discussion on (1) Research Philosophy, (2) Research Approach, (3) Primary and Secondary Research, (4) Quantitative, Qualitative and Mixed Method Research, (5) Time Horizons, (6) Research Objectives of this Study, (7) Research Instrument Selected, (8) Pilot Study, (9) Sample, (10) Data Analytics, (11) Research Limitations, and (12) Research Ethics and Considerations.

Chapter 4: Findings and Discussion of Findings

This chapter involves answering the research questions with the information found from the research tool. These findings will also be discussed in relation to the information that was found and mentioned in the literature review chapter and highlighting any industry implications these findings may have.

Chapter 5: Conclusions and Recommendations

The final chapter is the conclusion and recommendations chapter where the main themes that surfaced from the research will be concluded and recommendations for further research will be suggested.

Chapter 2 – Literature Review

Introduction to the Literature Review

Throughout this literature review, it becomes apparent that Marketing and how it is carried out has transformed tremendously over the last two decades. Technological advancements such as the Internet and Web 2.0 have played a significant role throughout these changes.

The key topics included throughout this literature review have been chosen, as they are most relevant to the objectives and questions being investigated in this research. The topics that will be discussed throughout this literature review are (1) The Evolution of Marketing, where the actual way in which marketing activities have changed will be discussed further, (2) Digital Marketing - Social Media/Networks and how they differ from each other, (3) How Job Seekers can be considered as a Consumer of Employment Opportunities which will relate to how job seekers approach the job search and weigh up their best options for employment selection, (4) the Recruitment Process and Stages will also be looked at as it is important to understand what exactly is involved during the process and how it relates from the job seekers perspective, and finally, (5) Students and Graduates as Job Seekers will be also discussed as it is important to see the current numbers of students and graduates of third level education. All these topics are important to discuss as they provide a context and all influence and relate to the research topics involved.

Evolution of Marketing into the Digital Space

The way businesses carry out marketing practices has changed enormously since the introduction of the Internet and more recently, Web 2.0. Weber (2009) argues that the Internet is becoming the most important marketing medium and marketing practices need to be adapted to the social elements of the web and the facilities it offers. It is argued that businesses must become more 'customer-cultivated'. The key difference between a traditional company and a customer-cultivated company is that traditional companies involve push-marketing strategies, where companies push products and brands onto their target markets and customers. The other, customer-

cultivated companies prioritize serving their customers and customer segments. (Rust, Moorman and Bhalla, 2010)

Marketing has become customer centered rather than business centered. (Vollmer and Precourt, 2008). Godin (2000) states that interrupting people is not a cost effective way of marketing anymore. He explains that marketers can not send people unwanted marketing messages that they do not have any interest in, and expect them to want to invest their money in the product or service they are offering. He believes that the future of marketing involves people and businesses marketing to each other. It is said that marketers should introduce consumer networks and then step out of the way and let them talk. Therefore, it is known that participation and engagement between business and consumers is essential for the future of marketing. By focusing on the customer's needs at all times, businesses can ensure they will keep up to speed with any trends or new product/service needs. This in turn, will prevent businesses from falling behind and as a result, failing. This includes how they attract talent to run their future business.

Harris and Rae (2009, p.24) explain that *'social networks will play a key role in the future of marketing; externally they can replace customer annoyance with engagement, and internally they help to transform the traditional focus on control with an open and collaborative approach that is more conducive to success in the modern business environment.'*

Digital Marketing – Social Media/Network

As previously mentioned, the Internet and the digital facilities it offers has impacted marketing and the way it is operated. This has lead to the introduction of digital marketing. Digital marketing can be defined as *'the use of digital technologies to create an integrated, targeted and measurable communication which helps to acquire and retain customers while building deeper relationships with them.'* (Smith, 2007) This definition shows that digital marketing includes a huge variety of platforms that can include blogs, advertising, websites and social media platforms. In relation to this study's research objectives, social media will be discussed specifically.

Social media can be defined as *'a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content.'* (Kaplan and Haenlein, 2010, p.61). As explained by Aaker and McLoughlin (2010), one of the most significant changes in the marketing industry has been the emergence of social media websites such as Facebook, LinkedIn and Twitter.

Although these websites are all social network websites, each of them has a unique purpose and their users use them with a specific intention in mind. With a specific focus on Facebook, Facebook's mission is *'to give people the power to share and make the world more open and connected. People use Facebook to stay connected with friends and family, to discover what's going on in the world, and to share and express what matters to them'* (Facebook, 2016). This suggests that Facebook is more of a casual platform, which primarily focuses on communication with friends and family. When focusing on LinkedIn, LinkedIn's mission is *'to connect the world's professionals to make them more productive and successful. When you join LinkedIn, you get access to people, jobs, news, updates, and insights that help you be great at what you do'* (LinkedIn, 2016). LinkedIn is a more formal platform, which focuses on a person's career and career development through social networking. It could be said that LinkedIn is more intentional on the part of the user and it requires a more proactive approach by its users. Twitter (2016) says its mission is *'to give everyone the power to create and share ideas and information instantly, without barriers.'* Twitter is centered on short and constant updates on what is happening at that moment in time. Twitter allows the users to stay up-to-date as well as allowing them to react and share updates that they have read about. Businesses and marketers must understand what exactly people are using these various sites for in order to utilize them to their best ability throughout all integrated marketing campaigns that are launched. This includes a company's search for new talent and advertising of job vacancies. Bohmova and Pavlicek (2015) explain in their study that although social network sites are an important tool for companies, they are not fully capable of meeting all of a business' needs.

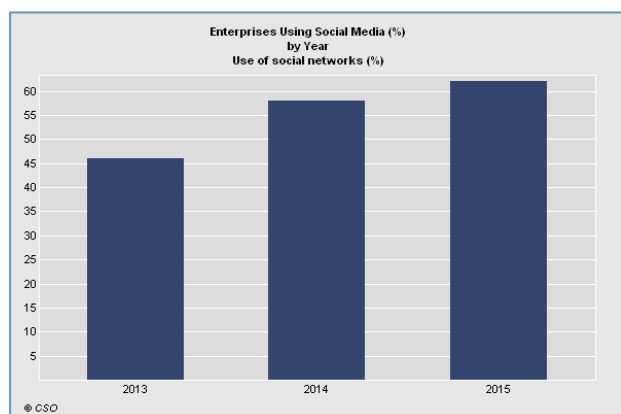
In relation to the human resources functions and in particular recruitment, websites and job boards are and most likely will remain important channel to present job offers.

Although these examples of social media websites are focusing on different objectives, these platforms have provided individuals and businesses with an opportunity to contribute and collect data, information and experiences in relation to both new and existing products, services, and opportunities. This further helps social communication and marketing to become more open, accessible and authentic and therefore develop better relationships with consumers.

eMarkable (2015) state that 1.8 million Irish people use Facebook every single day and that the largest age demographic in Ireland is 25-34 year old which makes up approximately 29% of the audience. It is also said that 70% of Irish businesses are also on Facebook. Businesses can use Facebook's popularity to enhance their 'employer brand'. These statistics show the mutual benefit to having an online presence for both consumers and particularly businesses.

First, we will look more closely at how the world of business has become more digital. It is necessary to explore how much social media usage has become more and more important for Irish business generally. By looking at recent statistics provided by the Central Statistics Office (2016), it becomes clear how much social media usage has grown within businesses based in Ireland.

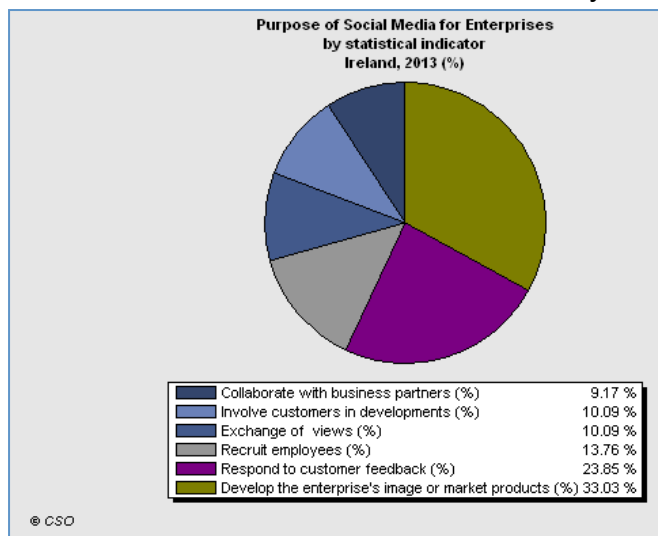
In this graph, it can be seen that in the year of 2013, 46% of businesses in Ireland used social media. This figure then grew to 58% in 2014 and then last year, 2015, the figure grew



again up to 62%. This evidently shows that within two years, social media usage within businesses in Ireland has grown by 16%. This increase in usage suggests not only are individuals using social media websites more each year but businesses in Ireland are too. The benefits are evidently mutual.

This pie chart consists of a set of statistics that portrays how Irish businesses are using social media according to the Central Statistics Office (2016).

From this pie chart, we can see that 33.03% of businesses said they use social media to develop the enterprise's image or to market their products, 23.85% of businesses said that social media platforms are used to respond to the firm's customer feedback, 13.76% use social media to recruit employees, 10.09% said it is used to exchange



views, 10.09% also said social media is used to include customers in developments and finally, 9.17% of businesses said that they use social media to collaborate with business partners. All these statistics are extremely interesting as there are a significant number of different reasons as to why businesses use social media networks. The most relevant statistic in terms of what is being discussed in this research is that 13.76% of business's active and intentional social media usage is for when they are recruiting new employees. This figure suggests that there is some scope for improvement and development.

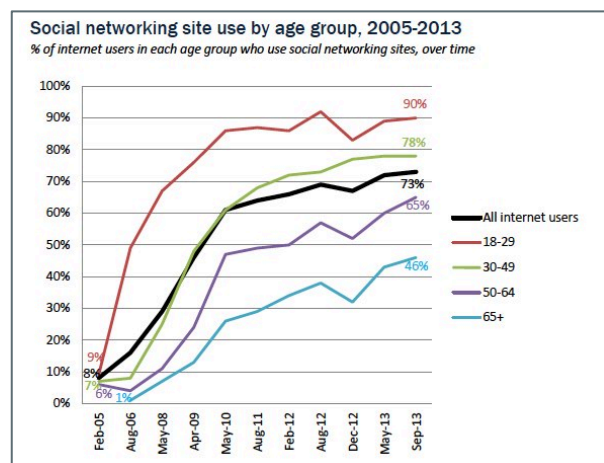
In relation to the technological developments, social media websites have grown rapidly over the years. Geho and Dangelo (2012), explain that although social media websites as a marketing tool can be very effective for businesses, they can also be time sensitive and require a high level of commitment in order to keep them up-to-date and interesting. Hootsuite, (a

social media platform that allows users to schedule and link all of their existing social media profiles with the aim of saving time), was launched in 2008. Even with Hootsuite, businesses need to be consistently active as an outdated Facebook and Twitter page can be detrimental to the overall marketing and reputation of a business.

Walker (2014), explains that since the future of marketing is digital, students should learn and engage with digital platforms from an early age in school, alongside the required general academic subjects. It is important for future generations to be taught about relevant and up to date tools specifically in relation to the real world of marketing. Teachers could and should help students develop digital literacy, as it is important that these students have an understanding of how digital tools such as social media is used in the marketing workplace. This shows that although during the early part of student life, students may not be searching for careers online as it is not a main concern, but all students who are growing up in this technologically advanced time, should have a basic understanding of using technology to research and explore opportunities as it is becoming an increasingly important factor of the daily lives of a significant number of people worldwide.

The research carried out by Pew Research Center (2016), which can be seen in the following image, shows the rapid increase of social media users according to their age demographic. A key takeaway from these findings is that the youngest demographic

(18-29 year olds) were the age group who used social media the most. This is not surprising for the most part as they have grown up with social media platforms playing a significant role in their daily routines. From this chart, we can see that a

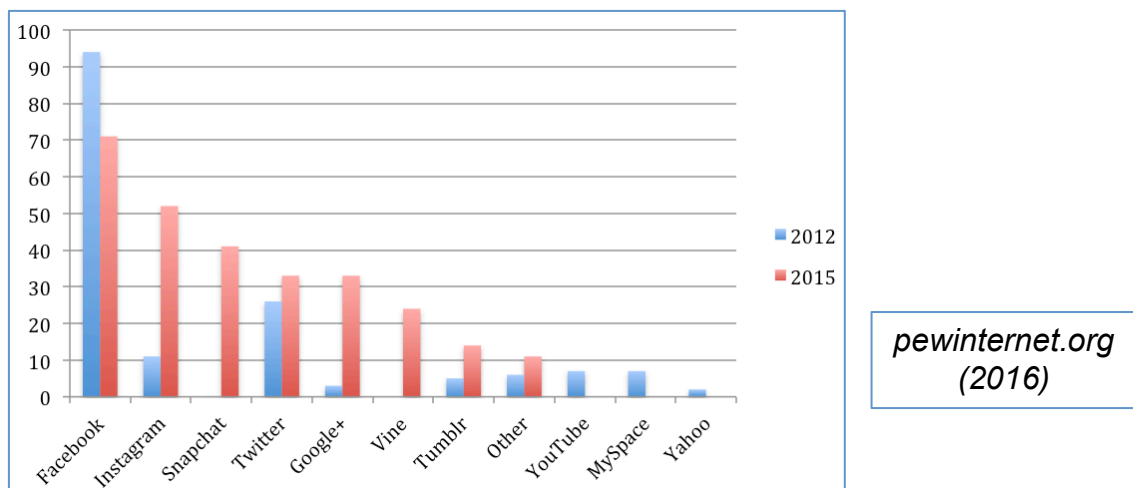


huge 90% of 18-29 year olds use social

pewinternet.org (2016)

networking sites. This age demographic and their active use of social networking sites, is key to this study as recent graduates are often between the ages of 18 and 29.

In this bar chart, it can be seen how teens (who participated in the survey) use social media by the number of most popular social media sites. In the research carried out by Pew Research Center (2016) clearly shows that Facebook is by far the most popular and a huge 94% of the teens that took part in the survey had a personal account. This is useful information as employers can see that this figure suggests that specifically Facebook is an ideal social media-marketing tool to reach potential employees.



In a more recent piece of research also carried out by Pew Research Center (2016), which can also be seen in the previous chart, it is clear that Facebook (71%) still holds the position of the most popular social media platform for teenagers. The popularity of Instagram grew significantly as now 52% of teenagers use it in comparison to 11% in 2012. Snapchat, which was not listed in the 2012 research, was found to be the third most popular platform with 41% of teenagers using it in the 2015 research. Twitter went from the second most popular platform in 2012 with 26% of teens using it to the fourth most popular platform in 2015 with 33% of teens using it. A key takeaway from these statistics is that businesses and employers must keep up to date and on trend as over a very short space of time, something can become old news. Businesses must meet the challenging needs of its users or else they will lose their audience.

Electronic Devices, Multi Screening and Multichannel Marketing

A key objective of this research is to identify which specific digital marketing tools are being used by the job seeker, when they are searching for employment opportunities. Sruoginis (2016) explains in a digital usage trend report that there has been a shift to mobile usage. It is said in the report that two thirds of time spent online is through a mobile device (tablet or smartphone) and one third of time spent online is via computer. Another interesting finding was that *'Two-thirds of online time is spent using a mobile device, one-third using a computer. Younger adults are likely to spend more time online with their smartphones. 18-34 year olds spend two-thirds of their online time on a smartphone. 35-54 year olds spend over half (54%) of their internet time on a smartphone while those 55 and over spend nearly half (46%) of their internet time on a computer.'* (Sruoginis, 2016, pg.58) These figures are hugely important for marketers and recruiters and this study aims to find out if these figures coincide with job searching activities.

Another key element is to investigate which electronic devices are being used most and at what stages of the search for employment. eMarketer (2016) defines multichannel marketing as *'using multiple touch points to reach audiences'* and they explain that marketers should understand that multichannel marketing shouldn't be solely about executing multiple channels. It must also involve each channel being completely integrated with the other channels being executed. Robinson (2015) explains that advertising on two devices instead of one had an increase in ad awareness by 60%. Brand consideration also rose from 6% to 30% and the study also found that the likelihood of recommendation grew from 0% to 15%. In regards to recruitment and job seeking, an objective of this study is to investigate if potential job seekers are using multiple devices for the purpose of employment opportunities and when these various devices are being used.

Recruitment Process and Stages

Here, we explore recruitment and study how best employers use digital marketing tools including social media. Gunnigle, Heraty, & Morley (2011) state that the recruitment and selection process is essentially concerned with finding, assessing and engaging new employees. The recruitment and selection process has five stages. These stages include (1) Human Resource Planning, (2) Pre-Recruitment Job Analysis, (3) Recruitment, (4) Selection, and (5) Induction. Focusing on recruitment, this stage involves job advertisement, internal/external sourcing, application forms/CVs and then finally short-listing for selection.

As a huge number of people use social media sites many companies have introduced the use of social media into their recruitment process. Dineen, Ash and Noe (2002) carried out one of the first studies to apply a theoretically grounded approach to the issues of person-organization (P-O) fit and applicant attraction in the perspective of Internet based recruitment. This study focused on the individuals from when they were actively on the website, applying for a specific job. The main finding from the study was that generally companies that provided personally important environmental cues that suggested high similarity between the individual and the company were seen to be more attractive. However, the way in which these individuals initially were attracted to and therefore went onto the organization's website was not acknowledged. This is a limitation of this study. It can be said that the individuals must have already had a significant level of interest in the organization in order for them to go onto the organization's website to begin with. This gap highlights how businesses could benefit in knowing how and why potential employees are going to these websites, and how they first consider an organization as a potential employer.

Although not mentioned in the research, there are a number of potential reasons as to what made these individuals go onto the organization's website, such as, word of mouth, information emails, online notices, social media and printed sources. To narrow the scope of this research, an important method that could potentially be used is the active use of social

media websites. By researching and investigating if employment-seeking graduates or students are initially made aware of and informed of promising employment and job vacancies through social media websites, businesses can then possibly use social media tools more effectively in finding and filling current job vacancies with best-fit candidates.

The Human Resource Management International Digest (2013) stated the obvious fact that Internet technology and social media websites are here to stay. They have allowed the world become a much smaller place as now people from all over the world can communicate and interact with one and other. Businesses worldwide have also had to integrate these communication tools into their business plans. For this to be executed correctly, excellent planning, development and monitoring must be carried out to ensure the technology is being used to its best capacity. This applies to the majority of departments within a modern organization such as human resources and marketing departments. Recruitment and selection must use Internet technology and social media websites as innovatively as possible while also maintaining intuition and adaptability.

Carrillat, d'Astous and Grégoire (2014), carried out a study in relation to how social media can enhance recruitment effectiveness. They explain that social networking sites (SNSs) can be exciting and challenging for marketers generally. From this study, it was found that research should be carried out in order to fully understand how SNSs users respond to various marketing strategies used by companies to advertise their services and products. As these SNSs are completely interactive, research approaches should also be interactive to collect strategic information. It was found that constant social media updates are not necessarily the most effective way to attract attention to recruitment messages. (Carrillat, d'Astous and Grégoire, 2014). The results from the research show that 'messages that stimulate more active processing enhance the attitudinal response toward the employer.' This is positive as it shows participants value the company and believe them to be a successful employer. In this way, the company can attract the best potential employees.

Job Seekers can be considered as a Consumer of Job Opportunities

From the perspective of employment, employers offer a service and their consumer is the job seeker.

In relation to the consumer decision-making process for purchasing a product or service, it is important to look at the stages involved within this process. Wilson, Zeithaml, Bitner, and Gremler (2012) explain that there are six stages of the consumer decision-making process when purchasing a product or service. These stages include (1) Need Recognition, (2) Information Search, (3) Evaluation of Alternatives, (4) Purchase, (5) Consumer Experience and (6) Post-Purchase Evaluation.

When relating the consumer decision-making process to seeking employment opportunities, the customer in the scenario is the job seeker. Rosengren and Bondesson (2014) explain that attracting and retaining employees is becoming increasingly important for companies. It is said that there is fierce competition for employees. In the study, it is said that advertising may not only be beneficial for sales, profits and brand equity. It can also strengthen the employer brand and the 'perceptions of a company's employment offering'. Collins and Han (2004) explain that there was an effective link between firms that invest in consumer advertising and their capability to attract employees. Collins and Stevens (2002) found from marketing research that early recruitment activities influenced job seeker applications and decisions. This is hugely beneficial information for marketers and human resource managers to be aware of when marketing job vacancies to job seekers.

For the purposes of this research, the second stage of the consumer decision-making process, Information Search will be primarily focused on. Freeman (2002) explains that the majority of people who have access to the Internet will use it during the job search process. Job searching is often seen to be a goal-oriented activity that starts from the recognition of an employment target. It's not completed until individuals strive to narrow the gap between reality and the target, and then finally achieve that target (Bao

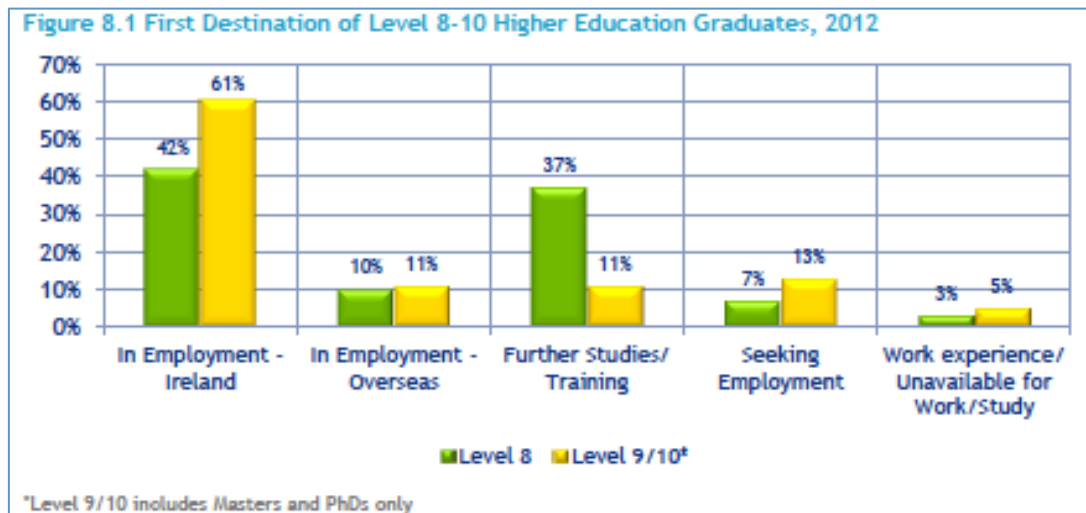
and Luo, 2015). With the constant advancements of technology and the huge numbers of active Internet users, it is important for employers to ensure that they are targeting and reaching job seekers that are the best fit for their job vacancies. Lindsay (2005) explains that providing valid and relevant labour market information that is easy for job seekers to access should be a key priority with the intention of both improving the quality and expanding the reach of services for job seekers. Through the use of digital marketing tools, both marketers and human resource managers can target and reach job seekers who are the best candidates for a position.

Ghosh, Varshney, and Venugopal (2014) explain that now consumers often use technological tools such as social media websites when purchasing a product or service to read reviews of other consumer experiences. In relation to the job seeker as a consumer, job seekers often look up websites such as Boards.ie or Glassdoor when looking for employment opportunities. From the perspective of the consumer decision-making process, job seekers search for information on available job opportunities online. They can also use the Internet to learn more about specific company environments. This allows the job seeker to become more confident in their job choices and acceptances as they feel they have reduced any risks involved in signing an employment contract.

Students and Graduates as Job Seekers

The number of students enrolling in third level education has been growing rapidly in the last few years. According to the Irish University Association (2016), in 2009/10 129,564 people enrolled in full time undergraduate courses. This figure then grew to 138,399 in 2012/13 and then the predictions for 2016 are that 146,834 people will be enrolled in full time undergraduate courses. This shows how the pool of highly educated talent is growing every year and therefore employers must be strategic in attracting and recruiting the best-fit potential employees.

According to Solas (2015), there were 30,600 Level 8 awards given in 2014 and 18,810 Level 9/10 awards given. These figures suggest that employers had almost 50,000 graduated students to attract towards their employment vacancies.



djei.ie (2016)

This diagram shows the first destination of recent graduates after they have graduated. An interesting and disappointing detail is that 10% of Irish graduates went overseas for employment after completing a level 8 undergraduate degree and 11% of postgraduates in 2012 went abroad for employment. Irish businesses are missing out on the opportunity of having these highly educated and talented graduates as employees. In the context of the recession, it can be understood that many graduates may not have had employment opportunities in Ireland and were therefore forced to go overseas for work. Now as the Irish economic climate is improving and more jobs are becoming available as companies begin to flourish again, it is important that businesses in Ireland attract and hold on to talented graduates.

For example, in relation to the technology industry, McMahon (2016) explains that according to Paul Breslin, Managing Director of Riot Games (Europe), the skills shortage in the technology industry has developed into a 'war for talent'. *Breslin says while there is much talk of millennials and those*

who have graduated in the past few years being hard for companies to hold on to, he is optimistic that companies with the right culture will hang on to top talent... Breslin says the company invests a lot in recruitment to make sure candidates are the right fit and once they are there, a career development plan is put in place for each employee.'

McMahon (2016) states that according to

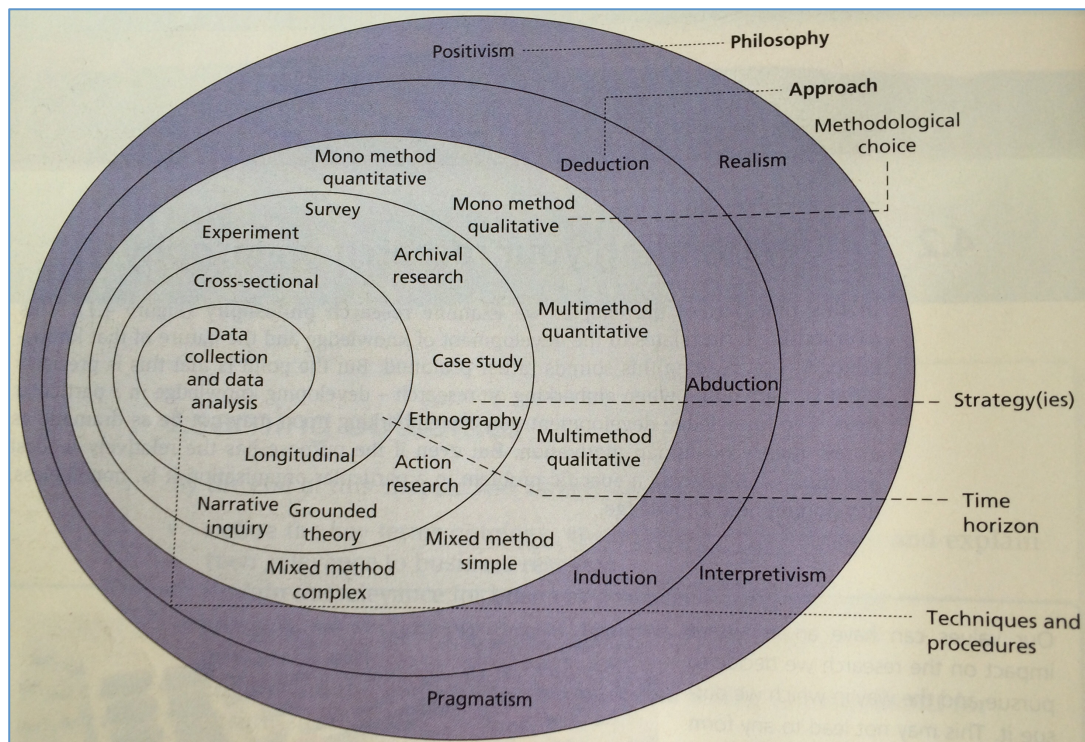
'A report published by Forfás and the expert group on Future Skills Needs (EGFSN) published in 2014 found that Ireland has the potential to become a leading country in Europe in data analytics services and create very highly skilled jobs for data analysts and data scientists proficient in areas such as mathematics, statistics and management science, combined with associated IT skills. The report estimated that Ireland has the potential to create between 12,750 and 21,000 job vacancies by 2020, arising through expansion and replacement demand comprising 3,630 for deep analytical roles and 17,470 for big data roles in the tech sector.'

These figures are very positive for Ireland's graduates and potential employment opportunities. They also highlight how important it is for employers to advertise and market these employment opportunities to the right candidates. According to Skills Ireland (2014), reports showed that since the economic recovery is strengthening, talent shortages are becoming more apparent and although there is an improvement in jobs prospects across all sectors, an issue that has emerged is that attracting and retaining staff is becoming difficult in some sectors. The 'war for talent' reinforces how important it is for organizations to connect and engage with students and recent graduates from early on and especially through digital channels.

In the research carried out throughout this dissertation, the channels and methods of marketing to students and recent graduates will be investigated with the hopes of shedding some light on which electronic devices and channels are the best methods in regards to reaching potential employees.

Chapter 3 - Research Methodology

The research onion, which can be seen in the image below, is an extremely useful tool commonly used by researchers to guide various research studies. It facilitates the researcher throughout the process by providing direction to the primary research attitudes, approaches and methods.



Saunders, Lewis and Thornhill (2012) – Research Onion

The research onion guides the researcher from their research philosophy, to their research approach, then to the research method they will use. It guides the researcher to their strategy, their time horizon and then to the techniques and procedures they will carry out in order to collect the necessary data and finally analyze the data that is collected.

The research methodology chapter involves looking at the (1) Research Philosophy, (2) the Research Approach, (3) the Research Methodologies (Mixed Method, Quantitative Method and Qualitative Method), (4) the Strategies (Survey, Interview etc.), (5) the Time Horizon, (6) the techniques and procedures associated with data collection and data analysis. The chapter then continues to discuss this study more specifically by discussing

the research objectives, the research tool that was chosen to investigate these objectives, the sample of people who will be participating in the research, as well as finally explaining how this data will be collected, organized and analyzed in the findings chapter of this research.

As mentioned previously, firstly the research philosophy of this study will be discussed.

Research Philosophy

It has emerged through the literature review that there is a limited amount of recent objective research and tangible data available on this specific thesis topic. With that in mind, driving the philosophy of this study is a commitment to generating current, specific, and concrete research data upon which further broader studies can be based.

To be more specific philosophically, this study is adopting a positivist ontological approach. The aim is to identify factual external behaviours and choices reported by students and recent graduates in their search for future job opportunities.

Epistemologically speaking, this study seeks to pinpoint and identify reported and tangible uses of digital marketing tools used for job search purposes. Given the lack of current data on this topic, this research aims to reduce the study down to some actual factual basic uses of digital marketing tools, and from there, it recommends that future studies can explore and assign more qualitative, contextual and subjective interpretations.

Although the researcher will explore the findings and closely consider the lifestyles and contexts of the students' using digital marketing tools for their job searching, the researcher is very conscious not to assign subjective values or interpretations. In this way again, the overall axiological outlook is positivist.

Research Approach

Overall, this study adopts a deductive research approach. The literature review demonstrates there are theories, past studies and findings on the significant emergence of younger generations' use of digital marketing across all aspects of their lives and that 'digital natives' are using these tools in a far more mobile way. However, there are very few if any specific research studies on student's and recent graduates use of these tools for job search purposes. Given this, this research aims to base it's research direction on past theory and findings but aims to use a highly objective, structured deductive approach to establish the facts in this area of study.

A deductive approach for example allows this researcher to define and operationalize very specific variables of interest in this study, for example, specific digital marketing tools and when students and recent graduates use these tools for job search purposes.

To establish facts and tangible evidence, a deductive approach encourages the development and use of a highly structured survey tool.

Identifying very specific demographic and 'uses of digital marketing tools' as research variables and clustering them together as part of the analysis, the deductive approach assists the researcher to form stronger objective relationships between variables or discount some. In doing this, a deductive approach allows the researcher to work from general research and ideas to specific findings in this study.

Furthermore, a deductive approach allows the researcher to support or challenge any existing or past theory or research findings in this area, with more up-to-date and tangible results. In that way, it can also build on the body of knowledge in this specific field of if *and* how students and recent graduates actually use digital marketing tools for job search purposes.

Primary and Secondary Research

In regards to this research, both primary and secondary research had been carried out. Secondary research was carried out first, which can be seen in the literature review. The secondary data came from books, e-books, journal articles, and websites, newspapers and statistics websites. Secondary data was sourced from studies that had been previously carried out as then the researcher could gauge which research areas needed more depth and development.

There are a number of advantages and disadvantages associated with secondary research. One of the key advantages of secondary research is that it prevents researchers wasting resources on research that has already been carried out. The most significant disadvantage associated with the secondary data available and given this specific study topic is that there is a limited amount of direct research that has been carried out on the objectives in which this study focuses on. The Internet and digital marketing is a relatively new phenomenon. A limited amount of research has been carried out and therefore there is a limited amount of secondary data available with a specific focus on digital marketing use and the job search process. This limitation has led to the nature of the primary research carried out in this study. Primary research can be divided into quantitative research, qualitative research and mixed method research. The focus of this study is quantitative to establish a baseline of facts.

Quantitative, Qualitative and Mixed Method Research

Horn (2009) explains that research can be characterized in a number of ways but one popular way is by characterizing it as qualitative research, quantitative research or mixed method research.

Quantitative research focuses on collecting numerical data and opinions primarily and the analysis of the data collected is mostly statistical. An example of a quantitative research method is a survey. Saunders, Lewis and Thornhill (2012) explain that a survey is used as a research strategy to collect data. The term 'survey' is often used to describe the collection of data

through questionnaires but surveys also include other techniques such as a structured interview or structured observation.

As there is not a lot of research that has been carried out previous to this study, a quantitative research method has been selected as a mono-method of research in order to gather a baseline of facts and figures on this topic. Quantitative research is usually associated with a positivist research philosophy as well as a deductive research approach, which are both relevant to the research philosophy, and research approach in this study. In future studies, qualitative methods could be used to develop more depth into this study area.

Qualitative research assumes that the areas in which are being researched are 'rich' and context based. According to Barnham (2015), qualitative research attempts to evaluate how a person thinks and feels in a more descriptive nature. The outputs from qualitative research are generally accounts of participant's views, opinions or emergent theory driven categories of behaviour. A qualitative research method was not carried out, as there was not enough relevant research that had been carried out on this specific topic – Digital marketing tool usage throughout the job search process from a job seekers perspective. From the results that have emerged from this quantitative study, further studies could apply a qualitative approach to gather more in depth information on this topic.

Another research method is mixed method research, which involves more than one type of research being carried out (Horn, 2009). Mixed Method research is when using more than one type of research strategy collects data. This could involve a researcher carrying out a survey as a quantitative research method and then based on the results of the survey, they then carry out a focus group as a qualitative research strategy. In relation to this study, a mixed method approach was not taken due to time restrictions, as mixed methods can be more time consuming to execute. (Horn, 2009).

Time Horizons

When designing the research for this study, the time horizon of the research was a vital element of the research being carried out. The time horizons associated with research according to Saunders, Lewis and Thornhill (2012) is either (1) Cross-sectional studies, or (2) Longitudinal studies. Cross-sectional studies are most common for dissertations due to the relevant time constraints associated with them. Cross-sectional research allows a researcher to look at a particular topic at a particular time. On the other hand, longitudinal studies allow a researcher to study developments and changes over a period of time. Due to the time limitations as well as the research questions, this research was cross-sectional which means it involved a study of a particular phenomenon at a specific point in time. Survey strategies are often used throughout cross sectional studies, which reinforces the decision for the researcher's choice of using questionnaires as the research method.

The following section of this chapter discusses the objectives of this particular research, the sample involved, the instrument chosen, the pilot study that was carried out, the analytics of the data, the limitations associated with the research methodology, and finally, the research ethics and considerations.

Research Objectives of this Study

This research aims to add to the existing information available and our understanding of how employers can better market and attract the talent they require through using digital marketing and social media platforms. The main objective of this research is to find out how and when students and recent graduates use digital marketing tools during their search for employment. In order to answer this overall question, the following research objectives will be examined throughout this research:

Research Objective 1:

To explore whether or not students and recent graduates are using digital marketing tools to source employment.

As explained in the literature review section of this research, Freeman (2002) explains that the majority of people who have access to the Internet and will use it during the job search process. With the constant advancements of technology and the huge numbers of active Internet users, it is important for employers to ensure that they are targeting and reaching job seekers that are the best fit for their job vacancies. This research objective focuses on student and recent graduate usage of digital marketing tools for employment sourcing in Ireland specifically.

Research Objective 2:

To find out if students are proactively using digital marketing tools, are they reacting to marketing messages from employers, or are they doing both.

With a limited amount of available previous research carried out on this topic, this research objective aims to investigate if students and recent graduates respond or react to marketing messages from potential employers or are they mainly proactively using digital marketing tools themselves. In order to investigate this, the following hypothesis was tested and will be discussed and analyzed in the following chapter.

Hypothesis: Those who use digital marketing tools proactively also tend to react to digital messages from potential employers

Research Objective 3:

To identify what digital marketing tools are being used during the job search process. For example; Advertising, Company Blogs, Social Media, Websites, Email Newsletters)

Research Objective 4:

To investigate which digital marketing tools are thought to be most useful during the job search process.

This objective aims to focus on how Irish students and recent graduate find various digital marketing tools in regards to searching for employment. It aims to provide human resource managers and marketers with more information on where they should be targeting potential employees.

Research Objective 5:

To identify which Social Network Sites are more useful for job search purposes. For example; Facebook, LinkedIn, Twitter, Snapchat, Pinterest.

As highlighted in the literature review, the use of social networking sites has become a significant part of the daily lives of individuals as well as how companies now carry out business (Aaker and McLoughlin, 2010). This research objective aims to establish which social networking sites students and recent graduates use when looking for employment opportunities.

Research Objective 6:

To explore what electronic devices are being used throughout the search for employment and at what times.

As mentioned in the literature review, Srugonis (2016) explains in a digital usage trend report that there has been a shift to mobile usage. It is said in the report that two thirds of time spent online is through a mobile device (tablet or smartphone) and one third of time spent online is via computer. This shows that different devices are being used for different tasks and at different times of the day. It is valuable for marketers and human resource managers to be aware of when and what devices people are using and then they can adapt their campaigns around this information to increase their campaign reach and awareness.

Research Instrument Selected

For the purposes of the objectives of this research, the researcher chose to use a survey/ questionnaire. More specifically, the researcher chose to use an online questionnaire on Survey Monkey as a quantitative mono-method of research for collecting data. Saunders, Lewis and Thornhill (2012, p.676) define online questionnaires as a '*data collection technique in which the questionnaire is delivered via the Internet or an intranet to each respondent. She or he then reads and answers the same set of questions in a predetermined order without any interviewer being present before returning it electronically*'. Survey Monkey is a survey software available online as a quantitative research instrument to collect data on the processes and

approaches in which students and graduates carry out searches for employment in the field in which they studied.

There are a number of advantages and disadvantages associated with using survey software, which include the following according to Horn (2009):

Advantages:

- The software is more than just a data entry tool
- It is relatively easy to use and navigate
- It is easy to generate questionnaires, data outputs and charts

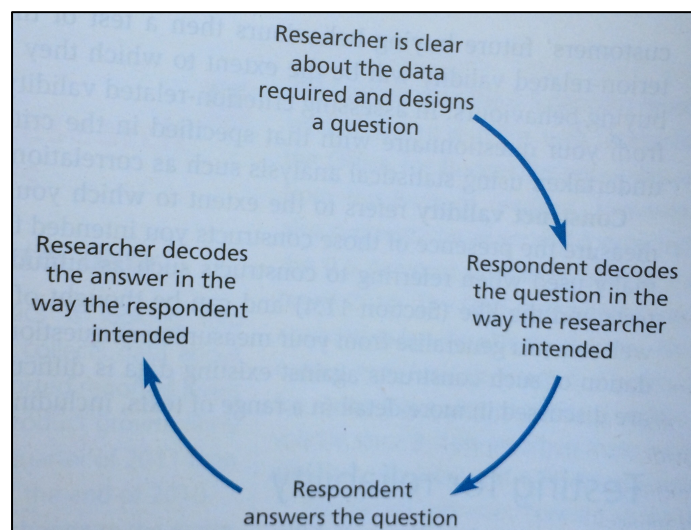
Disadvantages:

- It has limited statistical power
- It does not offer a complete range of statistical tests
- It's harder to export the data to other software

These questionnaires were strategically created in order to retrieve as much relevant but tangible data as possible. In order to ensure the survey was accurate and reliable, a pilot study was carried out.

Pilot Study

Czala and Blair (1996) explain the importance of a pilot study when using questionnaires as a research method therefore for this research, a pilot study was carried out. Saunders, Lewis and Thornhill (2012, p.451) explain that *'the purpose of the pilot test is to refine the questionnaire so that respondents will have no problems in answering the*



Saunders, Lewis and Thornhill (2012, p.429)

questions and there will be no problems in recording the data.'

The researcher designed a survey with ten questions and sent it to six respondents. These six respondents answered the questions and also provided the researcher with any suggestions for changes or questions that they had while answering the survey, which can be seen in *Appendix I*. After all changes were made, the survey was then posted on Facebook with the aim of 60 surveys to be answered. The reason Facebook was chosen to distribute the questionnaire was due to the information found in the literature. Pew Research Center (2016), stated from their research, that the youngest age group demographic in the study (18-29 years olds) were the group who used social media the most as 90% of 18-29 year olds had a social media account according to this research. As many students and recent graduates are aged within this age group, social media was a good tool to reach the sample necessary for this research study. Facebook was the chosen social networking site as the literature found it to be the most popular social networking amongst social media users. Pew Research Center (2016), states that Facebook with 71% held the position of the most popular social media platform, therefore this was evidently the best way to reach students and graduates.

The questionnaire included ten multiple-choice questions, which can be seen in *Appendix II*. The participants then received a link to the survey on Survey Monkey and this is how they will then fill out their answers. There was an aim of 60 people to respond to the survey but 49 people actually responded to the survey.

Sample

Due to the objectives of this research, the sample involved in this research included both men and women of any age who are current students or recent graduates from anywhere in the world as this is a universally relevant and applicable topic Therefore the sample is quite broad. For the purpose of this research, recent graduates include students who have graduated from any degree within the past two years.

As this research is focused on digital marketing tools, the researcher decided to post the questionnaire via their personal Facebook account. By posting it through social media, this gave the sample the opportunity to volunteer themselves to answer the questionnaire. It was also decided to post the questionnaire via Facebook due to convenience and the researcher having the ability of reaching a large number of people, therefore increasing the sample size and having more data to analyze. The researcher aimed to collect 60 questionnaires and available online via Facebook for a duration of two weeks. At the end of the two weeks, 49 surveys were completed but one survey was discarded, as the answers were not relevant to the research. This resulted in the research containing a sample of 48 participants.

After the surveys were completed and the data was collected, the next stage was to analyze the data to see what information was found.

Data Analytics

As Survey Monkey was used to design, publish, and collect the data from the questionnaire, the researcher also used the Survey Monkey response data-gathering tool to present and analyze the data collected in graphs and charts. This made the findings easier to understand, interpret and analyze the data found from the sample involved.

As mentioned previously, a disadvantage associated with using survey software is that it is difficult to export the data to other software. Another disadvantage mentioned in relation to using survey software was that there is a limited amount of statistical power. In order to dig deeper into the data that was collected from the questionnaires, the researcher manually transferred the data found on Survey Monkey into a Microsoft Excel sheet. By doing this, the researcher could then easily import the data onto IBM SPSS. The SPSS Statistical Analysis Package is a self-sufficient software package that provides researchers with the facilities necessary to perform standard statistical evaluations of results. The IBM SPSS software allowed the data to be tested and treated in order to produce a more thorough set of results and findings, which the Survey Monkey software was not allowing. It allowed the

researcher to address each research objective as well as allowing the researcher to test and analyze more efficiently. SPSS was an extremely useful tool as it allowed the researcher to carry out a number of tests and analyses such as the following; (1) descriptive statistics to examine the key demographics of the study, (2) a TURF (total unduplicated reach and frequency analysis) was carried out to investigate an objective further, (3) Classification trees (CART and CHAID algorithms) were used to search for any important differences within the answers of different demographic groups of respondents, hypothesis testing was carried out through confidence intervals as well as using a cross-tabulation with a chi-square test of independence. These analyses will all be discussed in more detail in the findings section of the study.

Research Limitations

Due to a number of elements such as time, finances and resources, a number of limitations can be associated with this research.

First of all, with the time frame at hand, the researcher could research a limited amount of secondary data, which is present in the literature review chapter. This limited the amount of information available to the researcher, which may affect the reliability of the results.

Secondly, there were a limited number of participants who responded to the questionnaire as the researcher had access to a limited sample. 48 of the completed surveys were used which means the research does not represent all students and recent graduates in Ireland as the sample were small.

Finally, a third limitation to this research was the fact that using a quantitative method only produced a baseline of facts and figures on the topic areas. If the research had more time, a more qualitative research strategy could have further developed some interesting areas and findings even further. In relation to the survey as an instrument, there are limitations in relations to its validity and reliability. Alongside this, there are also concerns that a positivist technique can never truly be objective as people are being dealt with.

Reliability and Validity of Research

To help guarantee the data collected was reliable, a pilot study was carried out which involved a preliminary questionnaire being designed on Survey Monkey. The survey was distributed to six respondents chosen specifically by the researcher in order to ensure the people who answered the survey were relevant to the study. Each pilot study participant was asked to note any questions or suggestion they had which they believed would make the questionnaire easier to understand and therefore would provide more accurate, reliable and relevant data. When the researcher received the suggestions, all changes were made and then the actual questionnaire was distributed.

When the surveys were collected and the 49 responses were analyzed, it became evident that one particular questionnaire was not completed accurately and therefore the data could not be used in the research. This was to ensure that only valid and reliable data would be included in the findings.

Research Ethics and Considerations

There are a number of ethical issues that must be considered throughout this research. As explained by Saunders, Lewis and Thornhill (2012), when research is being planned and designed, ethical concerns will always emerge.

It is crucial to ensure that no harm is caused to anyone during any research that is being carried out (Horn, 2009). This applies to this research study also. Many steps were taken to ensure participants knew they were not forced to answer the survey as the respondents volunteered themselves to participate in the questionnaire. On the top of the questionnaire, the purpose of this research was stated, explaining that all information would only be used as part of a Masters of Science dissertation. 100% privacy, anonymity and confidentiality were also promised to all participants of the survey.

In summation of the methodology chapter, the instrument selected to gather primary data was a questionnaire and the finding will be discussed and analyzed in the following chapter.

Chapter 4 – Findings and Discussion of Findings

This research is building on the increased importance of digital marketing tools such as social media websites for all citizens. In particular, it looks at (1) how students utilize these tools at a key point in planning their future and how therefore (2) employers should and could use these platforms to reach more students and recent graduates who could be extremely valuable for the future success of a business.

This particular chapter of the research focuses on the findings from the primary research carried out through the use of an electronic questionnaire as a quantitative method of research. The questionnaire consisted of ten questions. The researcher aimed to collect 60 responses. There were a total of 49 questionnaires completed. Of these 49 responses, 1 was not included as it was filled out inaccurately and therefore, could not be used as a valid piece of data in the research. There was a final amount of 48 participants in the sample.

The following sections of this chapter will look at (1) the demographics of the participants who answered the questionnaire (2) and their use of digital tools. In this, the findings then explore (3) the various electronic devices used to access the digital marketing tools. Where the findings data suggest and as appropriate, the chapter also refers back to the relevant literature included in the second chapter of this research – Literature Review.

The overall aim of this research is to explore how and if students and recent graduates are using digital marketing tools throughout the job search process. As not all of the information that was collected is completely relevant to the research objectives, this chapter will only include the findings that were central to the objectives. All other data not central to the research objectives can be seen in the appendices under *appendix III*.

Firstly, a number of descriptive statistics will be analyzed on the key demographics of the study including (1) Gender, (2) Age, (3) Field of study (4) the Industry in which they work now or would like to work, and (5) finally

the breakdown of the respondent's stage of study, that is whether the respondent is currently a student or a recent graduate. After discussing these demographic figures, the profile of the sample becomes clearer and the implications for the overall study findings and implications.

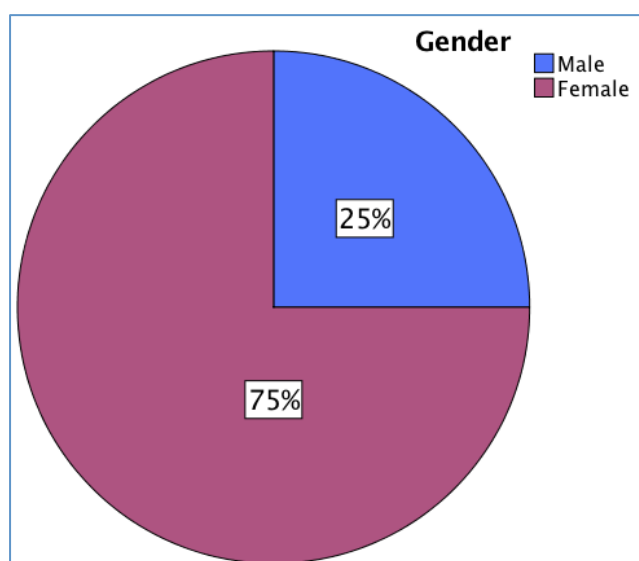
The next key sections involve looking at the six specific research objectives. This structured approach helps the researcher build towards addressing the overall objective: To investigate how students and recent graduates use digital marketing tools throughout the search for employment.

Demographics

Gender

The first key demographic that will be discussed here is the percentage of male and female participants in the study. As can be seen in the pie chart here, the majority of the survey respondents were female with 75% and 25% of the respondents were male. The fact that the majority of the respondents were female is interesting and although this research does not explore why more females responded than male, this could be due to a number of reasons such as accessibility to the questionnaire, interest in the topic, and perhaps females are generally more interested in giving their opinion than males. This could be an area that further studies could look into.

This study does not explore in-depth whether a higher percentage of female or male respondents would impact the findings or data collected from the questionnaire. This could be a consideration for future research studies.



Age Groups

Another interesting demographic is the age groups of the participants involved. This factor helps understand at what point students and recent graduates use technology and the digital marketing tools that are available to them – for purposes of the search for employment opportunities.

As can be seen in the following table, 16/48 (33.3%) of the respondents were aged between 18 and 22 years, 29/48 (60.4%) of the respondents were aged between 23 and 27 years, 1/48 (2.1%) of the respondents were aged between 28 and 32, none (0%) of the respondents were aged between 33 and 37 and finally, 2/48 (4.2%) of the respondents were aged 38 or older.

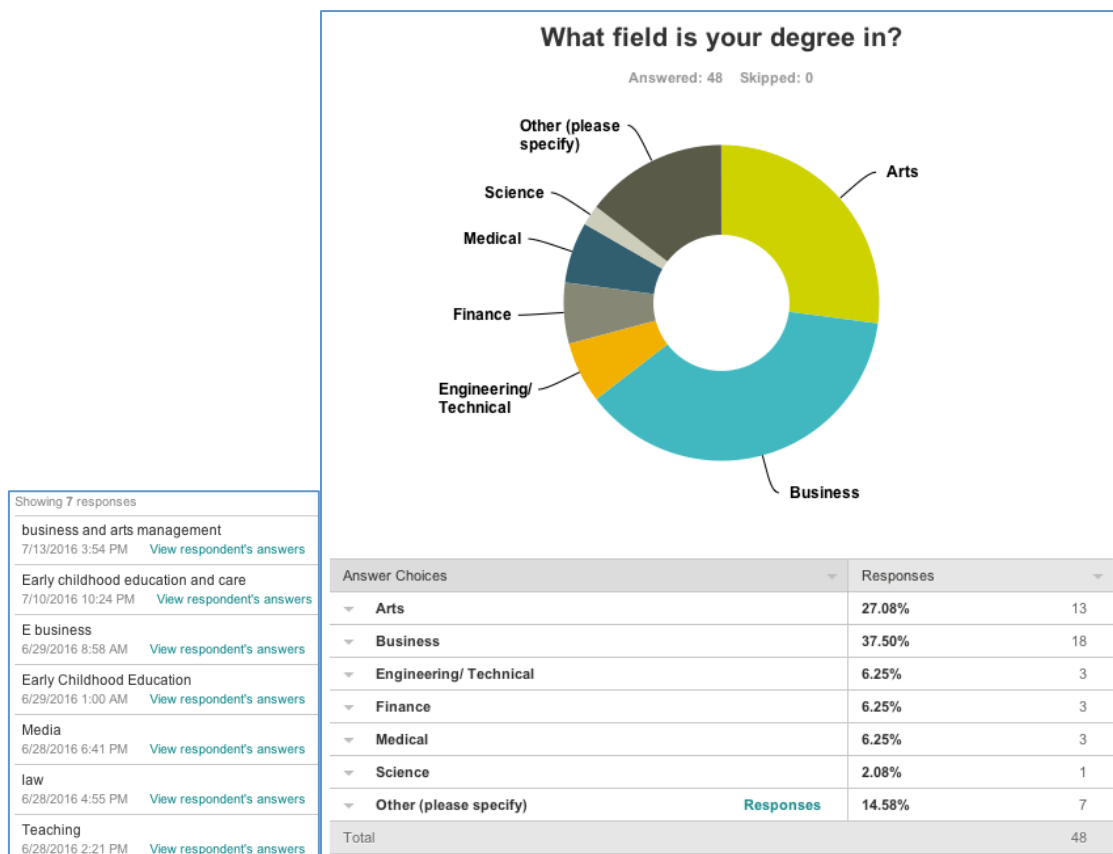
Age Groups					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-22	16	33.3	33.3	33.3
	23-27	29	60.4	60.4	93.8
	28-32	1	2.1	2.1	95.8
	38+	2	4.2	4.2	100.0
	Total	48	100.0	100.0	

This is interesting as the research carried out by Pew Research Center (2016), which was discussed in the literature review stated that the youngest age group demographic in their study (18-29 years olds) were the group who used social media the most as 90% of 18-29 year olds had a social media account according to this research. This is not surprising for the most part, as they have grown up with social media platforms playing a significant role in their daily routines. The link to the online Survey Monkey questionnaire was distributed through Facebook – one of the most widely used social media platforms. This could be a major reason as to why the majority (93.8%) of the respondents for this questionnaire were aged between 18 and 27 years – mirroring the profile of the Pew Research.

Field of Degree

This question intended to determine the respondent's field education. The majority of respondents, 37.5%, were business students or graduates. 27.08% of the respondents had graduated or are still studying an arts related degree. 14.58% of the respondents chose 'other' which will be discussed further on the following page, 6.25% said finance, medical and engineering/technical. Finally, only one respondent was studying or completed a science related degree.

In the case of a respondent not studying or having graduated from one of the listed degrees, there was an 'other' option in which the respondent could write their field of study. 7 of the 48 respondents (14.58%) chose this option. As can be seen above, 2 respondents listed early 'childhood education', 1 reported 'business and arts management', 1 chose 'e-business', 1 said 'media', 1 reported 'law', and 1 listed 'teaching'. Although business students represented the majority of respondents, there is a good diverse spread of study areas represented by respondents - and hence possible future employment opportunities and job markets involved.

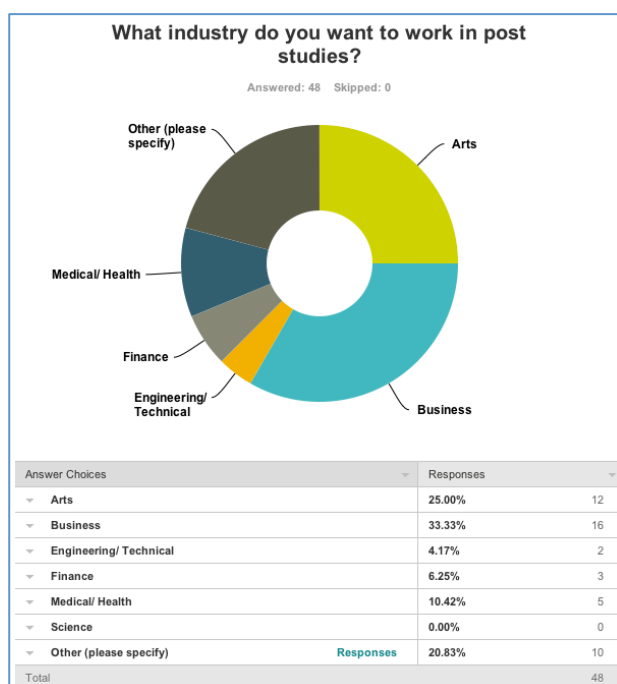


Employment Industry

This question was asked, because even though the respondent may have studied within a specific field, this does not ensure the respondent wanted to or is working within that same industry. By knowing this information, marketers and human resource managers would gain a better idea of which industries should be targeted or cross-targeted and through which digital methods.

As can be seen from the data above, the majority of the respondents planned to or was already working in 'business' with 33.33%. 25% of the respondents chose 'arts' as the industry they wanted to work in post studies. 10.42% of the respondents selected 'medical/health'. 6.25% chose 'finance', 4.17% selected 'engineering/technical' and finally, 20.83% chose the 'other' option where they could enter in their industry of choice if it was not already listed, which can also be seen here.

The 20.83% consisted of 10 responses, which can be seen above. From these 10 responses, 1 said childcare was the industry in which they wanted to work in, 1 said humanitarian, 1 said the education sector, 1 said music, 1 said media, 1 said law, 1 said, construction, 2 said marketing, and finally 1 said teaching.



Showing 10 responses

Childcare	7/10/2016 10:24 PM	View respondent's answers
Humanitarian	6/29/2016 9:18 PM	View respondent's answers
Education Sector	6/29/2016 1:00 AM	View respondent's answers
Music	6/28/2016 7:15 PM	View respondent's answers
Media	6/28/2016 6:41 PM	View respondent's answers
law	6/28/2016 4:55 PM	View respondent's answers
Construction	6/28/2016 2:40 PM	View respondent's answers

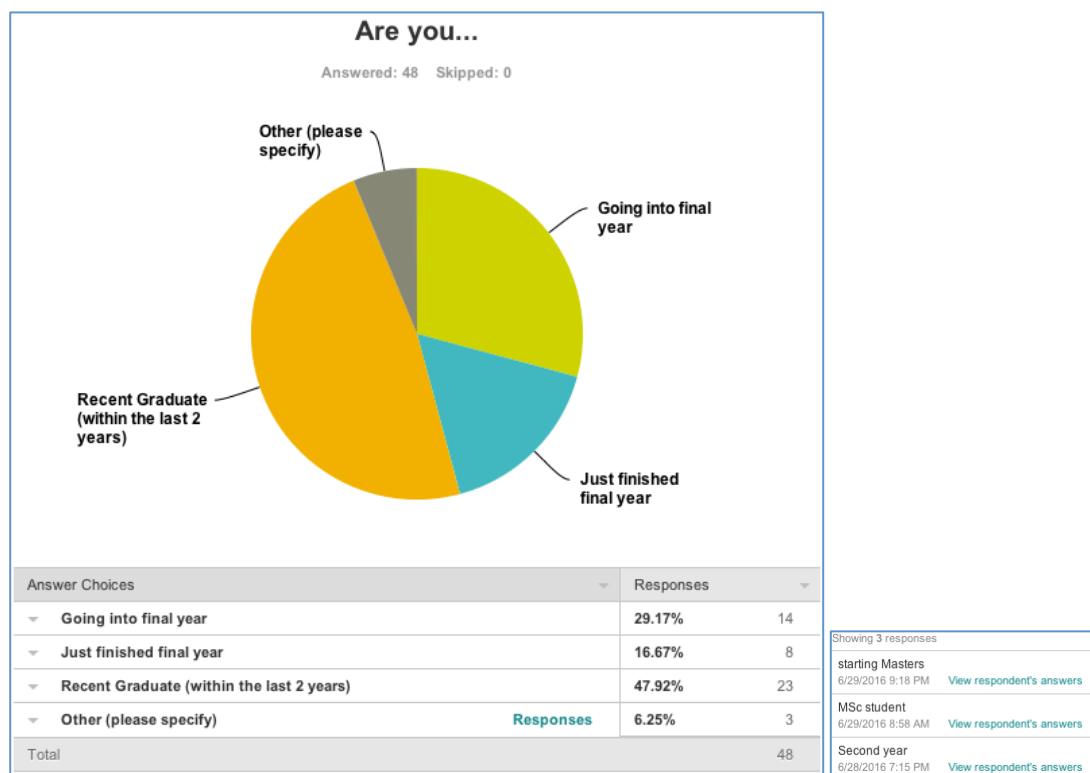
Marketing	6/28/2016 2:40 PM	View respondent's answers
Teaching	6/28/2016 2:21 PM	View respondent's answers
Marketing	6/23/2016 3:44 PM	View respondent's answers

A key finding here was that although most respondents overall plan to stay within their 'field of study' as a professional when they graduate – several may have or will choose to work in a different industry. This is useful information for marketers and businesses as they should be more open minded when developing their strategies for when they are searching for new educated talent, as the most motivated and/or best-fit candidates may not be studying in the field they have been targeting.

Student or Recent Graduates

This question aimed to find out how many of the respondents were currently students or recent graduates.

As the data here shows, the majority of the respondents, with 47.92%, were recent graduates, which meant they had graduated within the past two years. 29.17% of the respondents were going into their final year of college, 16.67% had just finished final year and 6.25% selected the 'other' option where they could clarify any other stages of their study. As can be seen below, one respondent was in second year and the other two respondents that selected 'other' were masters' students.



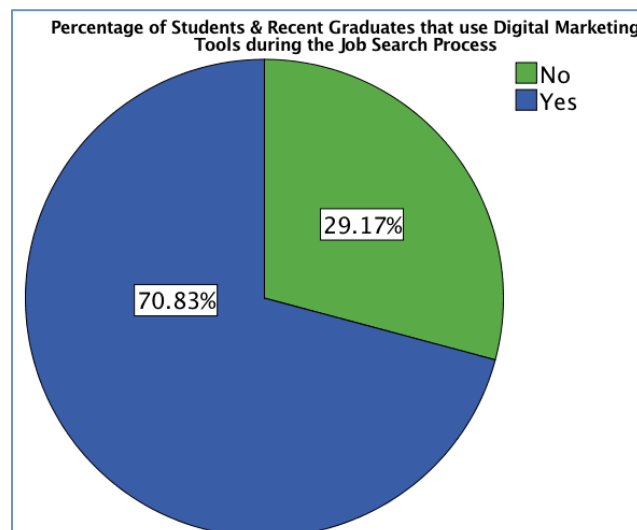
An important finding here and later on below shows that although they have not exactly finished college yet, students are actively looking at their employment option even before they have finished college. A suggestion here would be for marketers and recruiters to begin targeting students even before they have graduated. The ‘war for talent’, which was mentioned in the literature, is highly competitive and businesses need to be proactive when trying to attract the right candidates to the company (McMahon, 2016), especially for skills in short supply.

After looking at the general demographics of those students and recent graduates who participated in the research, each of the key objectives will be further discussed and analyzed.

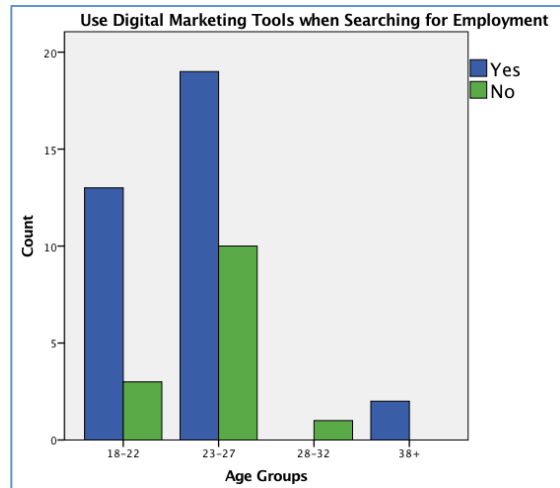
Research Objective Number One:

Are students and recent graduates using digital marketing tools to source employment?

As can be seen in this pie chart, the majority of students and graduates (70.83%) use digital marketing tools when looking for job opportunities. Interestingly, out of the 48 participants, 29.17% answered that they don’t use digital marketing tools when looking for employment. This suggests that employers should use digital methods of sourcing new employees but that they should also use more traditional methods as they could potentially miss out on valuable candidates.



Another interesting result from the questionnaire shows that when the results are further looked into, it can be seen that as the age groups get older, the percentage of students and recent graduates that use digital marketing tools gets smaller. This is to be expected as the introduction of the Internet and digital tools is a relatively new development and therefore younger generations are more familiar with how to fully utilize the Internet and the facilities it offers. It also could be due to the fact that as the older age groups will have experience working with a number of companies and different people, they will most likely have more connections and refer to a more face-to-face and directly personal wider network of people, which could impact their methods of sourcing employment also. This might explain why the older age groups would not be so or solely dependent on the facilities digital marketing tools offer.

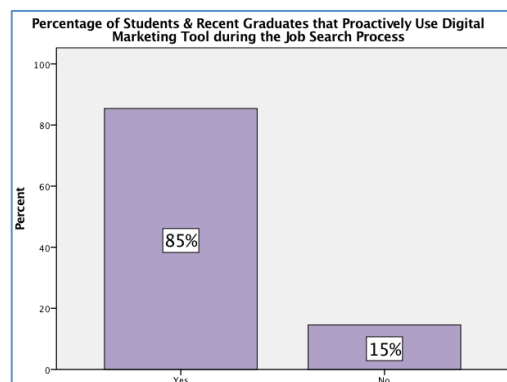


Research Objective Number Two:

Are students proactively using digital marketing tools throughout the job search process, are they reacting to marketing messages from potential employers, or are they doing both?

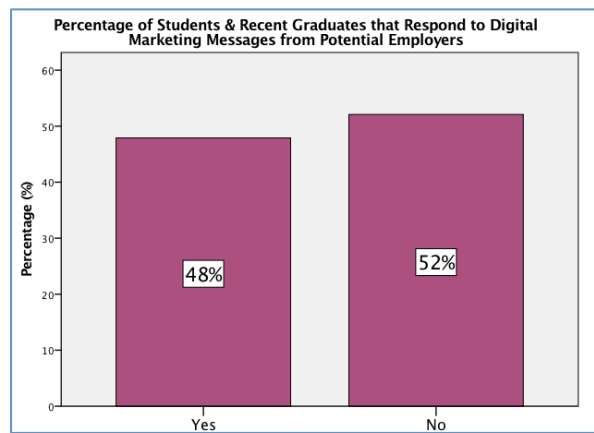
Hypothesis: Those who use digital marketing tools proactively also tend to react to digital messages from potential employers

As the bar chart here shows, 85% of students and graduates proactively use digital marketing tools when looking for employment and 15% of the participants do not use them proactively.



This finding might suggest that Employers must think ahead and be proactive in targeting students who could potentially be hired once they graduate. Having a proactive digital presence and approach helps employers obtain a more significant place in a student’s awareness and potentially employment preference. Building this two-way relationship and trust over time and during studies might encourage students to think of and target or welcome approaches from the most proactive employer who caught their attention and reinforced a presence in their mind.

On the other hand, this bar chart shows that when the participants see a message from a potential employer during their job search online, 48% of them respond to the message but 52% of them do not respond. The reasons behind the considerable lack of reaction



on the part of the students could be explored further in future studies. At a glance, it would seem students prefer to take matters into their own hands and be more proactive to pursue their own interests as a priority.

The researcher looked further at the responses and asked the question – how many of the respondents both proactively using digital marketing tools throughout their search for employment and react to messages from potential employers. 41 survey participants said they are proactively researching employer information through digital channels, and 23 said they react to messages from employers. It was established that 67% of respondents are both proactive and reactive by carrying out the following maths: $(41+23=64, 48*2=96, 64/96=0.67, 0.67*100=67\%)$

Both Proactive and Reactive Use of Digital Marketing Tool Frequencies				
		Responses		Percent of Cases
		N	Percent	
Proactive and Reactive Use ^a	Q6 – Proactively Use Digital Marketing Tools During Job Search	41	64.1%	100.0%
	Q6 – React To Digital Messages From Potential Employers	23	35.9%	56.1%
Total		64	100.0%	156.1%

a. Dichotomy group tabulated at value 1.

Hypothesis: Those who use digital marketing tools proactively also tend to react to digital messages from potential employers

To test this hypothesis we have used a crosstab with a chi-square test of independence between proactive use of digital marketing tools (yes/no) and reaction to digital messages from employers. The null hypothesis of no association can be rejected at 1% significance level (χ^2 , p-value<0.01). With deeper analysis, despite surface findings, those who report proactively using digital marketing tools during job search more often than others also react to digital messages from potential employers (in 56% of cases vs. 0%).

Q6 - React To Digital Messages From Potential Employers * Q6 - Proactively Use Digital Marketing Tools During Job Search Cross tabulation

		Q6 - Proactively Use Digital Marketing Tools During Job Search			
			Yes	No	Total
Q6 - React To Digital Messages From Potential Employers	Yes	Count	23	0	23
		% within Q6 - Proactively Use Digital Marketing Tools During Job Search	56,1%	0,0%	47,9%
	No	Count	18	7	25
		% within Q6 - Proactively Use Digital Marketing Tools During Job Search	43,9%	100,0%	52,1%
Total		Count	41	7	48
		% within Q6 - Proactively Use Digital Marketing Tools During Job Search	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7,540 ^a	1	,006		
Continuity Correction ^b	5,459	1	,019		
Likelihood Ratio	10,232	1	,001		
Fisher's Exact Test				,010	,007
Linear-by-Linear Association	7,382	1	,007		
N of Valid Cases	48				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 3,35.

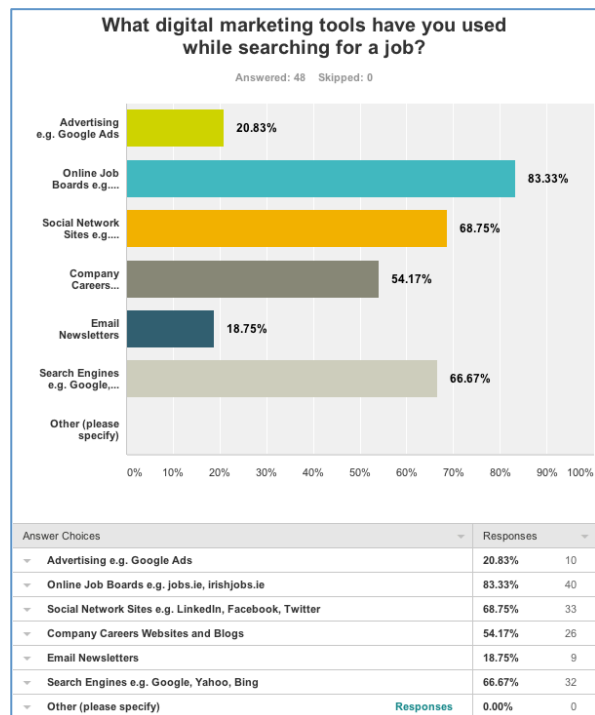
b. Computed only for a 2x2 table

Research Objective Number Three:

To identify what digital marketing tools are being used throughout the job search process. For example; Advertising, Company Blogs, Social Media, Websites, Email Newsletters.

The seventh question in the questionnaire asked the participants to specify which particular digital marketing tools have they used when searching for employment opportunities. This question was asked as it would show marketers and human resources managers which digital marketing platforms are used throughout the job search process from a job seeker's perspective. The respondents were able to select more than one option. From the answers the respondents provided, the data here shows that online job boards are most commonly used

when looking for employment opportunities as 83.33% of the respondents selecting that option. 68.75% of the respondents said that social network sites are often used during the job search process, 66.67% use search engines, 54.17% use the careers page of specific companies they would like to work for, 20.83% said advertisements are useful and 18.75% that email newsletters they receive are used too.



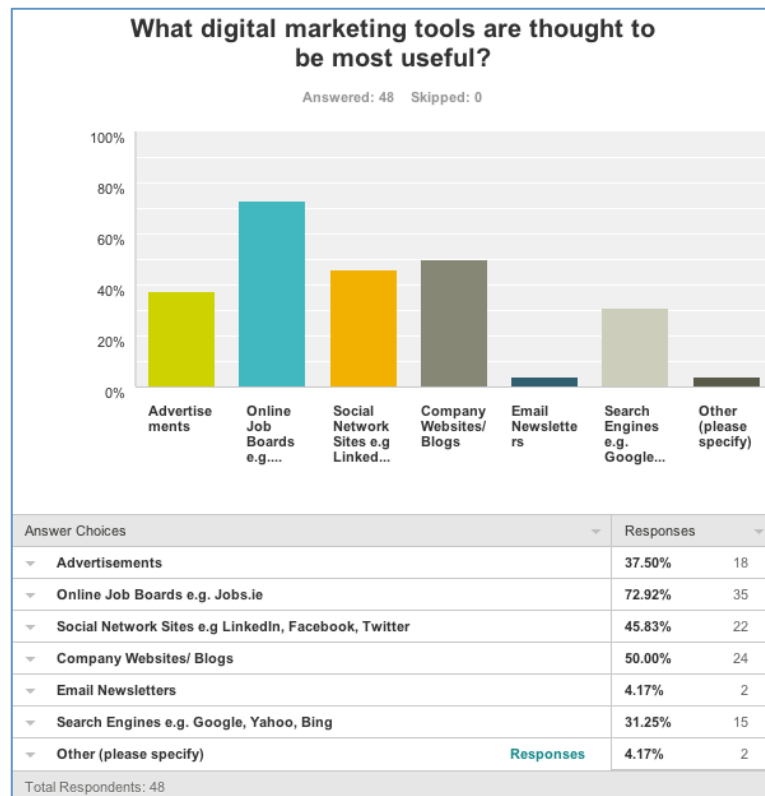
These findings establish the wide range of digital marketing tools the students and recent graduates access to explore information on future job opportunities. It would suggest that students and graduates 'cross-check' sources and formats of information. This shows they are digitally literate and agile. The next question explores which specific tools are more preferred and seen to be more useful from the student's perspective. Knowing this reveals very helpful information for marketers and hiring managers.

Research Objective Number Four:

To investigate which digital marketing tools are thought to be most useful.

The questionnaire included a question asking participants to identify which digital marketing tools were thought to be the most useful out of all the digital marketing tools they used. This question was hugely important for human resource managers and marketers as it clarifies which digital marketing platforms are thought to be the most useful for job seekers during the search for employment. Each respondent was able to select more than one of the listed options.

From the results of the questionnaire, it is clear that online job boards such as jobs.ie are thought to be the most useful digital marketing tool for job seekers as 72.92% of respondents selected this option. 50% said company websites and blogs, 45.83% chose social network sites, 37.5% chose advertisements, and 31.25% chose search engines, and 4.17% chose email newsletters and 4.17% chose the 'other' option, which will be discussed on the following page.



The two responses that chose 'other' said that Google was a useful tool and that industry specific jobs boards were also useful during the job search.

Showing 2 responses	
Google	6/28/2016 7:15 PM View respondent's answers
Industry specific jobs boards arts management.ie, art connected.ie, theatre forum.com	6/28/2016 2:24 PM View respondent's answers

Due to a company having limited resources, it is not always possible for Human Resource Managers to cover all channels that are potentially used by job seekers for job search. To study this more closely, the researcher conducted a so-called TURF analysis (Total Unduplicated Reach and Frequency) to figure out, which two, three and four Digital Marketing Tools out of the six included in the survey are seen by the respondents to be most useful, used most widely and therefore have the highest potential student and recent graduate 'reach'. Total Unduplicated Reach and Frequency (TURF) analysis is generally used to recommend solutions to the marketer's dilemma. TURF is a simple combinational technique that estimates the customer's coverage by the union of a chosen subset of the products. In this case, which digital channel, or combination of tools, is most preferred? This would point to how marketers should use specific preferred digital tools when trying to reach the best candidates for vacant positions (Conklin and Lipovetsky, 2005).

The following information and data emerged from the deeper analysis:

If a manager wants to use a single tool providing the highest reach, the best alternative is Job Boards (Reach of 73%) and the second best choice is Company Careers Websites (Reach of 50%) as can be seen below.

Maximum Group Size: 1. Reach and Frequency.

Variables	Statistics			
	Reach	% Of Cases	Frequency	% Of Responses
Job Boards	35	72,9	35	35,4
Company Careers Websites	24	50,0	24	24,2

If a manager wants to choose two digital marketing tools, then the best choice is (1) Job Boards and Search Engine Optimization (Reach of 85.4%). The reach of 85.4 means that 85.4% of respondents named at least one of these two tools as a useful tool. The second best combination choice is (2) Job Boards and Company Careers Websites (Reach of 81.3%).

Maximum Group Size: 2. Reach and Frequency.

Variables	Statistics			
	Reach	% Of Cases	Frequency	% Of Responses
Job Boards, Search Engine Optimization	41	85,4	50	50,5
Company Careers Websites, Job Boards	39	81,3	59	59,6

If a manager wants to choose three digital marketing tools, then the best combination choice is (1) Job Boards, Search Engine Optimization and Social Networking Sites (Reach of 93.8%), while the second best choice is (2) Job Boards, Company Careers Websites and Search Engine Optimization (Reach of 89.6%). In relation to SEO, employers must have all key words in relation to job offers on their websites. When a potential employee searches for a specific job related term, the search engine then provides the searcher with a number of related results. Through Google Adwords for example, ads could be placed at the top of the results page which might entice a potential employee to the employer’s website.

Maximum Group Size: 3. Reach and Frequency.

Variables	Statistics			
	Reach	% Of Cases	Frequency	% Of Responses
Job Boards, Search Engine Optimization, Social Networking Sites	45	93,8	72	72,7
Company Careers Websites, Job Boards, Search Engine Optimization	43	89,6	74	74,7

Finally, the two combination sets of four tools that have the highest reach are (1) Company Career Websites, Job Boards, Search Engine Optimization and Social Networking Sites (Reach of 95.8%) and (2) Job Boards, Search Engine Optimization, Social Networking Sites and Email Newsletters (Reach of 93.8%).

Maximum Group Size: 4. Reach and Frequency.

Variables	Statistics			
	Reach	% Of Cases	Frequency	% Of Responses
Company Careers Websites, Job Boards, Search Engine Optimization, Social Networking Sites	46	95,8	96	98,0
Email Newsletters, Job Boards, Search Engine Optimization, Social Networking Site	45	93,8	74	75,5

The findings from this analysis suggests:

- 1) Students and graduates do not only use one singular source of information or digital marketing channel or tool
- 2) Students and recent graduate use multiple source of information and digital marketing tools and channels tools in combination together
- 3) Students and recent graduates prefer some tools over others
- 4) Students and graduate are inclined to use very specific combinations of preferred tools

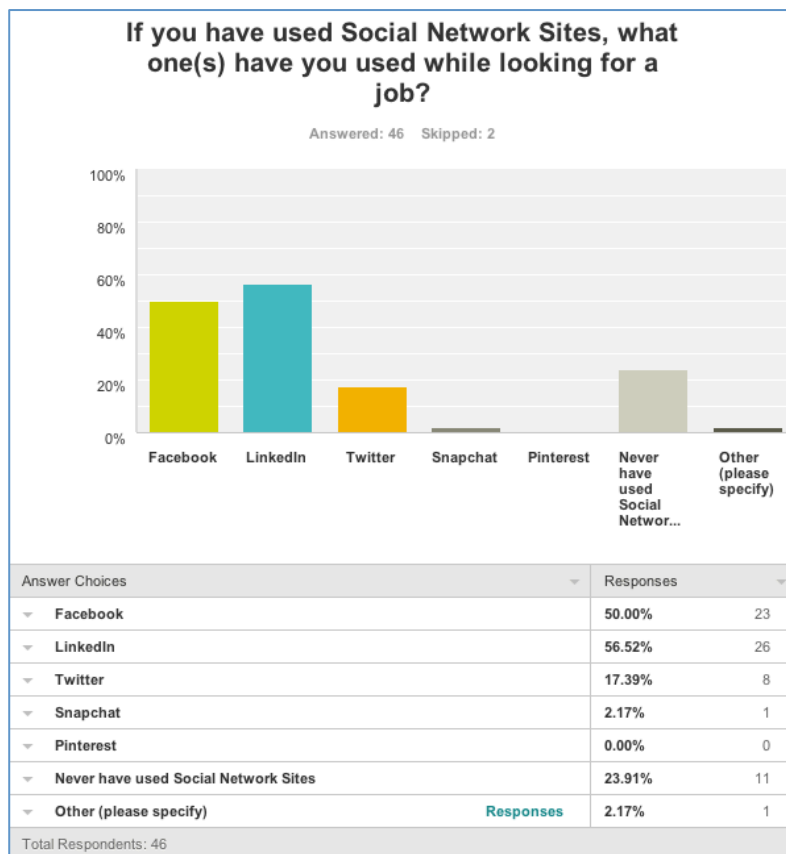
This all points to suggesting a better way to guide the employer’s use of their limited marketing and communication time and resources for optimal impact and reach.

Research Objective Number Five:

To identify which Social Network Sites are more useful for job search purposes. For example; Facebook, LinkedIn, Twitter, Snapchat, Pinterest.

It is proposed that by exploring this question - marketers and human resource managers will be more aware of where they should be posting job availabilities. Here the researcher looks at which social network sites are being used by students and graduates during the job search process.

The results found that LinkedIn with 56.52% was the most popular social network site for students and recent graduates when looking for job vacancies. 50% of respondents selected Facebook. Surprisingly 23.91% of respondents have never used any social network sites during the job search process. 17.39% selected Twitter, 2.17% chose Snapchat, 2.17% selected 'other'. Those who selected 'other' chose this option because they have never used social network sites for job searching purposes. Finally, none of the respondents have used Pinterest when looking for employment.



Showing 1 response
Never used
6/28/2016 7:15 PM

The key finding here was that LinkedIn was the most popular social network site to use as regards to searching for job opportunities. When we look back at what the literature said in the second chapter of this research, it was evident that Facebook was the most popular social network site (Pew Research Center, 2016). This is when the purpose and role of each different social network platform comes into play. As was also mentioned in the literature review, LinkedIn's mission is *'to connect the world's professionals to make them more productive and successful. When you join LinkedIn, you get access to people, jobs, news, updates, and insights that help you be great at what you do'* (LinkedIn, 2016). From this clearly stated definition of the mission and role LinkedIn is aiming to play in the 'talent' market, it may explain why it was the most popular social networking site to use when a student or recent graduate is looking to find job vacancies and positions. In relation to this point, it reinforces how important it is for marketers and employers to use and/or create each platform appropriately in order to engage and connect with the correct target audience.

Although Facebook was the most popular site overall, it was not identified nor utilized as the most popular site to use for job searching. Therefore marketers can make huge mistakes by utilizing incorrect or less effective platforms. This lack of focus could waste a company's time, money and resources by not understanding whom they are trying to connect with, for what purpose and on what platform - to reach their ideal target talent pool. Companies who are successful in using the correct platforms to source talent will ultimately win in relation to the 'war for talent' previously discussed. This not only effects the business's current operations and immediate hiring needs, but it is also vital in terms of a business's future and longevity (McMahon, 2016).

Finally we will now discuss the surprising 23.91% of respondents who have never used any social network sites during the job search process. As mentioned in the literature, Bohmova and Pavlicek (2015) explain in their study that social network sites are an important tool for companies, but they are not fully capable of meeting all of a business' marketing and human

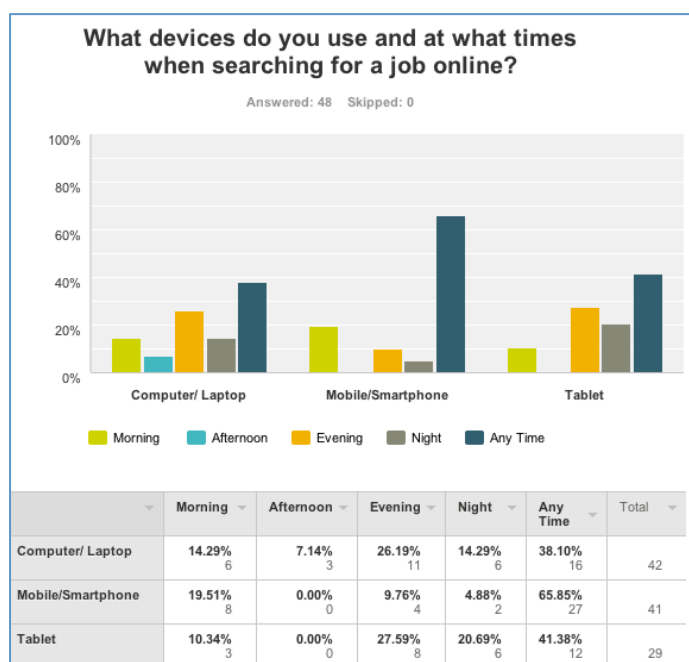
resources needs, including recruitment. This researcher has confirmed this earlier finding - that not everyone uses or has used social network sites when searching for employment opportunities. In relation to the human resources functions and in particular recruitment, websites and job boards are and most likely will remain important channels to present job offers. This shows that although these digital platforms are popular tools for both job seekers and recruiters, the potential of missing out on best-fit candidates is huge. With this in mind, other channels – both digital and traditional should be used in combination to prevent any missed opportunities.

Research Objective Number Six:

To explore what electronic devices are being used throughout the search for employment and at what times.

Understanding the kind of devices being used and what times students and graduates are searching for jobs, could provide extremely useful information. With more information, marketers and human resource managers could tailor their advertising campaigns and targeting strategies in order to increase their awareness by and reach of potential employees.

As can be seen in the data above, computer/laptop, mobile/smartphone and tablets were the three devices focused on. In relation to the times of the day these devices were being used, participants could choose morning, afternoon, evening, night and anytime. Participants could choose one or all three of the devices and could only choose one of the times listed.



Firstly, a key finding was that 88% of the respondents said computers/laptops were used during the job search process, 85% said mobiles/smartphones were used and only 60% said that they used tablets during the job search process.

In regards to computer/laptop usage alone, 38.10% of respondents that use computers/laptops said they could be used at any time of the day. 26.19% said in relation to searching for employment, computers/laptops are used only during the evening, 14.29% said morning, 14.29% said night and only 7.14% of the respondents that use computers/laptops for job vacancies would be in the afternoon.

When looking at the responses in regards to mobiles/smartphones usage, 65.85% of the respondents that use mobiles/smartphones during the job search process use them at any time of the day. 19.51% said they use their mobile/smartphone for job searching only in the morning, 9.76% only use their mobile/smartphone for job searching in the evening, 4.88% search for jobs by using a mobile/smartphone only at night and none of the respondents said that they use their mobile/smartphone to look for employment opportunities in the afternoon.

The final device that was included in this question was a tablet. 41.38% of the respondents that use tablets during the job search process said they would use it at any time of the day, 27.59% said they would only use a tablet for job searching in the evening, 20.69% said they use a tablet only at night when looking for job vacancies, 10.34% said only in the morning and none of the respondents use a table in the afternoon for looking for employment opportunities.

When looking at these findings, it is evident that mobiles and smartphones are the most popular device for job seeking activities. This finding, combined with the result that students and graduates, for the most part, use these devices at 'anytime' suggests a student's access job information in a highly mobile and flexible way. They don't seem to be rigid about when they are

open to researching or receiving information about job opportunities. This may be due to the possibility that their schedules are more fluid and flexible. It might also be explained by the likelihood that they have their mobile phone or smartphone with them at all times and therefore have constant access to them. Clearly, mobiles and smartphones are useful because a person can access the Internet and look up job availabilities at any time in the day, wherever the person may be, and whatever they are doing. In contrast, a computer or laptop is not as flexible or as discreet as smartphones or tablets as they are bigger in size and generally have to be plugged in for power.

Linking this finding back to the literature, Robinson (2015) explains that advertising on two devices instead of one had an increase in ad awareness by 60%. This current research suggests a similar direction. The most popular device in this current study for job search opportunities was computers and laptops, then mobile phones and smart phones and then tablets. Combined with the fact that the majority of students and graduates also report accessing all of these devices 'anytime' provides both clearer picture of preferred devices but also how very flexibility students and graduates access or are available to this information. By looking at the findings from this current research and to increase recruitment campaign reach, marketers and employers should strategically focus on job searchers access to and use of these preferred devices for job search – most particularly the top two: laptops/computers and mobile/smartphones – and at anytime. This means that when employers or marketers are trying to target students and recent graduates, they should focus on laptop/computer campaigns and mobile/smartphone campaigns. This would involve the campaigns strategy such as the times of the usage of these devices. In order to reach more potential candidates, employers and marketers need to understand when these devices are being used in order to reach the correct audience. If incorrect audiences are being targeted, then this will have a negative impact on the marketing budget as well as the number of relevant audiences being reached. It also involves looking at the more technical elements such as campaign compatibility on a variety of devices. Online marketing campaigns are not always technically set up to be visible on multiple devices therefore

this will have a huge impact on campaign design and marketers must be aware of these elements.

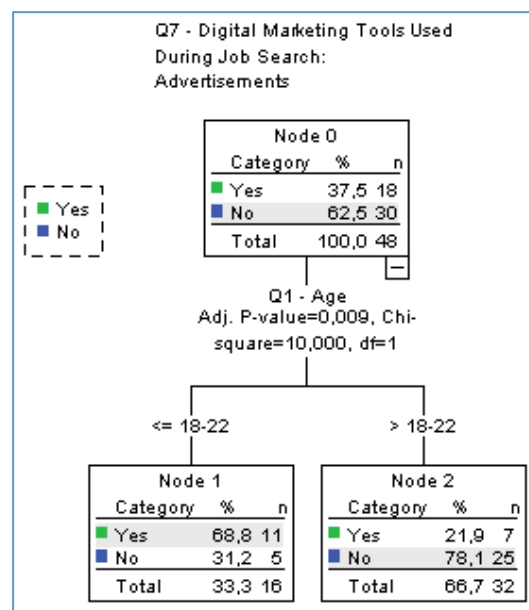
Other Interesting Findings to Note

During the analysis of the data collected through the questionnaire, non-parametric decision trees were used to search for significant differences in the answers of different demographic groups of respondents. Specifically, the classification and retention tree (CART) and Chi-square automation interaction detection (CHAID) algorithms were used.

Gan, Maysami, and Chye Koh (2008, p. 269) explain that '*decision trees are useful techniques for analyzing the data because they can handle non-linear and interaction effects well. The results can also be represented visually and hence are easier to understand and interpret.*' In their study, Gan, Maysami, and Chye Koh (2008) used surveys as their data collection method, similar to the method used in this study. During the data analytics stage of this study, the researcher thought it would be both appropriate and interesting to use decision trees to explore a different view of the data. From performing these tests, several statistically significant differences were revealed. The strongest and statistically significant findings are shared below.

Use of Advertisements By Younger Job Searchers

Firstly, in this image, it can be seen that advertisements are used by 69% of 18-22 year-olds, as opposed to only 22% of older respondents when they are looking for employment opportunities. The majority (78%) of respondents who belong to the age groups 'above 18-22' do not respond or use advertisements from potential employers when job seeking online. These figures suggest that the

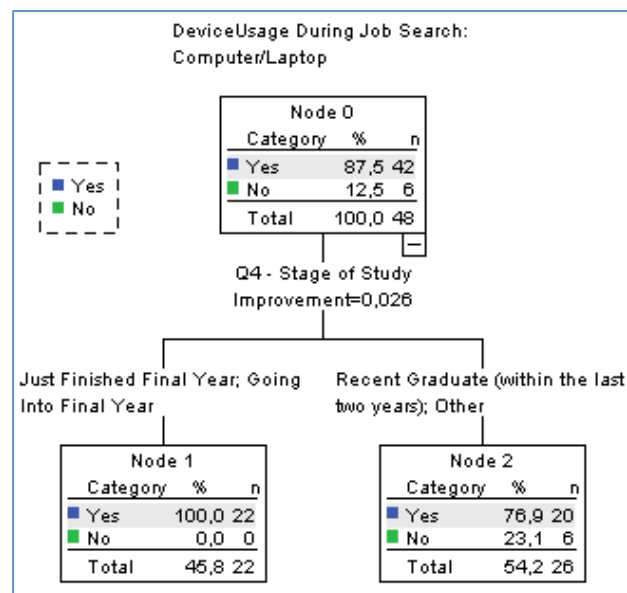


younger ages groups pay more attention and respond to the advertisements they come across through the use of digital marketing tools. Why is this the case for the youngest age group but not the older age groups? Businesses spend valuable money on advertising to their target market. If it is the case is that the business is trying to reach male and female students or recent graduates between the ages of 18 and 22, then advertising is an effective method. But what about the various other age groups businesses are trying to reach? From this data, it is apparent that businesses should be strategic when choosing which digital means and tool to reach their target audience. This is another area that could be further investigated in a future study.

Use of Device and Stage of Study

In this image, we look at the usage of computers and laptops during the job search process in relation to the stage of study of students and recent graduates. The usage was split into two groups; those who (1) just finished final year and those who were going into final year and (2) those who are already recent graduates or belong to the 'other' category of respondents.

An interesting finding was that of the first group who were going into their final year of study and those who had just finished their final year of study - 100% of the respondents from this group said they use computers and laptops during their search for employment. In relation to the other group, which included those who are

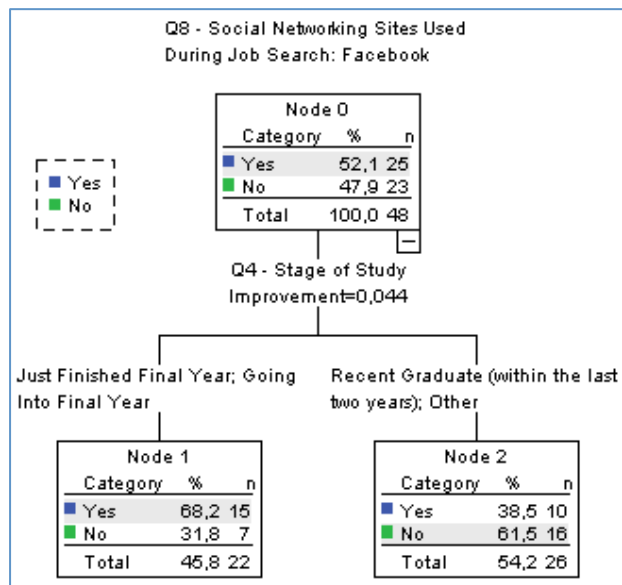


already recent graduates or belong to the 'other' category of respondents, far less of this group – that is 77% of these respondents - use computers and laptops when looking for job opportunities. As mentioned in the literature, Sruginis (2016) explains in a digital usage trend report that there has been a greater shift to mobile usage. It is said in the report that two thirds of time

spent online is through a mobile device (tablet or smartphone) and one third of time spent online is via computer. This may be relevant in terms of the general use of digital technologies. The purpose of this current study was to develop the existing information on digital use when searching for employment. Therefore from the data collected in this research there is not a direct match between the findings of Sruogins (2016) and this study. Computers and laptops in this current study are strongly preferred for job search purposes by the students at the earlier stages of study. This current study's findings suggest that specific devices and social media platforms are therefore used for different purposes at different stages. Students could also access other sources and tools, for example, personal social networks, at later stages of study: See objective five above.

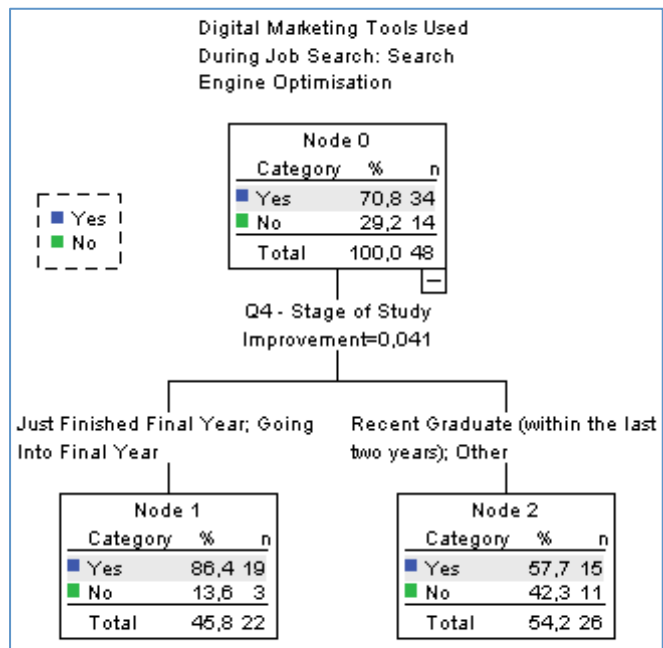
A suggestion for further research would be to qualitatively analyze why and how students and recent graduates use computers and laptops specifically during their search for employment.

In this image, it is clear that Facebook is used by 52% of all the 48 respondents who completed the questionnaire. When the Facebook usage is divided into two groups - those who (1) just finished final year and those who were going into final year and (2) those who are already recent graduates or belong to the 'other' category of respondents, interesting figures surfaced. The first group used Facebook more during their job search with 68% than those in the second group with 39%. Depending on which stage of study an employer is trying to target, these figures guide marketers and employers towards which method is most effective depending on who they are trying to target.



Finally, in this image here, we look at the SEO (Search Engine Optimization). 71% of all respondents use search engines when looking for job vacancies. When the respondents were split into two groups; those who (1) just finished final year or just going into final year and those who are (2) already recent graduates or belong to the 'other' category of respondents, more detailed figures came to the surface.

Those from the first group (just finished final year or just going into final year) use SEO in 86% of cases, which is much more often than those from the second group (already recent graduates or belong to the 'other' category of respondents), who use SEO in only 58% of cases.



In summation, these trees aim to guide marketers and employers towards using methods and platforms that are going to ensure they will reach who they are trying to target. By using these analysis methods, it becomes clear who can be reached through which digital platforms. The practical implications of this information are huge as now businesses have a better idea of which tools are the best in carrying out their strategies.

Chapter 5 – Conclusions and Recommendations

In summation of this study, a number of elements will be looked at. Firstly, the (1) Main Themes that surfaced from the study will be discussed, then the (2) Reliability and Validity of the Research will be discussed, the (3) Limitations of the Research will then be discussed and finally, (4) Considerations for Further Studies will then be suggested.

Main Themes

Stepping away from the detail of the findings discussed in the last chapter, we can come to some general conclusions based on the research.

General Findings from the Profile of the Respondent Group

It is interesting to note that students and recent graduates do not necessarily want to, nor do not intend to, pursue jobs in their specific field of study. Several students reported that they intend or have obtained employment in work areas outside of their field of degree. Just as one example, business studies students did not all intend to use their studies in a business role. And the number of students who chose the 'other' option to describe their field of study (14.58%) this 'other' category increased to almost 21% when they were asked what industry they intend to work in, and the range of work options widened.

There is somewhat of a decline in the use of digital marketing tools as students mature in age and in stage of study. As discussed previously, this could be explained by an ever-increasing digital literacy amongst younger students who potentially know more about how to optimize their use of digital marketing tools for job search. However, it might also be understood by considering that as students mature in age and stage study that potentially their own personal social networks and contacts develop, and that they possible trust and cross-refer more to an expanded range of sources of supporting information.

Active use of Digital Marketing Tools

Almost 71% of all respondents report their use of a range of digital marketing tools for job search purposes. It is clear from the findings in this study that most students, female and male, at all stages of their study and/or recent graduation, across most fields of study are engaging with digital marketing tools and platforms for the purpose of job search and job opportunity research. It is however, interesting to report that over one-quarter of all respondents report not using digital marketing tools for job search purposes.

Proactive Versus Reactive use of Digital Marketing Tools

Overall the vast majority of participants in the survey use digital marketing tools proactively (85%) for their job search purposes. Respondents were not inclined to react in an active way to digital marketing messages 'pushed at them' for example, through advertisements or emails.

Those respondents who seem to be more proactive are also more likely to react to marketing messages. There is a more positive link between the level of proactive use of digital marketing media by students and recent graduates and the likelihood they will also take note of marketing messages.

An additional finding suggested that younger students (69% of this group) are more open to paying attention to advertisements 'pushed' or directed to them from employers.

Wide Range of Digital Marketing Tools and 'Reach'

It is clear that students and recent graduates use a wide range of digital marketing tools for job search purposes. Respondents report their use of tools from advertisements, online job boards, social network sites, company careers websites, emails, newsletters and search engines.

Over 83% of respondents report their use of 'online jobs boards', followed next by social networks at almost 69% (LinkedIn and Facebook, etc.). Clearly, students and recent graduates have their preferences, but they are

not dependent nor do they rely on any one type or source of digital marketing tool or information.

Even though students and recent graduates *use* some tools more than others and more often, interestingly enough they report specific tools as being more *useful* than others. And these responses don't always line up. For example, online job boards are utilized by the majority of respondents and are also seen to be the most useful for job search purposes. However, even though the second most utilized digital marketing tool for job search was reported to be social networks, the second most useful tool was stated to be company websites and blogs. This might suggest that as students and recent graduates learn about job opportunities on job boards – they then might follow their own line of research to directly probe and learn more about specific companies from their own websites.

Clearly, the more tools marketers and employers use to market their employment opportunities, the greater the potential reach. However, given the wide range of digital marketing tools being utilized by students and recent graduates, the researcher explored what might be the best way to 'reach' *most* people. In this deeper analysis, it was found that there seems to be a way to cluster or combine the use of digital marketing tools to result in an optimal reach of students and recent graduates. In this study, jobs boards on their own result in the best overall reach (73%) of most respondents. By combining jobs boards and search engines the reach climbs to 85.4%. Combining jobs boards, search engines and social network sites could achieve a reach of almost 94%. And so on.

This finding would suggest that companies could utilize their limited resources to specifically use the most utilized digital marketing tools to reach most potential employees. Clearly this targeted approach would have to be tailored to their own unique target audience and sector.

Flexible and Mobile Job Search Behaviours

Overall, the majority (88%) of respondents report using computers and laptops specifically for job search purposes. This number climbs to 100% in the 'going into final year/just finished final year' group. This is followed by mobile phones and smartphones at 85%. Tablets were utilized by 60% of the respondents for job search purposes. Clearly therefore, students and recent graduates have access to and use a range of devices for job search purposes.

Combined then with the question 'when' do you utilize these devices, this research supports earlier findings to confirm that respondents use mobile phones and smartphones in the most flexible way for job search purposes at 'anytime'. This would suggest the respondents are actively looking for, and/or open to receiving information on, job opportunities at anytime of the day (or night) - at home, at college, at work, at social times with friends. Again, this point supports earlier findings that chart the significant growth in how we are all using technology in a far more flexible and mobile way. Now, within the scope of this study, we can confirm this also includes job search activity.

Considerations for Future Research

As stated in the findings and discussions chapter, more of the participants were female. As this study does not explore whether a higher percentage of female or male respondents would impact the findings, this could be a consideration for future research studies.

Questionnaires were used as a quantitative research method in this study as there was a limited amount of directly relevant research available to this topic and the researcher wanted to produce a baseline of facts and figures. A limitation to this as mentioned was the fact that some interesting findings lead to potential further studies, which would look deeper into certain areas. An example of this would be to investigate why the age group of 18-22 was more attentive to employment advertisement as opposed to the older age groups.

Appendices

Appendix I – Pilot Survey Suggested Changes and Comments

Rachel (Dissertation Supervisor): You got some useful feedback in your pilot. I would add the following:

Q6 - you give search engines as an example, consider adding the other examples from Q7 to make it clearer.

Q7 - consider adding 'other' category.

Sarah: No suggestions on changes – Really straightforward.

Katie: What exactly is a digital marketing tool? Other than that, it was really easy to fill out and extremely straightforward.

Ciara: No changes to suggest.

Michelle: Q6 does not allow you to answer no to both questions. Q8, there is no 'never have used social network sites before' option which might be useful to have as an option.

Robert: No suggestions on any changes.

Kevin: Did not respond.

Appendix II – Survey Monkey Questionnaire Used to Collect Data

Questions 1-3

Online Job Search

Digital Marketing Tool and Job Searching

This survey is focused on which Digital Marketing tools are being used throughout the job search stage of current students and recent graduates.
A Digital Marketing tool is defined as "the use of digital technologies to create an integrated, targeted and measurable communication which helps to acquire and retain customers while building deeper relationships with them." (Smith, 2007)
All responses used in this survey will be 100% private and confidential. They will only be used in my MSc Marketing Dissertation.

1. What gender are you and what is your age?

	18-22	23-27	28-32	33-37	38+
Male	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Female	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. What field is your degree in?

Business

Finance

Science

Arts

Engineering / Technical

Medical

Other (please specify)

3. What industry do you want to work in post studies?

Business

Finance

Science

Arts

Engineering / Technical

Medical / Health

Other (please specify)

Questions 4-7

4. Are you...

- Going into final year
- Just finished final year
- Recent Graduate (within the last 2 years)
- Other (please specify)

5. Are you currently looking for employment opportunities and if so are you using digital marketing tools?

	Yes	No
Looking for Employment	<input type="radio"/>	<input type="radio"/>
Using Digital Marketing tools throughout the search	<input type="radio"/>	<input type="radio"/>

6. Have you proactively used digital marketing tools yourself, and have you responded to digital marketing messages from employers?

	Yes	No
Proactively use DM tools (For example, Search Engines, Job Boards, Social Network Sites, Company Careers,)	<input type="radio"/>	<input type="radio"/>
Responded to DM messages from employers (For example, Advertisements, Email Newsletters)	<input type="radio"/>	<input type="radio"/>

7. What digital marketing tools have you used while searching for a job?

- Advertising e.g. Google Ads
- Online Job Boards e.g. jobs.ie, irishjobs.ie
- Social Network Sites e.g. LinkedIn, Facebook, Twitter
- Company Careers Websites and Blogs
- Email Newsletters
- Search Engines e.g. Google, Yahoo, Bing
- Other (please specify)

Questions 8-10

8. If you have used Social Network Sites, what one(s) have you used while looking for a job?

- Facebook
- LinkedIn
- Twitter
- Snapchat
- Pinterest
- Never have used Social Network Sites
- Other (please specify)

9. What digital marketing tools are thought to be most useful?

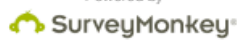
- Advertisements
- Online Job Boards e.g. Jobs.ie
- Social Network Sites e.g. LinkedIn, Facebook, Twitter
- Company Websites/ Blogs
- Email Newsletters
- Search Engines e.g. Google, Yahoo, Bing
- Other (please specify)

10. What devices do you use and at what times when searching for a job online?

	Morning	Afternoon	Evening	Night	Any Time
Tablet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile /Smartphone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer / Laptop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Done

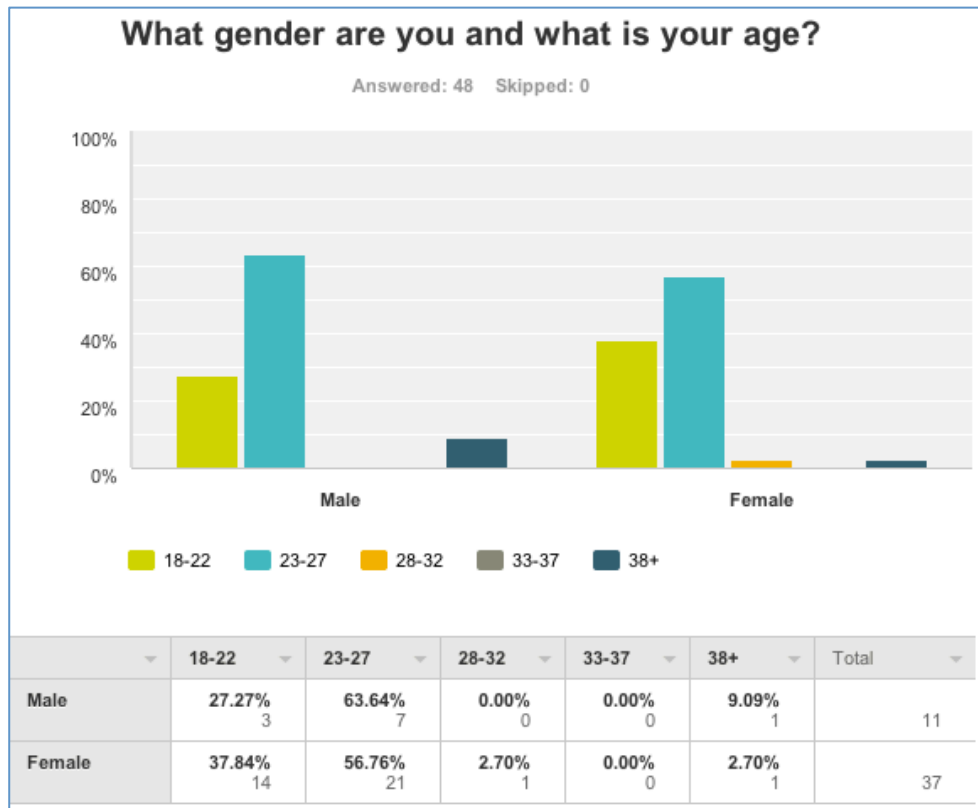
Powered by



See how easy it is to [create a survey](#).

Appendix III – Survey Monkey Questionnaire Data Results that were not included in the Research

Q1 – Demographics (Age & Gender Breakdown)



This question focuses on the demographics of the respondents. As can be seen from the results above, more women (77%) completed the survey than men (23%). 35% of the respondents were aged between 18 and 22, 58% of the respondents were aged between 23 and 27, only 2% of the respondents were aged 28-32, none of the respondents were aged between 33 and 37, and finally, 4% of the respondents were aged 38 or older.

Most of the men who responded (63.64%) to the survey were 23-27 year olds. This was the same for the women as 56.76% of the women that completed the survey were aged between 23-27.

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[736f1be290bf&q=device&CID=A106156&PUB=ADMAP](http://ezproxy.ncirl.ie:3116/Content/ContentViewer.aspx?MasterContentRef=a5bd9e97-c63a-4291-b1fd-736f1be290bf&q=device&CID=A106156&PUB=ADMAP)

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