TO CRITICALLY EVALUATE HOW DIGITISATION/AUTOMATION HAS CHANGED THE ROLE OF HR DEPARTMENT FROM RECRUITMENT AND SELECTION PERSPECTIVE: THE CASE OF ADECCO IN MIDDLE EAST MARKET

A Management Research Dissertation submitted in fulfilment of the requirements of Cardiff Metropolitan University for the degree of Master of Business Administration

Cardiff School of Management

15th May, 2018
Declaration and Statement

This dissertation is a result of my own research and investigations. The work is being submitted in partial fulfilment of the requirements for the degree of MBA, and has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signature: Faisal Nooruddin
Date: 15th May, 2018
Acknowledgement

I would like to take this opportunity to give special thanks to Almighty God, who gave me sufficient strength and courage to complete the dissertation in the most ethical manner.

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I acknowledge that the above named student has regularly attended the planned meetings and actively engaged in the dissertation supervision process. They have provided regular timely draft chapters of the dissertation and followed given guidance.

Signed ………………………………………………………

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Abstract
The purpose of this research study, titled “Impact of Digitization/Automation on Recruitment: A study focused on the Middle East” has focused on understanding and exploring the possible impacts of automation on the recruitment function, while focusing exclusively on Adecco; a Middle Eastern company. In this context, the study has adopted the research onion proposed by Saunders et al. (2009), where the study considered the selection of positivism philosophy, deductive approach, and quantitative research design. In addition, the primary data from 50 employees of Adecco was collected through the use of questionnaire (5-point Likert Scale). The research study found that Adecco use of automated recruitment and selection has presented the business with an opportunity to enhance its global reach, which was confirmed through the regression analysis. In particular, the study confirmed that there exists a significantly positive impact of global reach through digitisation and/or automation on the overall recruitment and selection process at the company. More importantly, it was found that 1 unit change in the global reach could lead to 74.6 percent change in the recruitment and selection function at the company. In relation to the findings of the study, the companies operating in Middle East were recommended to consider the adoption of information technology in their HR practices, which could lead to the reduction of time and costs associated with the selection of appropriate candidate at the right time and place. Since employees are amongst the most valuable resources, their selection and recruitment process should encourage them to become part of the organisation, rather than creating stressful situation for the applicants based on traditional HR practices.

**Keywords: Automation, Digitisation, Human Resource Management, Adecco, Global Reach, Cost-effectiveness, and Platform Openness**

**Boolean Search:** (Automation or “Automated tools”) and (Digitization or Digitisation or Modernization) and (HR or “Human Resource” or “HRM”) and (“Platform openness” or CRM or ERP or “Recruitment Tools” or “CRM systems”)
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Chapter 1:

INTRODUCTION

1.1. Introduction

This chapter has focused on presenting a context for the dissertation through contextual background, while presenting the purpose for conducting the research. In addition, this chapter has presented an overview of the research question that has helped in the formulation of the research aims and objectives. More importantly, the chapter has also presented the justification for conducting the research; meanwhile highlighting the methodology that has been used for the collection and analysis of the data.

1.2. Contextual Background

In the contemporary business environment, digitalisation and automation has continually been suggested to be amongst the driving forces of change across the globe; and considering the acceleration in relation to transformation (Bandarouk & Ruel, 2009); for instance, it took approximately 5 years for Apple to capitalise upon its resources and competencies to transform the music industry; whereas Airbnb and Uber reshaped the hospitality and the transportation industry in more or less than 2 years (Deloitte, 2016). The pace of the digital disruption can be measured within months, but it takes years for the businesses, in the intensely competitive business environment, to completely embrace the change in the form of automation and digitisation in the way in which it operates (Strohmeier & Kabst, 2009). Furthermore, it has been suggested that change management has by far become the most enduring bottleneck in the technologically advanced era; whereas others have suggested that technological adoption has remained the foremost concern for businesses to embark on their journey towards success (Becton & Schraeder, 2009).
1.3. Rationale

The transformation of human resource department and its recruitment and selection function has become the foremost priority of companies operating in the globalised era, irrespective of their nature and size of operations (Compton, 2009). This implies that the digital age has presented the both local and multinational companies with stepping-stone (opportunity) to evolve through the exponential use of the technology in the workplace. Since companies operating in the digital age have moved at relatively faster pace in comparison to earlier years, it has fundamentally and radically transformed the ways in which the companies operate, while presenting the companies with an opportunity to develop innovative and unique ways of attracting and retaining qualified and skilled employees as well as potential applicants (Reynolds & Weiner, 2009; Dhamija, 2012).

In the technologically advanced era, both local and multinational companies have realised that their remarkable success and outstanding performance is directly proportional to the recruitment and selection, and retention of the qualified and skilled employee (Holm, 2012). Hence, this indicates that human resources are amongst the most significant and vital for the success of the organisation; however the roles and responsibilities of the human resource department has changed to a great extent, which can primarily be attributed to the changes in the market dynamics and technological advancement (Florea & Badea, 2013); thus compelling the organisations and their human resource department to perform their associated tasks and functions in more effective and efficient manner (Holm, 2010). In this regards, it has been suggested that the growing use of Information Technology (IT), in the 21st century, especially in the case of human resource department has significantly improved the efficiency of the HR department in terms of recruiting and selecting, training and development, and other associated responsibilities and functions (Faliagka, Tsakalidis & Tzimas, 2012); meanwhile presenting the companies with an ability to reduce their costs associated and the speediness in relation to the HR department.

Though, there exists an abundance of journal articles and research studies in relation to the effect of technology on the HR practices (Saleem, 2012; Ali & Rajamani, 2012), but the number of research studies directly highlighting the effect on the companies operating in Middle East is scarce; thus indicating that there exists a gap in the literature. Hence, the purpose of the research
study was to fill the void by selecting an organisation; Adecco that has consistently operated in the Middle East as well as the rest of the world to determine and evaluate the overall impact on the digitisation and/or automation of the recruitment function in the company. More importantly, in-depth review of the literature on the company and its digitisation of HR function, or other companies operating in Middle East have infrequently been discussed in the literature; thus justifying the nature of the study as well as the selection of Adecco for the research purpose.

1.4. Research Question and Objectives

An overview of the literature presented an understanding that employees are amongst the most valuable resource of an organisation (Cascio, 2018); thus companies have priorities their recruitment and selection function to ensure that the business has skilled and competent personnel that can help in the achievement of organisational goals and objectives in the most profitable manner (Boxall & Purcell, 2011). In earlier years, the competition between the companies was based on their overall market share and profitability; however the change in market dynamics has made the businesses realise that their overall success is associated with the employees, rather than their market share and profitability; though these are amongst the important financial measures (Armstrong & Taylor, 2014). However, these financial measures cannot be achieved without talented and skilled employees.

Based on the reading available in the literature, the following research question was formed, and has been addressed throughout the research study;

*What is the impact of digitization and automation on HR?*

*How has it changed recruitment trends and increased efficiency in the Middle East?*

In this context, the purpose of the research study is to address the aforesaid research question; thus the following objectives were formulated, which are as follows;

- To comprehend the importance and role of recruitment and selection in the contemporary business environment
● To evaluate and investigate the difference in traditional and contemporary HR practices, especially in the technologically advanced era
● To investigate the impact of digitisation and/or automation on the recruitment and selection function of Adecco
● To propose recommendations to the companies operating in Middle East based on the findings of the study, to enhance their recruitment and selection function by relying extensively upon information technology.

1.5. Methodology
The research study has undertaken/selected positivism philosophy (Cibangu, 2010), since the primary purpose of the study was to determine the impact of digitisation and/or automation on the Human Resource Department, exclusively the recruitment and selection function. In this context, the study is causal in nature, which means that the study has concentrated on evaluating and investigating the impact of the independent variable on the dependent variable (Punch, 2013). Considering the nature of the study and the selected positivism philosophy, the research study has adopted quantitative research design, where the data was collected through the use of survey. In particular, the instrument used for the collection of data was self-administered questionnaire that was developed in accordance with the research aims and objectives.

Since the dissertation has focused on the collection of primary data, the consent from the employees of Adecco was obtained, as well as from the company by exclusively highlighting the purpose for conducting the research, and the overall benefit that the firm could achieve by comprehending the importance of digitisation and/or automation of HR department, especially the recruitment and selection function. The questionnaire was based on the 5-point Likert Scale ranging from the frequency of strongly agree to strongly disagree. The data obtained from the questionnaire was analyse through the use of SPSS 20.0, where descriptive statistics along with correlation and regression were conducted to determine the strength of association between the variables, followed by the impact of independent variables on the dependent variable. More importantly, regression analysis was conducted to support the null hypothesis that indicated a significantly positive impact of digitisation and/or automation on the recruitment and selection function of Adecco.
1.6. Outline of the Dissertation

The dissertation has been bifurcated into a total of 5 distinct, yet interrelated chapters, which are as follows;

1.6.1. Chapter 1: Introduction
The purpose of the introduction chapter has focused on presenting the contextual background of the research study, while offering justification for conducting the study. Moreover, the study has presented the research questions that helped in determining the research aims and objectives, while highlighting the methodology that has been used for the collection of primary and secondary data.

1.6.2. Chapter 2: Literature Review
The literature review chapter has focused on reviewing the existing literature in relation to the automation and digitisation of the human resource department, and the difference between traditional and contemporary human resource management, while ensuring that the literature is in accordance with the research objectives. The chapter has also shed light on the effectiveness of the digitisation element for improving recruitment, while determining the impact of digitisation on recruitment.

1.6.3. Chapter 3: Research Methodology
The research methodology chapter has presented an overview of the direction of the study by following the research onion proposed by Saunders et al. (2009). In particular, the chapter has offered justification for the selection and use of each element, while determining the methods undertaken for the collection of the data. More importantly, the chapter has presented the ways in
which the data is to be analysed, while demonstrating the ethical considerations taken into account for the completion of the research study.

1.6.4. Chapter 4: Findings and Discussion
The chapter has focused on the application of the research methodology, while highlighting the findings of the study through the use of descriptive statistics, followed by correlation and regression analysis. Furthermore, the chapter has ensured that the findings and discussion of the study are in accordance with the predefined research aims and objectives.

1.6.5. Chapter 5: Conclusion and Recommendation
The last section of the study has focused on summarising the findings of the study, while presenting recommendations for the company as well as other businesses operating in the Middle East. More importantly, the chapter has also present recommendations for the future researchers as well in accordance with the limitations of the study, which are also discussed in this chapter.
Chapter 2:

LITERATURE REVIEW

2.1. Recruitment and Selection

Recruitment and selection are the most important function of human resource department, where potential applicants are screened and recruited based on their skill sets and competencies (Rees & Rumbles, 2010). This does not only mean external recruiting through various media and channels, but also the internal promotion and transfer of employees (McGraw, 2013). Recruiting also includes the personnel planning and job description in advance to find out how many new employees need to be recruited and which position in the company is subject to change (McGraw, 2011).

Recruiting people is basically a sale like any other. However, in the recruitment process, the product being offered to the applicant is the organisation. As with any sales process, it has been suggested that an organisation must present itself to encourage the applicants to become part of the organisation, which implies presenting the company in an attractive way in order to attract attention and convince applicants (Garner, 2012). Considering the latter, it can be argued that recruitment and selection of employees, in the organisation, is amongst the most important functions of human resource management, since it helps the business in search of new talent that can present the business with an opportunity to survive and thrive in the intensely competitive business environment (Ofori & Aryeetey, 2011; Cabellero & Walker, 2010).

Today, it is therefore necessary to look for employees in various channels in order to find suitable candidates at all. Good candidates have the choice between different options and offers and are accordingly critical and selective towards the employers (Meyer, 2007). The changed environmental conditions require new approaches to recruitment, which implies that companies have adopted automation and information technology in their recruitment and selection processes for operational efficiency and efficacy (Brewster, 2017).
2.2. Recruitment Effectiveness

In the contemporary business environment, effective recruitment and selection has become a necessity for businesses to survive and thrive in the intensely competitive marketplace; thus companies have actively focused on ensuring that their recruitment are effective (Carrillat et al., 2014). This has ultimately led to the concept of recruitment effectiveness, which is measured through the following;

2.2.1. Recruitment Period

It is calculated in calendar days between the day when the authorization to recruit is obtained and the day when a job offer is made to a candidate. It is an indicator that highlights the recruiter's speed at identifying, evaluating, selecting and attracting candidates (Hall et al., 2009). The recruitment time calculated in days will cut short the discussions on the "slowness" of recruitment. It will distinguish between hiring normally and those taking longer, either because of shortages of candidates (Cascio, 2018).

2.2.2. Average Cost of Recruitment

It is calculated by adding all the recruitment costs over a year (salaries of the recruiters or recruiters, costs of announcements and CVs, costs of recruitment offices, costs of personality tests, etc.) divided by the number of recruitments made over the year (Kapp, Peters & Oliver, 2013).

2.2.3. Retention rate

This percentage can be calculated over a year or two or over a longer period. The calculation formula is as follows: number of employees still present at the end of the period considered / number of recruitment over the period considered (Nicholson et al., 2011). This indicator measures company's ability to "retain" candidates. It is also an indicator of the quality of the recruitment: if the candidates leave the company, it is either that they did not find what they
came to look for or that the recruited profile was not the good one (Hausknecht, Rodda & Howard, 2009).

2.2.4. Internal Mobility Ratio
It is calculated by dividing the number of recruitments filled by candidates from internal mobility by the total number of recruitments made (DeVaro & Morita, 2013). It is a relevant indicator of the trust the organisation place in the employees to meet new challenges.

2.2.5. Acceptance Rate for Job Offers
It is calculated by dividing the number of accepted job offers by the number of hires issued. It is a reflection of the relevance of company’s offers (salary, status, benefits etc.) and the image of the company. A rate that is too low can highlight an inappropriate salary position or a degraded image (Breaugh, 2008).

2.3. Conventional and Digitised Human Resource
The importance of the internet as a global platform for networking and communication has increased significantly in recent years both professionally and privately. Social networks have played a key role in this evolution (Bailon et al., 2011). They are now part of the daily lives of professionals; thus nobody wants to miss the rendezvous of these new media. Indeed, being on social networks seems to be a fashion phenomenon for which companies do not want to stay on the side-lines. The main reason for the presence of companies on social networks is the communication to different groups: new customers and existing customers, of course, but also potential employees (Caers & Castelyns, 2011). A presence on social networks is a significant support for company activities such as: improving brand awareness; dissemination of information on the company's products and services; attracting new customers; interaction with existing customers; the presence of the company at the rendezvous of new forms of communication (Stepanashvili & Janiashvili, 2015).
Recruitment has not been spared, according to the results of the survey conducted by Wyman (2016), where it was suggested that more than half of job seekers use social networks in their job search. Another survey conducted in the suggested that 100% of the 300,000 surveyed respondents prefer to interact online with employers. The fact that social networks have gained ground in the field of recruitment among graduates is just as true for companies. In the USA, the number of companies using social networks as a recruitment tool grew by more than 100% between 2006 and 2008 (Sivertzen, Nilsen & Olafsen, 2013).

LinkedIn seems to point in the lead since a study conducted in 2012 reveals that this social network is preferred by 93% of employers surveyed (Singh & Sharma, 2014). It is followed by Facebook and Twitter which have respectively 66% and 54% of preference. Social networks are used at various stages of recruitment, in different ways by companies (Broughton et al., 2013). Some use them to publicize their employer brand and give themselves more visibility with the target populations, thus conveying a positive image of their company to the public. Others use it as a recruitment tool, to identify hidden talents and current professionals (Hodgson, 2014). This is possible thanks to the digitalization and the relative free accessibility to the professional profiles. In this sense, social networks are an integral part of the recruitment process. They allow an organisation to post job offers, analyse and sort candidates, evaluate them, do interviews, etc. They do this while maintaining their primary function of networking and communication, thereby facilitating permanent contact with candidates (Koch, Gerber & Klerk, 2018).

It is therefore understandable why social networks are positioning themselves as a recruitment channel that is highly prized by companies, particularly by "these HRDs disappointed with recruitment firms" (Ismail & Koshy, 2017). They accuse them of lack of responsiveness, problems of evaluation of the candidates as well as the high cost of their services. Even the most sceptical have finally been persuaded because of the large number of members that abound social networks (statistics). It is estimated that because of these statistics, social networks offer an unprecedented opportunity to find candidates quickly via the internet (Holm, 2012). This question calls for others, including the impact of social networks and the risks they pose as a recruitment channel.
2.3.1. Digitisation and Ever-growing influence of Recruitment

Social Networks is a collective term for a wide range of online platforms that allow community members to interact. The foundation of these online communities and networks is sharing: photos, music, interests, ideas and experiences (Henderson & Bowley, 2010). Members have the opportunity to share articles they have created themselves. There are several types of social networks; Friendster, Facebook, MySpace, Instagram, Google, Podcast, Twitter, YouTube, and Yahoo, etc. In addition to sites oriented more towards friendly and affective sociability, services have been developed which are known as "professional networking platforms" (Safko & Brake, 2009). These platforms are increasingly used for online identity and reputation management purposes. On these platforms, one generally uses his real name and not his pseudonym as often on the platforms of personal sociability. The most used social networks for recruitment are LinkedIn, Facebook and Twitter.

As the use of social networks has grown, it has ultimately resulted in global reach and exposure. In companies, the first to follow this trend are the Human Resources departments. It is only recently that they have been overwhelmed by the marketing departments they always close behind (Girand, Fallery & Rodhain, 2014). Today the penetration rate of social networks is even greater. This presence is justified on the one hand because social networks are a fashionable means of communication and on the other because it is an inexpensive means of communication. A company that wants to count and mark the news of the business world must count with social networks (Doherty, 2010).

2.3.2. Social Networks and Recruitment Process

Professional networks such as LinkedIn are the most used for recruitment purposes. LinkedIn is the European leader. In fact, 64% of companies use it to find new talent. In 2013 LinkedIn had 200 million members (Castilla & Fernandez, 2017). This figure has increased significantly today and now has nearly 400 million members worldwide as much as Instagram, as and nearly 100 million more than Twitter. Facebook is in second place with 41% of companies integrating it into their recruitment strategy. 29% of companies use Twitter to find their future employees (Veiga and Turban, 2018).
If companies use social networks to recruit, it must be recognized that it is for budgetary reasons. Indeed, recruitment budgets by social networks are low. Many companies do not allocate any of their budgets to recruitment via social networks (Brandao et al., 2017). In 2013, only 15% of companies spend more than 5% of their HR budget on social networks. In the same sense, very few companies have staff specifically dedicated to recruitment through social networks. In addition to being less expensive, they would have the advantage of speed (Goldberg & Nguyen, 2017). This would save time in the search for talent and the company's performance can only be felt.

These platforms are used at various stages of the recruitment process for the publication of job offers. More and more companies are posting their open jobs on Facebook or Twitter, looking for socially connected job seekers (Chan and Kjellberg, 2017). The ability to share these job opportunities on the same network or across different networks increases their reach to attract more candidates. Companies also use social networks for direct research of future employees. They benefit from the advantage of these social networks as an interplanetary database. Another reason and not least of the use of social networks is the search for general information about potential employees (Salloum et al., 2017). They carry out checks on the profiles of the candidates by conducting a small survey on their identity: their professional background, level of study, professional experience. To do these profiles, photos, articles and other items posted by the candidate are of interest to recruiters. Better, by reading the different comments made by future employees on their page, companies can already get an idea about them. It is important to note that because of their scope, social networks are used by companies to convey their employer brand and project themselves as an employer of choice (Madia, 2011).

2.4. Benefits of Digitisation/Automation Recruitment

In the contemporary business environment, 72% of employers believe that some roles in talent acquisition and human capital management will be fully automated within 10 years. Since companies operate in technologically advanced era, businesses have continually focused on HR automation efficiency (Farber, Weitzel & Keim, 2003); however it has been suggested that the speed of adoption of automation varies considerably from one company to another. While more and more are relying on technology for time-consuming, exhausting, and human-error-prone
tasks, the study shows that many companies still rely on manual processes for acquisition, talent and management. 34% of employers do not use automation to recruit candidates, 44% do not automate on-boarding and 60% do not automate human capital management activities for employees (Faraj, 2010).

Following are the prominent reasons for digitising and automating the HR department in an organisation;

2.4.1. Time saving and better efficiency
An HR manager who spends hours browsing timesheets, files and e-mails may not do more than that. The more time he loses, the less productive he is. Automating processes improves the productivity of the HR team and facilitates its work (Farber et al., 2003).

2.4.2. Better Candidate Experience
Communicating with candidates in a clear and consistent manner throughout the recruitment process reduces their frustration. Application tracking software facilitates communication and candidates feel valued because they can log in and check the status of their application. In addition, if candidates have questions for HR, all information is available and easily accessible for the HR team (Hakan, & Yilmaz, 2017).

2.4.3. Fewer Errors
Automating the strategy allows an organisation to standardize records management. Incidentally, it eliminates the risk of human error that can be so problematic. A paper system is a big risk: there may be no backup, and in case of loss, fire or theft, for example, some information may not be recovered.

2.4.4. Saving Money and Resources
Automation offers the organisation with an ability to save its time, and therefore money, allowing the business to invest in really important things (Chapman & Godollei, 2017). This implies that automation has reduced the burden on the organisation in terms of costs associated with recruitment and selection; thus allowing the business to remain competitive in terms of the HR function.

2.4.5. Best paid experience

Every employee has his own requirements. Some travel and must make travel requests and report on their expenses. Others contact HR regularly to update their personal and professional information (Masoer & Skitka, 2018). As it grows, the company will have more and more employees who will need HR help. Automated HR systems allow employees to manage all these elements themselves. Thus, they are masters of their own data and the task of HR is greatly facilitated.

On the other hand, it has been suggested that list of benefits of online recruitment over traditional recruiting is long - not only for employers but also for employees. The main advantages of e-recruiting for companies are, above all, the simplification and optimization of applicant management and the associated savings in time and hiring costs. Following is the list of benefits for employers (Analoui, 2017);

- In contrast to traditional print advertisements, online job advertisements can be distributed more cheaply worldwide and can also be made available to applicants around the clock, which significantly increases the number of interested job applicants and the overall reach.
- Applications can be processed faster and more efficiently with suitable IT solutions since relevant data can be recorded electronically from the outset (for example, in company personnel and applicant databases).
- The updating of job postings is possible at any time, so that they are always up to date.
- Many e-recruitment channels are free (for example, your own career page or online job portals), which means financial savings on the employer side.
• The linking of content is possible with an online job advertisement. Thus, it can be kept short and clear, but still contain all relevant information or their links.
• Depending on the e-recruiting channel, the inclusion of moving images (for example in the form of an image video) is possible, which benefits above all employer branding.
• E-recruiting is a great (maybe even the only) way to reach out to the digital natives and the coveted Generation Y professionals.
• Some e-recruiting channels provide easy communication between applicants and companies, for example to clarify possible questions.
• Cost and time savings are also created by the simplified as well as accelerated and partly automated processing of the incoming applicant data.
• After submitting the questionnaire, the software can filter out applicants whose profile does not meet the job requirements.
• A pre-selection of applicants via so-called "E-Assessment" using internet-based aptitude tests (for example, acquisition of personality traits, educational level or soft skills) and corresponding matching software is possible.

Like the benefits associated with employers, employees and applicants are also provided with several benefits including (Bowers et al., 2018);

• For job applicants, the biggest advantage of e-recruiting is the simplification of the application process, which can be handled directly online. He also benefits from time savings through e-recruiting.
• Online applications are for the employee in most cases free of charge and thus much cheaper than the traditional application in paper form via mail.
• For example, an applicant can enter biographical data into a web form, or upload relevant files to a web page (for example, resume, work certificates, certificates or even application videos) with less time and expense than traditional paper applications.
• The application possibilities expand, as more and more job offers are permanently accessible online.
• Increasingly sophisticated matching technologies in job boards help applicants to find suitable job postings when looking for a job.
2.5. Reasons For Automation/Digitisation In Recruitment

Even if traditional paper-based recruitment has worked well for company so far, sooner or later the companies will not be able to avoid digitizing in terms of recruitment. The development away from the classical and towards the e-recruiting is in fact justified by several current trends on the job market - and has become unavoidable:

2.5.1. Digitization

Of course, the first trend is obvious. E-recruiting grows with the possibilities. Digitalization is advancing at a rapid pace, social networks are in steady growth, mobile has changed society's Internet usage, and more and more potential candidates - most notably Generation Y - are simply advancing, and pretty much anything is comfortable these days to handle online, also applications (Singh, 2017).

2.5.2. Shortage of Skilled Workers

To put it a bit ironically, it could be stated that digital natives do not even know how to use paper and pen. They work virtuously on the World Wide Web and prefer to apply online - or even more often "mobile", since the well-educated Generation Y is in a better bargaining position thanks to a shortage of skilled workers (Xu et al., 2017). If a company does not offer a digital application, it may result in the loss of highly qualified young professionals to the more modern competitors.

2.5.3. Internationalization

The alternative could then be simply: If an organisation does not find the right applicants at a national level, it tends to look for the right resource on international level (Shenoy & Aithal, 2018). And even in the global market for applicants, nothing works today without the Internet.
2.5.4. Resource Scarcity

Internationalization, however, brings with it yet another peculiarity, namely the increasing competitive pressure (Arora & Hanumante, 2017). Companies in this country no longer have to assert themselves against German, Austrian or Swiss competitors, but also against fellow combatants from India, China or Romania in order to be able to survive in the market on a lasting basis. The only problem is that, in many of these countries, wages are lower, quality requirements lower or materials cheaper (Silva, Silva & Martins, 2017). There is therefore hardly any company that does not have to struggle with scarce resources, above all financially. Cost savings are high on the agenda for most companies, and that is exactly what the increase in efficiency in the recruitment system through e-recruiting will do.

2.6. Impact of Digitised/Automated Recruitment

2.6.1. Platform Openness

The study conducted by Ghazawneh & Hendridsson (2013) has indicated that automation of HR practices, especially the recruitment and selection function, has presented the companies with an opportunity in terms of controlling and accessing, while allowing the organisation to enhance their compatibility to recruit and select applicants. Similarly, Brake (2014) argued that digitisation has presented the applicants with an opportunity to participate to become part of the organisation, without being concerned about their physical presence.

On the other hand, the study of Monson (2017) indicated that digitisation has made the recruitment and selection function open for all the organisations, irrespective of their industries; thus increasing the recruitment and selection process to be significantly effective in the professional context. Similarly, Aral et al. (2013) indicated that platform openness in relation to recruitment and selection function has presented the companies with an opportunity to attract large number of skilled and competent job seekers in the marketplace, while allowing the organisation to select the most professional applicants for their company.
2.6.2. Global Reach
Automation and digitisation has not only presented the companies with an ability to effectively recruit and select personnel for the vacant position, but it has also presented the companies with an opportunity to expand their recruitment and selection to both developing and developed nations without being concerned about the screening and assessment process (Dhamija, 2012). This implies that applicants from all around the globe can share their resumes based on their interest in becoming part of the organisation (Fujimoto et al., 2007).

2.6.3. Cost-Effectiveness
The research study conducted by Carroll & Buchholtz (2014) has indicated that businesses have continually shown preference towards automation, since it presents an opportunity to minimise the costs associated with operations. This is quite applicable in the case of recruitment and selection process as well, since digitisation has presented the companies with an opportunity to make the recruitment and selection process less labour intensive; thus reducing the overall costs associated with the function to a significant extent. Furthermore, the study by Leeflang et al. (2014) that the use of digital platforms for recruitment has presented the companies with an ability to easily reach the applicants, irrespective of their geographical boundaries, in the most cost-efficient manner; whereas conventional methods have been suggested to have resulted in higher costs in relation to recruitment and selection. Turner (2010), in this regards, highlighted the fact that interviewing the candidate is a time consuming process; whereas the companies that have digitised their HR function are able to interview the applicant in the most cost-effective manner (i.e. video interviewing).
Chapter 3:

RESEARCH METHODOLOGY

3.1. Introduction
The chapter of research methodology has provided information related to the direction of the study by relating it with the research philosophy, design and approach. Furthermore, the chapter has focused on offering justification for each element highlighted within this section; meanwhile addressing the ethical considerations in accordance with the Saunders et al. (2009) research onion.

![Research Onion]

Figure 1: Research Onion

3.2. Research Philosophy
The first layer of philosophical stance focuses on the 3 philosophies of ontology, epistemology, and axiology (Hughes & Sharrock, 2016). The ontological stance is primarily concerned with the nature of reality, and has suggested that difference exists between the reality and the perception of the individual; thus influencing the individuals to change their behaviour towards the reality. On the contrary, the epistemological stance focuses on addressing and gauging the acceptable knowledge; thus this philosophical stance has continually been used in scientific research studies. Lastly, the axiological stance focuses on understanding and recognising the role of personal values and opinions in relation to the collection and analysis of the research (Saunders et al., 2009).

Based on the latter, the study has concentrated on the selection of epistemological stance, where the philosophical position of positivism has been selected, since it is more inclined towards the use of statistical tools and techniques to determine the reality based on facts and figures, rather than the opinions of others.

3.2.1. Justification
The research study is primarily concerned with the investigation of the impact of independent variable on the dependent variable, which in this case was the impact of automation and/or digitisation of the HR practices, especially in the case of recruitment and selection. Taking this element into consideration, it was most appropriate to consider the philosophical position that encourages the use of statistical tools and techniques for analysis (i.e. positivism), rather than those philosophical stances that encourage the use of personal opinions and interpretations that might have resulted in the inclusion of personal biases during analysis (Smith, Thorpe & Jackson, 2012). Thus, the most appropriate philosophical stance for the study was positivism, which has been selected for gaining authentic and valid findings for the study.

3.3. Research Approach
The second layer of the research onion entails deductive and inductive approaches; however Saunders et al. (2009) has clearly indicated that the decision to select the research approach should be based on the earlier decision in relation to philosophical stance. The first approach that has been discussed in this layer is of deductive, which focuses on the movement from general information to specific knowledge; thus presenting the researcher with an ability to develop a statement or question to be addressed throughout the research study. On the contrary, the second approach discussed in this layer is of inductive that is more inclined towards the creation of theory (Hyde, 2000). Since the movement of this approach is opposite to that of deductive approach, the inductive approach focuses on making amendments in existing theories, or proposing a new theory by moving from specific knowledge to general information.

3.3.1. Justification
Since it has clearly been highlighted that the decision of selecting research approach should be based on the philosophical stance, the study has selected the deductive approach. The use of deductive approach was primarily based on the fact that it is closely associated with positivism philosophy, and can be used for the acceptance or rejection of hypothesis based on the use of statistical tools and techniques (Dubois & Gadde, 2002). More importantly, the number of studies indicating the impact of digitisation and/or automation of the recruitment and selection function in Middle East is scarce; the use of deductive approach can help in overcoming the limitation by collecting data directly from the employees of the company, which can be then analysed through the use of quantifiable and statistical tools.

3.4. Research Strategies
The third layer of the research onion focuses on determining the most appropriate way for collecting and analysing the data. In this regards, it has been argued that there exists a variety of strategies that can be used within a research study. For instance, experimental designs are
commonly used based on their rigidness and nature of their structure; thus presenting the researchers with an opportunity to replicate the findings. On the contrary, survey strategy allows the researcher with an ability to collect large amount of data in the most economical manner; meanwhile ensuring the generation of statistically rich data that can lead to valid and reliable findings (Saunders et al., 2009). Lastly, the action research strategy focuses on addressing issues in an organisation, while ensuring that appropriate solutions are presented to the company for implementation.

3.4.1. Justification
For this research study, survey strategy has been selected based on the fact that the researcher has collected first-hand information directly from the employees of Adecco. Since the research study revolves around the aforesaid company, the survey strategy was selected to ensure that the data is directly obtained from the company, rather than generalising the findings based on the earlier research studies (Saunders et al., 2009). Moreover, the selection of survey strategy is also justified, since the study has selected deductive approach; thus indicating that this was the most feasible and appropriate strategy for the completion of the dissertation.

3.5. Research Choices
The fourth layer of the research onion focuses on determining the most appropriate research design, since the researcher has the option to either consider qualitative or quantitative design, or a combination of both the research designs. In particular, it has been suggested that quantitative and qualitative research designs are completely different from one another; for instance, quantitative research design focuses extensively on number and statistics; whereas qualitative research design focuses on the richness of the data by taking account of opinions and perspectives (Neuman, 2013). On the contrary, the mixed methodology that considers the combination of both qualitative and quantitative research designs in the research study. This primarily ensures that the limitation of each research design is reduced through its counterpart.
3.5.1. Justification
The research study has been based on mono-method, where only quantitative research design has been selected over the qualitative research design (Neuman, 2013). More importantly, quantitative research design was selected in accordance with the selected research philosophy and approach, which implies that the selected method has also been justified and supported by other elements. In addition, the impact of independent variable over dependent variable can only be determined through the use of quantitative design; thus the mono-method was selected to ensure that the findings of the study are in accordance with the research questions and objectives (Saunders et al., 2009).

3.6. Data Collection and Research Instrument
For the research study, both primary and secondary data has been used, where the primary data was collected through the use of questionnaire that was directly distributed to the participants through the use of Survey Monkey as well as direct email. The questionnaire has been based on 5-point Likert Scale, where the minimum frequency was of strongly agree and the maximum frequency was of strongly disagree (Veal, 2005). On the other hand, secondary data was also collected, exclusively for the literature review. The secondary data was collected from peer-reviewed journal articles and websites.

3.7. Sampling Method, Technique, and Justification
The most commonly available sampling methods are probability and non-probability sampling, where probability sampling offers equal chance of participation; whereas non-probability sampling focuses on the inclusion of participants that are most conveniently available to the researcher (Trochim & Donnelly, 2001). Considering this, the research study has selected non-probability sampling method over probability sampling, which can be argued to be the result of limited time-frame in which the research study had to be completed. More importantly, the
selection of non-probability sampling was also appropriate, since the researcher is an active employee at Adecco; thus justifying the fact that the researcher is aware of the individuals that are closely associated with HR department, or have sufficient knowledge related to the automation and its impact on recruitment and selection.

In relation to the latter, the sampling technique that has been used for the collection of data from the participants was convenience sampling technique (Etikan, Musa & Alkassim, 2016). Again referring to the fact that the researcher was aware of the internal processes and employees that were directly associated with HR department were taken into consideration for the collection of data. Thus, it justifies the inclusion of participants through the use of convenience sampling technique during the completion of the research study.

3.8. Sample Size
For the research study, a total of 50 participants were selected for filling the questionnaire. These participants were selected, since they were directly related to the HR department, and had sufficient knowledge about the company’s HR practices, and the role of automation in reducing the intensity of workload on them.

3.9. Data Analysis Technique
Since, it has already been established that the study has been based on quantitative research design, the data collected from the participant through the questionnaire was transferred into Ms Excel for coding, where the frequency of strongly agree was coded 0 and the frequency of strongly disagree was coded 4. The coded data was then used as an input in SPSS 20.0 for the descriptive statistics, correlation and regression analysis. The correlation and regression analysis were conducted in relation to the 3rd objective of determining the impact of digitisation and/or automation on the recruitment and selection function at Adecco.

3.10. Data Reliability and Validity
For the reliability and validity of the data, Cronbach’s Alpha was used to determine whether the collected data is valid or not. In this case, it became evident from the Cronbach’s Alpha value of 0.897 that the data is highly valid and reliable, and has the research study with authentic findings, rather than manipulated findings.

Table 1: Reliability Statistics

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>0.897</td>
</tr>
</tbody>
</table>

3.11. Ethical Considerations

Since the study has focused on the collection of primary data, it was important to comply with ethical considerations to avoid any harm to the participants. Considering this, the study has assured the participants that their participants should be completely voluntary, and that they would not be enforced to participate in the study, if they are not willing to. Secondly, the study also has communicated that the participant’s confidential information would not be revealed throughout the study, and that their confidential data would not be distributed to any third party for commercial purposes. More importantly, the study has informed the participants about the reason and purpose for conducting the research, and has even retrieved consent form from each participant. Most importantly, the research study has avoided the element of personal biases and prejudice that may lead to the manipulation and misrepresentation of the data to ensure that the findings of the study are valid and reliable.
Chapter 4:

FINDINGS AND ANALYSIS

4.1. Introduction

This chapter has focused on presenting the findings of the study that were obtained through the use of questionnaire that was distributed to the employees to Adecco. Since the questionnaire entailed questions that were in accordance with the research questions and objectives, this chapter has presented the data findings in relation to the impact of automation and/or digitisation on the overall recruitment and selection function in the case of Adecco in Middle East. The findings of the study has further been used to draw conclusion, while helping the readers understand the prevalence and importance of automation and digitisation of the HR department in organisations, especially in the 21st century.

4.2. Findings

This section of the study has been dedicated to the findings of the study, which are as follows;

4.2.1. Demographics Analysis

The first demographic question was related to the gender of the participants. Though, the identification of gender holds no significant importance, but it presents the readers with an understanding of the ratio of male to female that participated in the study. Considering this, it became evident that Adecco has focused on the inclusion of both the genders, since 22 of the participants were male (representing 44 percent of the total sample size); meanwhile the remaining participants (i.e. 28) were females. This implies that the study has avoided biases and prejudice in terms of the inclusion of a specific gender; and has presented equal opportunity to both the genders in terms of sharing their knowledge and opinions in relation to the importance
and impact of digitisation and/or automation on the HR department, especially the recruitment and selection function.

Table 2: Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Male</td>
<td>22</td>
<td>44.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>56.0</td>
<td>56.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The second demographic question was related to the overall experience of the participants. In this regards, it has been suggested that higher level of experience in the industry yields better understanding and knowledge of operations; thus the study has concentrated on the inclusion of participants that had an experience ranging from 1–12+ years. In terms of frequency, it was found that majority of the participants (i.e. 16) that shared their response had 1-3 years of experience; whereas 10 of the participants had an overall experience of 3-5 years. It was worth noticing that the remaining 24 participants had more than 5 years of experience, and their frequency, based on their response, are; 7 of the participants had 5-8 years of experience, 10 of the participants had 8-12 years of experience, and the remaining 7 participants had 12+ years of experience.

Table 3: Overall Experience
The next demographic question was related to the length of service in Adecco. The purpose of this question was to determine the understanding of the participants in relation to the digitisation and automation in the HR department. In this context, the analysis unfolded that only 16 of the participants had 1-3 years of service; whereas 10 of the participants had remained loyal to the business for approximately 3-5 years. Furthermore, 7 of the participants had served Adecco for 5-8 years, and 10 of the participants had served the business for approximately 8-12 years. Lastly, 7 of the participants indicated that they had worked in Adecco for more than 12 years.

Table 4: Length of Service

<table>
<thead>
<tr>
<th>OverallExperience</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 1-3 Years</td>
<td>16</td>
<td>32.0</td>
<td>32.0</td>
<td>32.0</td>
</tr>
<tr>
<td>3-5 Years</td>
<td>10</td>
<td>20.0</td>
<td>20.0</td>
<td>52.0</td>
</tr>
<tr>
<td>5-8 Years</td>
<td>7</td>
<td>14.0</td>
<td>14.0</td>
<td>66.0</td>
</tr>
<tr>
<td>8-12 Years</td>
<td>10</td>
<td>20.0</td>
<td>20.0</td>
<td>86.0</td>
</tr>
<tr>
<td>12+ Years</td>
<td>7</td>
<td>14.0</td>
<td>14.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The last demographic question was related to the career level of the participants at Adecco. In this regards, 15 of the participants were at junior level, and represented 30 percent of the overall sample size; whereas 19 of the participants were at their mid-level at the business. More importantly 16 of the participants that filled the questionnaire were part of the senior
management. This implies that the questionnaire entailed information provided by employees ranging from junior to strategic management.

Table 5: Career Level

<table>
<thead>
<tr>
<th>Career Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Junior/Intern</td>
<td>15</td>
<td>30.0</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Mid-Level</td>
<td>19</td>
<td>38.0</td>
<td>38.0</td>
<td>68.0</td>
</tr>
<tr>
<td>Senior Management</td>
<td>16</td>
<td>32.0</td>
<td>32.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

4.2.2. Descriptive Statistics

The descriptive statistics, in the research study, was used to describe and demonstrate the basic features of the data obtained via the questionnaire. Since descriptive statistics provide a simple summary of the data and the sample, it holds significant importance as it focuses on presenting an analysis of the quantitative data.

Table 6: Descriptive Statistics
### Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform Openness</td>
<td>50</td>
<td>0</td>
<td>3</td>
<td>1.44</td>
<td>.787</td>
</tr>
<tr>
<td>Cost Effective</td>
<td>50</td>
<td>0</td>
<td>4</td>
<td>1.24</td>
<td>.916</td>
</tr>
<tr>
<td>Global Reach</td>
<td>50</td>
<td>0</td>
<td>4</td>
<td>1.00</td>
<td>.969</td>
</tr>
<tr>
<td>Recruitment And Selection</td>
<td>50</td>
<td>0</td>
<td>3</td>
<td>1.32</td>
<td>1.058</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The aforementioned table has presented the descriptive statistics of the variables taken into account for the analysis section. In particular, the column of N represents the number of valid observations, which implies that a total of 50 participants (employees of Adecco) completely filled the questionnaire and submitted it for analysis. Meanwhile, the columns of minimum and maximum represented the frequencies ranging from strongly agree to strongly disagree. It has become evident from the aforementioned table that the minimum frequency was 0 (representing the frequency of strongly agree), and the maximum was 4 (representing the frequency of strongly disagree), and in some cases the maximum was 3 (representing the frequency of disagree).

The column of Mean is amongst the most commonly used methods to describe and demonstrate the central tendency. Since mean focuses on adding all the responses and dividing it with the number of values, it became evident from the table that the mean value for platform openness was 1.44; meanwhile the mean values for cost-effectiveness, global reach, and digitisation were 1.24, 1.00, and 1.32 respectively. On the contrary, the last column of standard deviation focuses on representing the dispersion of the values, which implies that it shows the relation that focuses on setting the scores in relation to the mean values of the sample. In this context, the standard deviation values for platform openness, cost-effectiveness, global reach and recruitment and selection were 0.787, 0.916, 0.969, and 1.058 respectively.

### 4.2.3. Correlation Analysis

The correlation analysis, a statistical test, was used in the research study to demonstrate and describe the extent of the association between the variables. This test was preferred in the
research study to describe and establish the fact that there exists a possible connection between the variables, be it positive or negative.

Table 7: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>PlatformOpenness</th>
<th>CostEffective</th>
<th>GlobalReach</th>
<th>Recruitment &amp; Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>0.587</td>
<td>0.569</td>
<td>0.367</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.009</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>59</td>
<td>59</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td><strong>CostEffective</strong></td>
<td>0.587</td>
<td>1</td>
<td>0.897</td>
<td>0.824</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>0.367</td>
<td>0.367</td>
<td>0.594</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>59</td>
<td>59</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td><strong>GlobalReach</strong></td>
<td>0.897</td>
<td>0.824</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>0.897</td>
<td>0.824</td>
<td>0.876</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.009</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>59</td>
<td>59</td>
<td>59</td>
<td>59</td>
</tr>
</tbody>
</table>

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

The correlation analysis highlighted that the variable of platform openness had moderate relationship with the variables of cost-effectiveness and global reach. The conclusion related to the moderate relationship was reached based on the Pearson Correlation value of 0.587 and 0.509 respectively. However, in relation to the positivity and/or negativity of the association, the significant (2-tailed) values were taken into account, where it was unveiled that the significant values were less than 0.05; thus indicating positive association between the variables. On the contrary, the variable of platform openness had weakly positive relationship with recruitment and selection, which was based on the Pearson Correlation value of 0.367.

On the other hand, the variable of cost-effectiveness reflected a moderately positive (uphill) relationship with the variable of platform openness, which can be attributed to the Pearson Correlation value of 0.587, and a significant value of 0.000. This implies that there exists a positive association between both the variables; however the strength of association between the variable was moderate. On the other hand, the variables of global reach and recruitment and selection in relation to cost-effectiveness reflected strongly positive relationships, since the Pearson Correlation values were 0.897 and 0.824. Since the values were greater than 0.8, it indicated the existence of strong association between the variables.
Similarly, the variable of global reach reflected a moderately positive (uphill) relationship with the variable of platform openness, which can be attributed to the Pearson Correlation value of 0.509, and a significant value of 0.000. This implies that there exists a positive association between both the variables; however the strength of association between the variable was moderate. On the other hand, the variables of cost-effectiveness and recruitment and selection in relation to global reach reflected strongly positive relationships, since the Pearson Correlation values were 0.897 and 0.879. Since the values were greater than 0.8, it indicated the existence of strong association between the variables. More importantly, the positivity of the relationship was reflected through the significant value of 0.000.

Lastly, the variable of recruitment and selection reflected a weakly strength of association with platform openness, since the Pearson Correlation value was 0.367 and the significant value was 0.000. This implies that recruitment and selections’ strength of relationship with platform openness was weak; whereas the strength of association and/or relationship with the variables of cost-effectiveness and global reach was significantly higher (uphill and positive). The strongly positive (uphill) relationship can be attributed to the Pearson Correlation values of 0.824 and 0.876 with the aforesaid variables. In relation to their nature of relationship, the significant (2-tailed) value of 0.000 indicated the existence of positive relationship, instead of a negative relationship with the variables.

4.2.4. Regression Analysis

The last statistical (quantitative) test conducted in the research study was of regression analysis that highlights the relationship of independent variables on the dependent variable. In this context, the purpose of conducting regression analysis was to demonstrate whether or not digitisation and/or automation have significant impact on the HR practices, exclusively in the function of recruitment and selection at Adecco.

The first element of the regression analysis is the model summary that reflects whether the statistical test is fit for the study. In this regard, the R Square value was 0.791, which was higher than 0.6; thus indicating that the model is fit for regression analysis. More importantly, it can be
argued that recruitment and selection process at Adecco has been explained by 79.1 percent through the model.

Table 8: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.890a</td>
<td>.791</td>
<td>.778</td>
<td>.499</td>
</tr>
</tbody>
</table>

a. Predictors: [Constant], GlobalReach, PlatformOpenness, CostEffective

Once the model summary test is conducted, the regression analysis focuses on the statistical test of Analysis of Variance (ANOVA), which helps in indicating whether there exists an impact of the independent variable on the dependent variable. Since automation and/or digitisation was the independent variable in the study, and the recruitment and selection was the dependent variable; ANOVA has helped in determining whether digitisation has any significantly positive impact on the recruitment and selection function at Adecco.

Table 9: Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>43.437</td>
<td>3</td>
<td>14.479</td>
<td>58.201</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>11.443</td>
<td>46</td>
<td>.249</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>54.880</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: RecruitmentAndSelection
b. Predictors: [Constant], GlobalReach, PlatformOpenness, CostEffective
Considering the significant value of 0.000, it can be stated that there exists an impact of independent variable on the dependent variable, which implies that the hypothesis indicating the existence of significantly positive impact has been approved; whereas the hypothesis suggesting no significant impact has been rejected based on the following table.

An important element in the table is of degree of freedom (df), where the row of regression demonstrate the value of 3, which represents the number of independent variables taken into consideration, and 49 in the row of total represents the difference that exists due to the dependent variable (i.e. recruitment and selection – 1 variable). Thus, subtracting the independent variables and the dependent variable leads to the residual value of 46.

The last element in the regression analysis was of coefficient, or the beta analysis, which indicates the existence of impact on the dependent variable. Since there were 3 independent variables and 1 dependent variable, the following table has helped in understanding which variable had an impact on the recruitment and selection function at Adecco.

**Table 10: Coefficient Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.446</td>
<td>.152</td>
<td></td>
<td>2.928</td>
</tr>
<tr>
<td>PlatformOpenness</td>
<td>-.216</td>
<td>.112</td>
<td>-.160</td>
<td>-1.925</td>
</tr>
<tr>
<td>CostEffective</td>
<td>.354</td>
<td>.187</td>
<td>.306</td>
<td>1.891</td>
</tr>
<tr>
<td>GlobalReach</td>
<td>.746</td>
<td>.186</td>
<td>.683</td>
<td>4.482</td>
</tr>
</tbody>
</table>

a. Dependent Variable: RecruitmentAndSelection
The first variable of platform openness had a significant value of 0.060, since the significant value was higher than the predefined value of 0.05 for acceptance; thus the findings of the study showed that platform openness had no significant positive impact on the overall recruitment and selection function of Adecco. More importantly, the beta value of the variable was -0.216, which indicates that 1 unit of change in the platform openness can lead -21.6 percent change in the recruitment and selection function of the business. In comparison to the literature, the findings of the study were found to be completely contradicting; thus indicating that the literature has continually indicated that digitisation leads to improved recruitment and selection function by providing equal opportunities to the applicants to share their resume for selection.

On the other hand, the variable of cost-effectiveness significant value was 0.065, which was higher than the predefined value for accepting a hypothesis; thus it was concluded that cost-effectiveness through automation and digitisation had no significant impact on the variable of recruitment and selection in the case of Adecco. Meanwhile, the beta value of the variable suggested that 1 unit change in the cost-effectiveness can lead to 35.4 percent change in the recruitment and selection function. Though, the findings of the study has suggested that there exists no significant impact, the literature has indicated that recruitment and selection function experiences dramatic reduction in the costs of recruiting and selecting an individual (applicant) in comparison to traditional recruitment and selection function; thus indicating that the findings of the study are in contradiction to that of the literature. However, this can be attributed to the market dynamics in Middle East in comparison to the rest of the world.

Lastly, the variable of global reach had a significant value of 0.000, which indicates that the significant value was lower than that of 0.05; thus leading to the acceptance of the hypothesis suggesting that there exists a significantly positive impact of global reach based on digitisation and automation on the recruitment and selection function. More importantly, the unstandardized beta value indicates that 1 unit change in the global reach can lead to 74.6 percent change in the recruitment and selection function. The findings in comparison to the literature were quite similar, where it has continually been reflected that digitisation of the HR department has presented businesses with an opportunity to increase their exposure and reach to global talent pool, rather than restricting the recruitment and selection to just a limited area or location. The findings of the study has further indicated the importance for adopting information technology
and automation in the human resource department, since companies in the intensely competitive business environment have competed against the competitors based on the skills and competencies of their workforce.

4.3. Analysis of Results

The findings of the study have reflected the importance of digitisation and/or automation in the technologically advanced era. In the 21st century, companies have continually competed against their competitors based on their workforce and talent pool, which can only remain effective and efficient if the companies change their approach from traditional to modernised ways of recruitment and selection. The case of Adecco is a perfect example of digitisation and/or automation of the HR department in the Middle East. Since the company has realised that its survival and growth is the result of effective recruitment and selection, it has continually encouraged the enhancement of the HR department through automation, which has not only presented the business with an opportunity to expand the horizons in relation to recruitment and selection, but has also presented the company with an ability to remain ahead of its competitors based on the recruitment and selection of diverse applicants, especially in the multicultural society in which the business operates.

The analysis of the company in relation to automated and digitised recruitment and selection process indicated that Adecco has become less labour intensive, which implies that the automated human resource department has reduced the stress in relation to the labour intensive work. This suggests that the automation has presented the company with an opportunity to focus on its core business functions, rather than spending majority of the time in screening resumes and making phone calls for appointments. More importantly, the automation of the recruitment and selection process has increased the company’s consistency in screening the applicants against predefined criteria, while ensuring the elimination of prejudice and biases. Considering the element of consistency through automation, Adecco has increased its legal defensibility in terms of its hiring process, which implies that applicants are not rejected based on their discriminatory factors, but are rejected based on their failure to meet the predefined criteria set for the vacancy within the business.
Since Adecco has transformed its human resource department through automation, all the information is used to track the candidates during the recruitment and selection process; hence making the function to be more efficient and effective in the Middle East. In comparison to the manual process, automation has presented the appropriate personnel with access to the information related to the applicant; thus reducing the element of paper trail, which has often been regarded as a time-consuming process. The automated human resource department, especially in the function of recruitment and selection has also provided the company and its personnel with an ability to better track the pass rates in each of the predefined steps, while allowing them to evaluate and investigate the underlying reasons for the applicants in relation to their failure rate during the hiring process, which in the case of manual process would be near to impossible.

Not only has the automation and digitisation of recruitment and selection function presented Adecco with an opportunity to drastically reduce its costs associated with recruitment and selection, but has also presented the company to redirect its costs to core areas and functions of the business. In addition, the analysis of Adecco in relation to automation also presented with an understanding that the digitisation was primarily to survive and thrive in the intensely competitive Middle Eastern region; henceforth automation became the primary source for the business to ensure that it remains competitive in the technologically advanced era, while creating value for the business.

4.4. Summary of the Chapter

The chapter of findings and analysis has presented an understanding of the impact of digitisation and/or automation on the recruitment and selection function at Adecco. In particular, the findings made it evident that automation and digitisation are amongst the basic necessities for the business survival in the Middle East, which has presented the company with an opportunity to not only reduce the costs and time associated with screening and other related areas in the recruitment and selection, but has also helped in transforming the labour intensive function to be less labour intensive.
The next chapter of the research study has concentrated on summarising the overall research study, while presenting objective-wise discussion for the purpose of drawing conclusion.
5.1. Introduction

The purpose of this chapter is to summarise the entire research study based on the findings in relation to the research objectives, while drawing conclusion based on the research aims and purpose for conducting the study. Moreover, this chapter has presented the limitations of the study, as well as recommendations for the future researchers.

5.2. Critical Evaluation of Adopted Methodology

The research methodology selected for the completion of the study proved to be quite effective in terms of determining and describing the impact of digitisation and/or automation on the overall recruitment and selection function of Adecco. This was accomplished through the use of quantitative research design that presented the researcher with an ability to determine the strength of association between the variables, while investigating the impact through correlation and regression analysis, which might have not been possible if the study had selected qualitative research design.

5.3. Conclusion and Objectives

The study has highlighted the impact of digitisation and/or automation on the recruitment and selection function, in the case of Adecco that operates in Middle East. The study found that automation has presented the business with an ability to improve its overall recruitment and selection function by removing the factors of biases and prejudice, while ensuring that the applicants are selected on predefined criteria; thus reducing the intensity of the work on the personnel associated with the human resource department.
Furthermore, the technological adoption in the case of Adecco has resulted in improved efficiency of the recruitment and selection, and has been a key turnover for the organisational development in the intensely competitive business environment. Since Adecco operates in Middle East, the business has continually embraced automation and digitisation to ensure that its human resource department in relation to recruitment and selection remains competitive, while presenting the business with talented and skilled employees without the inclusion of discriminatory factors.

The conclusion of the study and its findings has been assessed against the predefined research objectives, which are as follows;

5.3.1. Objective 1

To comprehend the importance and role of recruitment and selection in the contemporary business environment

The literature review presented an overview of the importance of recruitment and selection in the 21st century, where it was unfolded that companies have extensively relied on their recruitment and selection function to provide the organisation with talented and skilled personnel that collectively work towards the attainment of organisational goals and objectives. Furthermore, the literature review also shed light upon its importance by demonstrating that recruitment and selection function provides the organisation with quality employees, which has remained the foremost priority of companies. Considering this, effective recruitment and selection process provides the business with an opportunity to attract applicants and candidates that have the right set of skills (i.e. in accordance with the organisational requirements in relation to the vacant position), while identifying the most appropriate training and development sessions to ensure that the applicants and/or potential employees would remain satisfied and engaged with the operations of the business.
5.3.1. Objective 2

**To evaluate and investigate the difference in traditional and contemporary HR practices, especially in the technologically advanced era**

The literature also shed light upon the differences and similarities between traditional and digitised HR practices, where it was found that traditional HR practices were highly labour intensive; thus resulting in a time-consuming process in terms of screening and selecting the most appropriate applicant for the vacant position. On the contrary, the digitised HR practices reduced the intensity of work by screening the participants based on their skill sets and their expertise to meet the vacant position; thus resulting in less-time consuming process, and presenting the business with an ability to focus primarily on their core functions, rather than being concerned about the selection of the appropriate applicant at the right time and place within the organisation.

On the other hand, the literature also indicated that traditional HR practices were quite costly for the business, since the potential applicants were attracted through extremely expensive platforms like TV commercials, and print media. Though, it presented the companies with an opportunity to be presented with a variety of diverse applicants, but the cost for recruiting an applicant was significantly higher than the benefits associated with it. On the contrary, the use of digitised and automated system has brought significant improvement in HR practices. Not only it reduced the costs associated with the recruitment and selection function, but also presented the business with diverse applicants, especially in the case of multicultural society. For instance, if the companies are to use digital platforms for the attraction of potential employees, the costs associated with this process is significantly lower than that of traditional processes; thus presenting the business with an opportunity to increase its overall efficiency and effectiveness in terms of recruitment and selection.

Furthermore, the use of automated recruitment and selection has not only presented the companies with an opportunity to improve its overall performance and productivity in relation to HR department, but it has also reduced the stress on the interested applicants in terms of sharing their resumes. In the traditional HR practices, applicants had to personally visit the organisation to share their resumes; whereas in the automated recruitment and selection process, the
applicants are presented with an opportunity to share their resumes online. In terms of assessment, traditional HR practices relied on handwritten assessments that made the recruitment and selection function to be highly labour intensive; whereas the transformation based on digitisation and automation has helped in automating the assessment function; thus reducing the intensity of the work on the HR personnel to significant extent.

The aforementioned figure has clearly depicted the difference between the traditional and automated HR practices, which demonstrate that automation has presented the businesses with multiple opportunities to achieve their goals and objectives in relation to recruitment and selection in the most profitable manner.

5.3.1. Objective 3

To investigate the impact of digitisation and/or automation on the recruitment and selection function of Adecco

The third objective was the most important, since it concentrated on determining the impact of digitisation and/or automation on the recruitment and selection function at Adecco. In this regards, the study concluded that the automation of HR’s recruitment and selection function has
presented the business with an opportunity to encourage and engage with both local and international applicants that are interested to become part of the organisation. This ultimately reflects that automation has increased the company’s global reach, which can be considered as an accomplishment in the 21st century. In particular, the study found that 1 unit change in the global reach can lead to 74.6 percent change in the recruitment and selection function.

On the other hand, the study also found that the digitisation and automation has presented the business with an ability to reduce the costs associated with recruitment and selection to a great extent. Though, the study rejected the hypothesis indicating that cost-effectiveness based on digitisation has significantly positive impact on the recruitment and selection, the study concluded by highlighting that 1 unit change in the cost-effectiveness can lead to 35.4 percent change in the recruitment and selection function. However, the findings of the study contradicted with the findings of the literature available, but it became evident that improved efficiency and effectiveness is amongst the underlying benefits resulting from digitisation and automation.

5.4. Recommendations

This section has focused on presenting recommendations to companies that are operating in Middle East, and have not yet considered the automation and digitisation of their HR practices, especially the recruitment and selection function. The recommendations are as follows;

- Companies operating in Middle East should consider the adoption of information technology in their HR practices, which could lead to the reduction of time and costs associated with the selection of appropriate candidate at the right time and place. Since employees are amongst the most valuable resources, their selection and recruitment process should encourage them to become part of the organisation, rather than creating stressful situation for the applicants based on traditional HR practices.
- Since companies are operating in an intensely competitive business environment, automation of HR practices can present the businesses to be regarded as ‘employer of choice’ based on their effective and efficient HR practices, rather than influencing the applicants to become part of competitor’s workforce based on inefficiency (time consuming process) of the HR practices.
Automation and digitisation of HR department would not only present the businesses to experience applications from just the locals, but it would present the company with an opportunity to open a new channel of communication between the applicants and the organisation; thus helping the business to develop relationship with them. As a result, the businesses would be able to overcome their challenge of sourcing and attracting the best candidate for the organisation.

5.5. Limitations

The research study has faced a variety of issues and challenged prior to and during the completion of the study, where the most prominent limitation of the study was the selection of the sample size. As mentioned earlier, the study was completed in a predefined time-frame; the sample size was just limited to 50 employees of Adecco; however the researcher did consider the inclusion of senior management as well as middle management to ensure that both reliable and authentic results could be obtained for the completion of the study. Considering this limitation, if the researcher had been presented with sufficient time and resources, the sample size could have been increased, which would have further enhanced the validity of the statistical analysis.

Secondly, the study’s limitation is also in the form of selecting an organisation operating in Middle East. In particular, the study has only focused on Adecco that has operations in Middle East, but has failed to consider other organisations that have automated and digitised their human resource department; thus the findings of the study are limited to Adecco. If presented with more time and resources, the research study could have compared the findings of the study with other companies operating in the region to demonstrate and highlight the best practices in terms of automation and digitisation; thus enhancing the validity and reliability of the findings, and its applicability across the globe.

5.6. Recommendations to Future Researchers
The future researchers that are interested in conducting their studies on the impact of digitisation and automation on the recruitment and selection function are recommended to consider the possibility of comparing and contrasting different companies operating across the globe. The findings would further enhance the understanding of the companies that have not yet considered the automation of their processes and procedures; thus influencing them towards the automation and digitisation of their HR department.

Furthermore, the future researchers are also recommended to consider sample size of more than 250 participants, which would ultimately enhance their validity and reliability of the findings; thus encouraging the companies to change their attitude towards automation and digitisation. The increased number of participants would also present the future researchers with diverse findings; thus allowing them to differentiate their findings from that of the literature.
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Appendix

Information Sheet

Research Project Title
Impact of Digitization/Automation on Recruitment: A study focused on the Middle East

Invitation
You are humbly invited to take part in this research project, but before deciding to do so, it is important to understand the purpose of the research and the underlying reasons for conducting it. Please take your time in reading the following information carefully, and discuss it with others in case of further clarity. You can always ask me if anything is unclear or in the case if you would like more information. Take your time in deciding whether or not, you wish to take part. Thank you for reading this.

What is the project’s purpose?
The current research study aims to investigate the impact of automation and digitisation on the recruitment function, especially in the case of Middle East. The research is novel, since it has focused on Middle east, rather than conducting the research on general basis.

Why have I been chosen?
You have been chosen for the research study based on your employability in the company operating in Middle East, and based on your close association with the HR department. Considering your association, your knowledge would hold significant importance in investigating the overall impact of digitisation on the recruitment function.

Do I have to take Part?
The decision of taking part in the research study is completely based on your willingness and feasibility. If you decide on taking part, you will be able to keep a copy of this information sheet, and can use this sheet to indicate your agreement to participate in the research study. You can
also withdraw from this research at any time, without giving any reason or justification for doing so.

**What will happen to me if I take part?**
You will be requested to complete a questionnaire (available on survey monkey), which is estimated to take approximately 10 minutes of your valuable time.

**What do I have to do?**
All you have to do is to completely fill the questionnaire.

**What are the possible disadvantage and risks of taking part?**
Participating in the research study is not anticipated to cause you any disadvantage, since your confidential information would not be revealed to anyone, even in case of severe consequences. On the contrary, the psychological harm will the same as any experienced in everyday life.

**What are the possible benefits of taking part?**
There are no immediate benefits of participating in the research study; however results will be shared with the participants to enhance their understanding of the impact of digitisation on the recruitment function; thus resulting in enhanced knowledge in the professional working environment.

**Will my taking part in this project be kept confidential?**
All the information being collected during the questionnaire session will be kept strictly confidential. Your personal information will be kept confidential, and would not be submitted for publication. Similarly, your institution will also not be identified throughout the completion of the research study.
Data collected through the questionnaire will only be shared in anonymised form; however it would not be sold to any third parties for personal benefit.

**Who is organising and supervising the research?**
The research study is self-funded, and would be completed under the supervision of Stephen Bibby; member of Academic faculty within Cardiff Metropolitan University.

I hope the information has sufficiently addressed your concerns and queries in relation to the participation in the research study. Thank you for taking part in this research.
Consent Form

Dear,

The purpose of this research study, titled “Impact of Digitization/Automation on Recruitment: A study focused on the Middle East” has focused on understanding and exploring the possible impacts of automation on the recruitment function, while focusing exclusively on the companies operating in Middle East.

Thank you very much for agreeing to participate in this survey.

The information provided by you in this questionnaire will be used for research purposes. It will not be used in a manner which would allow identification of your individual responses.

Anonymised research data will be published in order to make them available to other researchers in line with current data sharing practices.

Yours,

Faisal Nooruddin