

LEVERAGING TECHNOLOGY FOR THE NEEDS OF THE CONTINGENT WORKFORCE MARKET

LAHTI UNIVERSITY OF APPLIED
SCIENCES LTD
Bachelor of Business Administration
Degree programme in Business
Information Technology
Autumn 2019
Anna Seklikova

Abstract

Author(s) Seklikova, Anna	Type of publication Bachelor's thesis	Published Autumn 2019
	Number of pages 49	
Title of publication Leveraging technology for the needs of the contingent workforce market		
Name of Degree Bachelor of Business Administration		
Abstract <p>The twenty-first century is bringing major changes to the human resource environment. More and more companies are starting to realize that relying on a standard approach of permanent employment alone might be a losing strategy in the current state of scarcity of skilled specialists. Executives, as well as HR managers, are starting to understand the potential of employing workers in a more flexible manner.</p> <p>The main aim of the research is to analyze how the case company can improve its platform with modern technology in order to better meet the current trends and needs of the contingent workforce arena. The thesis discusses gig economy, the concept of contingent workforce and related current and future trends. The thesis, furthermore, analyzes related reports and data to discover the challenges and needs of contingent talent as well as HR managers and company executives inclined to employ such talent.</p> <p>Moreover, the thesis examines existing solutions applied in the case company to attract contingent talents.</p> <p>The thesis applies a deductive research approach and uses both qualitative and quantitative research methods. Based on the findings of the research, the thesis provides improvement suggestions for the case company. For example, the thesis recommends to automatically suggest matching jobs to a candidate and create a more personalized communication channel with the users of the platform.</p>		
Keywords Human resources, Contingent workforce, Gig economy, Freelancing, Digital solutions		

CONTENTS

LIST OF ABBREVIATIONS	4
1 INTRODUCTION.....	1
1.1 Research Background	1
1.2 Research Objectives and Questions	2
1.3 Research Limitations	3
1.4 Research Methodology and Data Collection	3
1.5 Thesis Structure.....	3
2 THE GIG ECONOMY AND THE CONTINGENT WORKFORCE.....	5
2.1 Definitions and History.....	5
2.2 Statistics and Figures	7
2.3 Current and Future Trends	9
3 CHALLENGES AND NEEDS IN THE CONTINGENT WORKFORCE.....	14
3.1 Employee's Perspective	14
3.2 HR's perspective.....	16
4 CASE COMPANY STUDY	19
4.1 Introduction	19
4.2 Solution Review	20
4.3 Value Proposition.....	21
4.4 Talent Acquisition Flow.....	22
4.5 Customers and Stakeholders	25
4.6 User Flow.....	26
4.7 The Product-Market Fit Pyramid.....	35
5 EMPIRICAL RESEARCH AND DATA ANALYSIS	37
5.1 Data Collection	37
5.2 Data Analysis and Customer Journey	39
5.3 Improvement Suggestions	41
6 CONCLUSIONS	43
6.1 Answers to the Research Questions	43
6.2 Reliability and Validity.....	44
6.3 Suggestions for Future Research	45
7 SUMMARY	46
LIST OF REFERENCES	47

LIST OF ABBREVIATIONS

HR	Human Resources
MSP	Managed Service Provider
SER	Standard Employment Relationship
UI	User Interface
UX	User Experience
VMS	Vendor Management System
VP	Value Proposition

1 INTRODUCTION

1.1 Research Background

We are living in a time when our world is undergoing economic, digital and social transformations. These crucial changes influence the workforce landscape. The rise of technologies and the alterations in the social scene have played a significant role in shifting the processes of how employees are being recruited, organized, managed, engaged and trained as well as how employees prefer to maneuver in the labor market.

The present-day era of speeding markets and global competition is reinforced by technological innovations. To take advantage of these technological advancements corporations have started to be greatly contingent on getting knowledgeable workforce. As a consequence of the unavoidable changes, a new corporate setting is developing where business executives recognize that flexibility is the chief approach for planning their working processes, structuring their organizations and engaging their HR in order to be competitive. (Thompson 1997, 44-45.)

More and more companies are starting to realize that relying on the standard approach of permanent employment alone might be a losing strategy in the current state of scarcity of skilled specialists. Executives, as well as HR managers, are beginning to understand the potential of employing workers in a more flexible manner.

Corporates that are integrating a Talent On-Demand approach secure themselves with having a constant source of top-level specialists with the most relevant skills, who can be acquired just in time when they are needed. This flexible approach provides a necessary level of cost and competence optimization and allows companies to regulate their human recourse levels in an agile manner. The On-Demand approach gives companies a possibility to seize innovations that skilled workers bring and avoid the trouble of trying to possess all the human resources available. (Cooksley 2017.)

The twenty-first century is bringing major changes, and the HR environment is evolving as a result of these changes. This research will explore gig economy and the contingent workforce and its related current and future trends as well as analyze related statistical reports and data. Moreover, the research will examine the challenges and needs of the contingent talent and HR managers as well as executives of the companies inclined to employ talents.

The case company, Twago, has one of the top platforms for online work in Europe. The name Twago is short for “Teamwork Across Global Offices”. Twago is encouraging individuals and businesses to go online to find experts and collaborate on projects.

The research will explore one of the company’s products: Twago Talent Pool platform which is a white-label solution that combines marketing practices and personal candidate relationship management to fill curated talent bases and build long-lasting relationships between corporate and contingent talent. The Twago Talent Pool is a sophisticated candidate data platform paired with simple and effective talent attraction and acquisition techniques that support companies with engaging and managing a contingent workforce. The thesis will examine the existing solution of the case company, investigate how the solution is solving the needs and challenges of its customers. Finally, based on the findings of the research, some improvements will be suggested.

1.2 Research Objectives and Questions

The main aim of the research is to explore how the case company can improve its platform with modern technology solutions in order to better meet the current trends and needs of the contingent workforce arena.

The objectives of the thesis research are to:

- Explore up-to-date reports from the industry experts and current trends of the field
- Collect and analyze quantitative data and statistics on the topic
- Determine and summarize the needs and challenges of contingent talents and HR managers of the companies implementing contingent workforce strategy
- Examine the case company’s solution
- Collect and analyze case company data
- Suggest improvements for the case company’s platform

Research questions are one of the vital elements of the research. They introduce the questions that will be answered by the study as well as define chief ideas adopted in it. Research questions ascertain that a reader is not deprived of the primary purposes of the study. Generally, scholars conducting the research formulate multiple research questions rather than a single one so that they are able to explore the subject fully. (Creswell 2012, 109-111.)

The main research question of the thesis is the following:

How can current trends and needs of contingent workforce be met with the help of technology?

In addition, the following subordinate research questions help focus the study:

- What are gig economy and contingent workforce?
- What are the current and future trends in the field of the contingent workforce?
- What are the needs and challenges of the HR departments and contingent talents?
- How can the case company's digital platform be improved to better meet the needs of the company's HR department and contingent talent and to better support their interaction and cooperation?

1.3 Research Limitations

There are several limitations to this study. Firstly, the study is limited to exploring the solution of the case company and may not apply to other cases. However, the study can be effective for reviewing and analyzing the trends of the field, and some of the conclusions can be useful to anyone interested in the topic. Another limitation is the lack of previous studies on the topic. Even though the topic is widely discussed and studied by the industry experts, it is nevertheless relatively new.

Finally, the statistical data available on the topic is limited. This is because statistics on the matter are private information of the related companies.

1.4 Research Methodology and Data Collection

There are numerous methods of conducting research but three common ones are quantitative, qualitative, and mixed methods. Generally, if research questions involve answers compelling numerical data, the quantitative approach is applied, if answers require textural data, the qualitative approach is employed, and if the combination of both numerical and textual data is needed, the mixed methods approach is used. (Williams 2007, 65.)

The thesis will draw on a deductive research approach and collects data by applying both quantitative and qualitative methods. Data will be collected by examining existing statistics and by reviewing related papers and publications written by industry experts. In addition, case company related data will be collected, and the case company's digital solution will be examined.

1.5 Thesis Structure

The thesis consists of six main chapters. Figure 1 demonstrates the structure of the thesis. The more detailed description of each chapter is presented below.

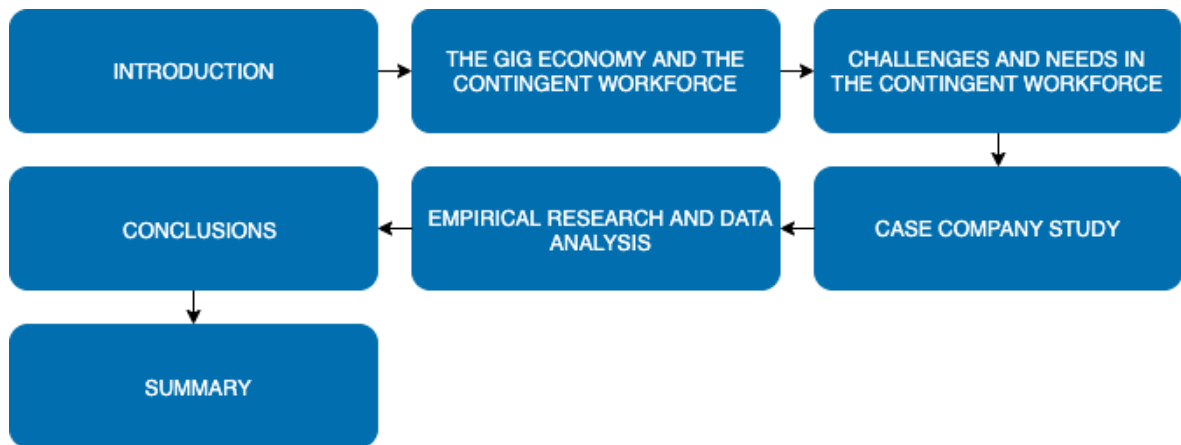


Figure 1 Thesis structure

The introductory chapter of the thesis introduces the research topic, research questions, objectives, and limitations.

Chapters 2 and 3 comprise the theoretical part of the thesis. The two chapters consist of the literature review and the examination of the available data and statistics as well as related studies.

Chapter 4 reviews the case company's solution. It analyzes the case company's platform and examines related key concepts.

Chapter 5 includes the empirical part of the thesis. The chapter explains how the case company data was gathered as well as analyzes the collected data. Based on all the gathered information as well as reviewed literature and examined statistics and trends, the chapter presents suggestions on how the case company could improve the platform.

Chapter 6 concludes the thesis by answering the research questions and giving suggestions for further research. Finally, chapter 7 presents a summary of the thesis.

2 THE GIG ECONOMY AND THE CONTINGENT WORKFORCE

2.1 Definitions and History

We are now living in the era of globalization and digitalization. People can work from any part of the globe at any time they want using only their mobile phone or a laptop. Technological and social development has shifted the way people prefer to work. The labor market and the economy have started to adapt to those transformations. The concept of the “gig economy” is not new. It has been already examined during the past decades. However, it has become a key discussion topic only during the past few years.

Developed rapidly, the gig economy now challenges present business models and management principles and guidelines of the labor market. To get a better understanding of the topic, it is crucial to firstly sort out the definition of the gig economy and understand what it is.

The “gig economy” is one of the terms used to define different forms of “gig” work or freelance project work. Other definitions that are being employed are “on-demand economy,” “collaborative consumption” or “sharing economy.” Definitions of the gig economy vary greatly. (SIA 2018, 3.)

For instance, the Cambridge Dictionary (2019) defines the gig economy as follows:

A way of working that is based on people having temporary jobs or doing separate pieces of work, each paid separately, rather than working for an employer.

Another definition provided by the Collins English Dictionary (2019) states that gig economy is:

An economy in which there are few permanent employees and most jobs are assigned to temporary or freelance workers.

The word “gig” itself is claimed to be originated in the 1920s by jazz musicians. It was referring to a stage music performance, a recording session or any other music-related one-time work that was usually paid for. Nowadays, the term is used not only concerning the music business but also to describe any kind of paid work or employment. (Victor & Dalzell 2007, 288.)

Now, the term, “gig economy”, is commonly used, for example, in media and business contexts. However, to understand the subject better, it is essential to consider the fact that the principle of piece-based, temporary work has not emerged just recently but has been existing already for several decades. The first rudiments appeared already after World

War II. In the 1970s the workers' previously supreme position was weakened. It happened due to outsourcing and offshoring of manufacturing and service processes and the rise of non-standard employment relations (Anwar 2018).

With the rising popularity of the Internet, Craigslist has been created. Craigslist is one of the first examples of the digital platform where individuals can find a gig. It was founded in 1995 and is still used to sell things and post personal and job ads (Business Dictionary 2019). A few years later, Elance (currently known as Upwork), a global freelancing website, was introduced followed by such currently worldwide known and used services as Airbnb and Uber as well as by many other digital platforms that are based on the principle of the gig work.

In addition, to the concept of "gig economy", the concept of "contingent workforce" should be defined here. The U.S. Bureau of Labor Statistics (2019) defines contingent workers as

People who do not expect their jobs to last or who reported that their jobs are temporary. They do not have an implicit or explicit contract for continuing employment.

Deloitte (2011, 143), defines contingent workers as:

People who are not on the company payroll but provide services to an organization, such as contractors, consultants, temps, and advisers.

In the current state of the labor environment, there is a huge scarcity of personnel who have advanced skill sets, and companies struggle significantly with growing labor costs, and executives are in demand of the specialist who can rapidly adapt to constantly changing markets (Deloitte 2011, 143). Thus, new types of gig-type contingent work forms emerge and could include a wide range of working arrangements.

The term "freelancer" is typically being associated with a very particular and in many cases, rather standard types of work like creating a website or designing a poster. Meanwhile, the term "contingent worker" comprises a significantly broader definition. Some of the examples of working arrangements that can be considered contingent might include independent contractors, temporary talents, project-based workers, and interns.

One of the popular misconceptions about the contingent workers is that these types of employees are just temporary workers that are provided by an external agency to quickly fill in clerical or routine work. The misconception can come from the fact that traditionally contingent workers were being associated with the non-critical substitute positions. Hiring them was essentially just a quick reaction to an urgent demand when a job had to be done but there was no time to proceed with the standard recruitment process. (Spalla 2018.)

To understand the concept of contingent workforce better, it is essential to consider the fact that contingent workforce comprises in equal measure of both manual or blue-collar type of jobs (like taxi drivers or factory workers) and positions where highly skilled professionals are needed (like project managers or scientists). Originally the freelancing or any other non-standard employment was perceived as something temporary, a transitory substitute before a person can find a permanent “proper” job.

However, nowadays contingent employment can be a permanent lifestyle for an individual. People can intentionally prefer contingent employment as a stable source of income and a prospective career path. Many employees are considering being employed in a contingent manner for various reasons. For instance, to get the feeling of freedom, to avoid commitment, to have the challenge of working on different projects for different companies or to have flexible working hours. (Allan 2002, 106.)

Spalla (2018) names four major advantages in favor of integrating contingent employees in the company’s workforce landscape. Those advantages are: acuminating the main competencies, adapting rapidly to change, upholding better control over results and insulating the company from talent scarcity. Spalla claims that integration of the contingent workforce to the business set-up might be the best tactic that would reinvigorate the company’s talent strategy, support global goals and in general advance the organization.

This part of the thesis has introduced and analyzed the concepts of the gig economy and the contingent workforce. However, to support the claim that these are indeed growing in popularity, related data and statistics will be presented and reviewed in the following subchapter.

2.2 Statistics and Figures

Oxford Economics (2019a) claims that 83% of managers worldwide declare that they are progressively using contingent, intermittent, seasonal, or consultant employees in their companies. It is predicted that the workforce landscape of 2020 will significantly differ from one of its forerunners.

Furthermore, Randstad Sourceright (2019, 14) claims that 25% of large and mid-sized firms will transform more permanent jobs into contingent by the end of the year. Companies see benefits in the agility of contingent hiring. In the modern business pace where corporates are forced to deal with organizational crisis, urgent launches and rapidly shifting customer demands the ability to occur desired human resources with as little waste or

delay as possible is highly essential. The data collected demonstrates that among the corporate employers of large enterprises who have integrated talent strategies to their standard set up, 35% state that they did it to reduce the time of filling critical business positions.

The alterations are noticeable not only on a corporate level but also from the perspective of personnel.

In their study, the Oxford Economics (2019b) have uncovered that a considerable 41% of respondents claim that in their company they are increasingly using contingent employees such as independent contractors, part-timers, or temporary or leased employees. Moreover, as Figure 1 demonstrates, the significant 35% are progressively using intermittent or seasonal employees and 34% of interviewees are working with consultant employees more and more.

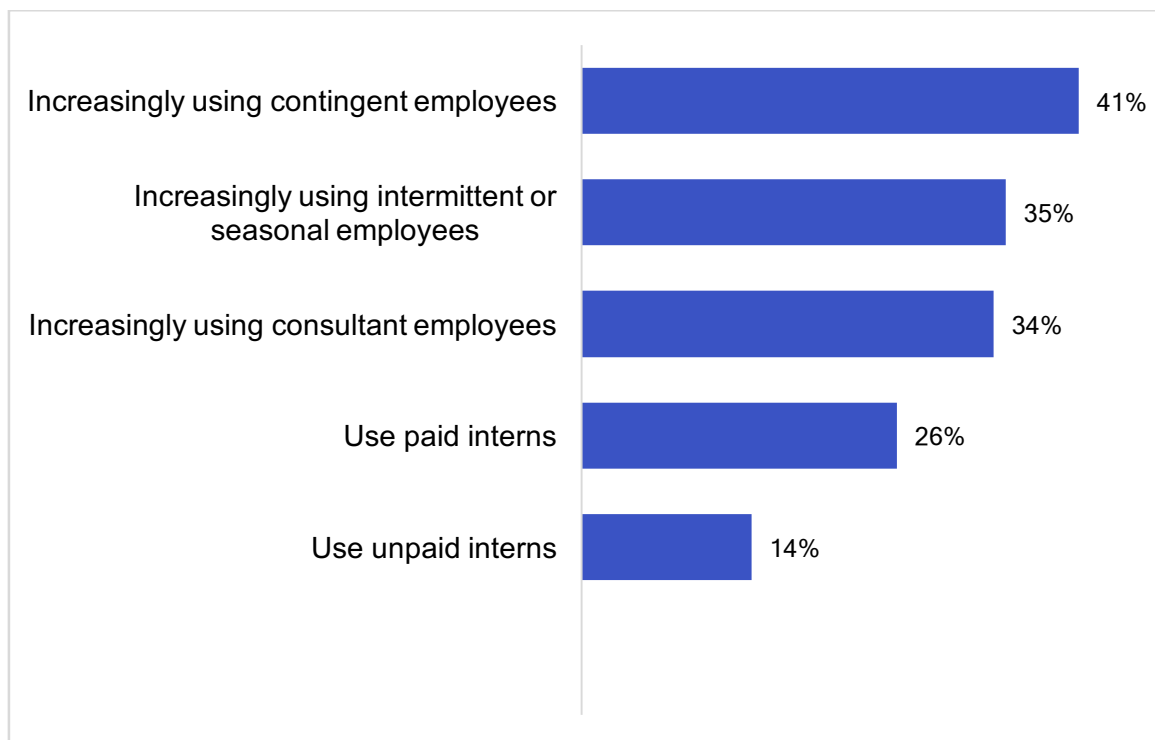


Figure 2 The percentage of responders considering statement to be true for their company (Oxford Economics 2019b)

Upwork, the largest global freelancing website, and the Freelancers Union acknowledged that 56.7 million Americans were freelancing in 2018 which is 35% of the population of the United States and it is 3.7 million more compared to the same index in 2014. Furthermore, one of the key findings of their study uncovers that income is not the chief motive why individuals are choosing freelancing over regular full-time employment. The results of the survey reveal that 84% of full-time freelancers prioritize lifestyle over earnings and, meanwhile the percentage the full-time non-freelancers who make the same prioritizations is

also relatively high (64%), the difference that is 20% can be considered significant. Finally, the research emphasized that 77% of full-time freelancers claim that they have a better work/life balance when freelancing than being in standard employment. (Upwork 2019.)

However, it is extremely important to mention that even though presented numbers and figures are indicating that alterations towards the contingent workforce set-up are considerable, the standard employment still solely remains dominant in the HR environment. While the shifts happening are critical, it is essential to keep in mind that they are only a part of a bigger picture. Companies are only starting to very gradually recognize the transformations and move alongside with them. One of the studies discovered that only 42% of managers confirm that they understand how to meaningfully process all the available information on the workforce and how to derive helpful conclusions out of it (Oxford Economics 2019b).

Nevertheless, even though not everyone acknowledges the change, the phenomenon of the contingent workforce is yet proceeding to develop and even transform from its original state. Many factors and processes impact the evolution of the modern labor market. The following sub-chapter will examine the current states of the contingent workforce and related trends as well as review some of the forecasts for its future.

2.3 Current and Future Trends

Modern technologies have all the potentials to transform the workforce, create new jobs and shift the old ones. Moreover, they can affect people's lifestyles. The possible positive scenario is that the gig economy would boost productivity, flexibly and funds. Whereas a more negative forecast anticipates growing employment insecurity, job losses, and de-skilling. (de Ruyter et al. 2019, 38.)

John Thompson (1997, 44) wrote:

Today, no market is safe from the innovations of sometimes unknown competitors who can spring up overnight and quickly render well established products and services obsolete.

More than 20 years have passed since then, but his idea continues to be nothing but the truth.

Thomson stated that one of the main factors that facilitates the growing popularity of contingent employment is the aspect that an enormous amount of information is available for companies nowadays. This enables them to develop long-term business plans. However, longstanding plans generally require continuous short-term alterations. Companies need

to keep up with these short-term planning alterations and rapidly respond to the frequent and quick changes on the market. Business solutions, related to those needs, depend on the HR and operational flexibility. Therefore, corporations are continuously growing their outsourcing programs. It would allow them to employ teams and individuals, including the ones at a very senior level, on a contract basis. (Thompson 1997, 44.)

Data is, in fact, an extremely powerful resource. With proper processing, data can derive great results. Data-driven algorithms are starting to take control of the human-performed processes. They support human workers, for whom it is physically not possible to process such enormous amounts of information received daily from millions of sources online and offline. Data can be also a great use for the HR sector. Some of the companies are using big data to outline what is needed for a specific position and identify where the best candidates for the position are coming from. The process of utilizing data today goes beyond analyzing academic alignment, it aims towards more complex matching (Hipps 2018).

David Weil (2014) when describing supremacy deterioration of the standard employment relationship (SER) over the past forty years is claiming that several mechanisms had emerged or re-emerged to fissure the relationship between employers and employees. Among the factors, Weil considers subcontracting, franchising, labor hire, and disguised employment relations. The author claims that all the issues made the job more insecure. Furthermore, they eliminated employees that are recognized to perform 'non-core' work from the major workforce scene. In the current state, it is essential to also add platform-based 'gig' employment to the reasons why the SER setup is decaying. This employment adopts digital technology as an intermediary for commissioning, supervision, delivery, and compensation of work executed by people on a contingent, piece-work basis. (Flanagan 2017, 378-379.)

Another major factor that has enhanced the transformations is millennials entering the workforce. "Millennials" is a term used to describe a generation of people born between the 1980s and early 2000s. They are widely known for their confident use of technologies and overall adaptive capacity.

According to the statistics presented by Duffin (2019), the highest percentage of freelancers among the working population in the United States in 2018 is detected amongst the people in the age range between 18 and 34, with 42% of working individuals freelancing and 58% not freelancing. As can be observed in Figure 2 below, the proportion of freelancers and non-freelancers of the mentioned age group out of all age groups is closely approaching 50/50 state. Therefore, considering values for other age groups it can be

concluded that millennials are more likely than other age groups to prefer freelancing over the standard employment.

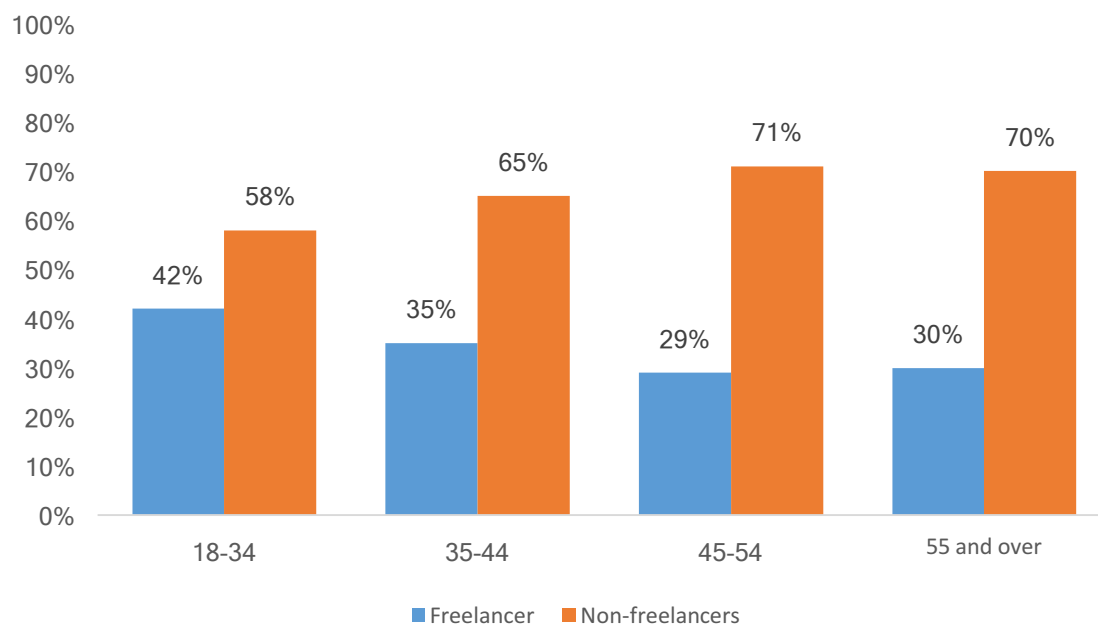


Figure 3 Freelance participation in the United States as of 2018, by age (Duffin 2019)

Oxford Economics (2019a) has discovered that millennials coming to the labor market is one of the topmost matters among the managers and executives. More and more people of this generation are entering the workforce and are becoming the force that facilitates contingent set-up. Therefore, to efficiently and accurately plan for the company's HR and development strategies employers need to consider the characteristics and traits of the millennial generation.

Furthermore, the future of work is forecasted to be influenced by overall diversity and globalization. Internet connection allows people from different parts of the world to work together and even pitch together their mutual project to an investor who might be sitting in the third faraway location. There are hundreds of examples of multinational companies with offices across the globe. Globalization and diversity at the workplace is what is going to have a huge impact on the development of the contingent working arrangements.

Another extremely significant point is that knowledge is decreasing in its value much faster than it was decades ago. There is a concept of half-life of knowledge. It represents the period in which half of the considered knowledge will be substituted with new ones or proven to be false. In other words, the half-life of knowledge is the shelf-life of knowledge. With new technological advancement, scientific discoveries and even societal transformation the knowledge is decaying.

In the time of technological advancements, workers who possess knowledge are greatly valued. Though, companies may not always have needed workers employed or may not have the resources to train hired specialists. Thus, they should seek for needed talents outside the company. Contingent workforce and particularly the base of independent consultants are the main sources of recruits with up-to-date knowledge and expertise. (Matusik & Hill 1998, 696.)

Following, it has been reported that HR departments have been experiencing a major talent shortage. The issue is forecasted to only deteriorate soon. McKinsey expects to have a global deficiency of 40 million educated people with a university degree by 2020. Thus, already today firms are overstating salaries to guarantee they get a needed candidate. Companies are trying to remain successful. However, rising wages are not a viable solution for the long run. (Higgs 2018.)

David Bristol (2016) declares:

It's always a matter of finding the right match.

Talent scarcity is one of the chief reasons why companies are increasingly utilizing talent pools. The term "talent pool" refers to a database of potential job candidates of the company that is typically created and updated by an HR department.

Talent pools are believed to be a highly beneficial and helpful recourse for businesses. They deliver pre-analyzed and vetted contingent workforce reserves. They offer companies the advantage of having a base with skilled and verified candidates who are characterized and grouped by needed attributes and can be accessed quickly and effortlessly. (Wasley 2016).

Furthermore, one more motivation for the companies to create and maintain pools of talents is speed. Randstad Sourceright (2019, 2) suggests:

Speed is the new business currency.

With the ever-changing market demand companies are forced to be able to allocate required resources fast. The right talent in the shortest possible time is an essential part of the success. This is one of the reasons in favor of early talent acquisition. Nowadays, it is crucial for businesses to build and maintain connections with suitable candidates early on (Higgs 2018). Those connections later would allow companies to recruit already vetted candidates much quicker.

Equally important is flexibility. It is essential for keeping up with the modern pace of the world and for implementation of the efficient workforce strategy. As revealed by Oxford

Economics (2019a), a lot of the companies are reported to be less flexible than their workers want them to be.

Moreover, even the companies that have decided to implement more flexible working set-ups, struggle with execution. The issue is that the currently existing organizational and HR procedures and arrangements are immensely static and rigid. Thus, companies that want to obtain all the welfares of the contingent workforce need to adjust their conception of labor. The factors as HR metrics need to be redetermined. (Cooksley 2017.)

Flexibility in various aspects of HR strategies can allow businesses and their executives to realize the maximum potential of the workforce available on the labor market.

Finally, contingent workforce management requires a contribution to the corporate culture to the same degree as it needs technological support. The worker loyalty is widely agreed to be a foundation for an effective business's performance. Assuring loyalty and building a strong connection between employees and the company in the contingent set-up is particularly challenging. This is because often contingent workers are considered to be less devoted to the company's culture due to the specifics of their working arrangement. Moreover, there is an assumption that the company from its side would be less concerned about them. (Oxford Economics 2019a.)

That is why company culture is vital especially for the implementation of the contingent workforce. HR managers should put an effort and approach contingent workers with the needed level of dedication and build better relations with them. Improving a company culture continues to be one of the highly challenging issues.

Summing up, many aspects determine the contingent workforce development direction. The predictions for the future can be made. However, as the sub-chapter discusses the main thing that the HR field should be prepared to face is a constant change. That is why at this point it is highly essential to focus on the needs of the parties involved, as well as on the improvements that can be made. The following chapter will focus on the needs and challenges that are faced in the contingent workforce today.

3 CHALLENGES AND NEEDS IN THE CONTINGENT WORKFORCE

3.1 Employee's Perspective

One of the main reasons why people choose to work in contingent set-up is their aim to have flexibility in working day and hours so they can devote time and effort to other interests (Allan 2002, 106). The outcome of this mindset is that people want to have convenience, security and satisfactory experience at every step of their work journey. Although contingent workers have a lot of traits, desires, and complications that are similar to the ones of employees in the standard set up, many of the issues are unique and require special attention. This sub-chapter will focus on determining what are the most crucial needs, difficulties and challenges definitive to contingent workers.

Legal protection and overall law regulations are some of the top issues for the contingent workforce. According to the study by the Chartered Institute of Personnel and Development (CIPD), 63% of interviewees working in the gig economy set up believe that their fundamental employment rights and welfares such as holiday pay should be secured by the government (Scott 2017). Governments and labor unions only recently started to release regulations and guidance that apply to contingent employment and consider all its up-to-date features.

Typically, contingent employees are significantly less likely to obtain health and retirement welfares compared to permanent employees. For instance, the majority of contingent workers have to get personal health insurance rather than use an employer-sponsored one. (Allan 2002, 107.)

Due to those issues, contingent workers in many ways might feel insecure and even the company's managers realize this problem. Per the study by Oxford Economics (2019c), 46% of interviewed executives believe that changes are needed in the field of compensation plans for the contingent employees.

Furthermore, another essential issue is brand trustworthiness. Job seekers looking for a permanent position can spend enough time getting to know the company and the brand. For instance, while going through interview phases. Meanwhile, candidates for the contingent position usually don't have such privilege. That is why the contingent talents must be able to be assured in the company and the brand in advance. It would allow them to apply for the position or a project with a needed level of confidence.

One more important factor is the convenience and ease of the search for the position and job application. Any hiring and job-hunting process should be effective and not overcomplicated no matter if involves standard employment arrangement or not. However, the issue is especially crucial for those who regularly go through the process of looking for a job and applying for it. Contingent workers that are looking for a new gig can go through a massive number of applications on a yearly, monthly and even weekly basis depending on the type of work they perform. That is why it is highly essential to provide them with convenient, to the possible extent standardized and clear experience of job application. To clarify the matter, it is important to mention that it does not mean that the company, for instance, should ease up the selection criteria while looking for a highly-skilled applicant, but rather that the organizational process itself, the communication with the job seeker and the delivery of information should be transparent and understandable.

Following the topic of job-seeking, it should be mentioned that while the hiring manager needs to know how fitting the candidate for the position will be, the candidate wants to know how well the job will fit his needs, career development plans, and abilities. As in other issues mentioned before, contingent employment needs a special approach in this matter. The standard hiring process involves a deeper level of clarification about the position itself and the responsibilities the candidate will have. The contingent employment might lack some of the needed clarifications. This is the reason why it is highly important to present the position and responsibilities as clearly as possible and use available technology to match talents to the positions.

Moreover, one more concern to raise is practical regulatory and organizational matters. Paperwork distribution and collection of needed documents are vital parts of onboarding a new contingent worker (Parks 2014). Processes such as invoicing, taxation, hours and job tracking can be challenging for a contingent worker. As mentioned previously, law regulations and guidelines are some of the weak spots in the area. Contingent employees are facing a complex task to organize their paperwork, align their tax payments with existing regulations and generally do all the needed arrangements for the regulation of their work.

Finally, internal contingent employee management within the organization is an equally vital subject. The time that contingent employees spend at a company can be considerably less but it should not be the reason to treat them poorly or in general differently. Bristol (2016) underlines that the company's internal employees and contingent employees should be managed in the same manner. This is quite crucial for employee performance, job satisfaction, and an overall healthy workplace environment.

3.2 HR's perspective

Nowadays HR specialists very frequently face a challenge to hire fast, so they can keep up with the constant request for short-term employment. Due to the necessity of taking rapid hiring decisions and protect highly essential human resources, recruiters are forced to hasten a lot of crucial processes. (Smith 2018.)

Lack of tools, absence of experience, financial issue and legal complications are only some of the major aspects that can obstruct the embedding of the contingent workforce strategies into the company's HR structure. This sub-chapter will focus on the identification of the most common needs and challenges that HR specialists can face concerning the contingent workforce.

The first and foremost need for many of the companies and their HR departments nowadays is to realize the potentials and benefits of implementing the contingent workforce to the company's HR set-up. Contingent employment is one of the leading trends in the corporate landscape and more and more businesses start to incorporate it into their company's structure. However, there is still a common and widespread misconception about it. One of the reasons why many executives perceive contingent workforce as something negative could arise from the fact that they associate this set-up with the terms "outsourcing" or "offshoring". Also, there is the assumption that that way they could lose quality or/and control (Spalla 2018).

Unawareness and misunderstanding can be decisive obstructions towards the development of a convenient and productive contingent workforce formation. Nevertheless, the situation getting improved due to the forces of the field specialist. Many of them are drawing attention and promoting their knowledge and experience through articles, public talks, media interviews, and conference presentations. Yet, the corporate landscape is still in need of wide-scale knowledge distribution. Big corporations, for instance, can influence smaller businesses by reporting on their own experience with contingent employment.

Secondly, subsequently, when the step of awareness has been passed and the HR department proposes the new solution to the company's directors it can be challenging to get the needed funding for the integration. According to Oxford Economics (2019b), one of the major barriers to implementing the contingent workforce is financial support. Starting a contingent employment initiative in most of the cases will require additional expenses. This is because many methods and processes differ from the standard hiring and managing processes and additional tools will be needed to implement them. Due to that demands it might be difficult for the c-suite executives to see why they should allocate extra

HR funding for it. Consequently, businesses need cost-effective processes, methods, and tools that can support them with the implementation of the contingent workforce strategy.

Thirdly, as already have been deliberate in the previous sub-chapter, the legal aspect of the contingent employments is still very challenging in the current situation not only for the contingent employees themselves but also for the companies hiring them. The gig economy's rapid development, characterized by the wide spreading of online platforms and independent workforces, brings major challenges to conventional models of work regulations (Stewart & Stanford 2017, 421).

In the current state, there is a lack of rights and regulations for contingent employment which is in some cases fueled by the assumption that independent employment can represent only a second job or a part-time job for students. It even goes so far as to say that, the basic employment regulations are not the only ones to be evaded, but correspondingly fundamental issues like taxation, social security, and work-related health and safety measures are not regulated. (de Ruyter et al. 2019, 44.)

Current legal guidelines should be modified to meet the changing labor environment. Stewart and Stanford (2017, 428-430) suggest five possible options for broadening present policies. The first one is to reinforce current laws by expanding the scope of the prevailing legal framework using test cases and precedents. The second option is to refine or broaden existing classifications of employment to include new forms of paid work emerged during the past decades. The third possibility proposed is to constitute a new class of 'independent workers' that can be approached with the specific tailor-made regulations suiting newly emerged types of workforces. The fourth and most drastic suggestion is to establish rights for workers, rather than employees that will discard a traditional employment position entirely and concern proper procedures to anyone doing 'work'. The final option advised is to, additionally to the concept of employee, reassess the perception of an employer and analyze the various functions he might have.

Another issue that should be mentioned in this section is the increasing scarcity of expert talents. With the development of technologies and overall industrial and social progress, the labor market is in demand of the workers with a relatively high set of knowledge, competences, and experience.

Though the HR industry has managed to predict a lot of the changes, the specialists are yet astonished of how rapidly and extremely the market of skilled talents has been constricted. Although the number of job applications and potential candidates for the positions has stayed the same, the problem of finding the right match for the is now more aggravated than ever. The obvious solution of raising wages for attracting more experienced

and skilled candidates cannot always be applicable due to the limited resources. Therefore, nowadays companies are forced to come up with elaborate and creative solutions to attract and engage highly needed candidates. (Bristol 2016.)

While there can be several approaches towards the recruitment and retention of the competent workers one of which is the provision of additional expertise training, it is still challenging for businesses to find effective and cost-efficient ways to engage the right talents for the jobs. At this point, technologically advanced tools and solutions can come useful.

This leads us to the final topic: shortage of those technologies and tools. Since today people anticipate to be able to interact with each other and with organizations with utmost effortlessness and convenience, a digital workforce practices that does not meet the highly raised commercial demands and expectations can be extremely frustrating and provide a ground for a generally negative workforce experience (Mazor et al. 2019). There are enormously high amounts of data available nowadays, and it cannot be effectively processed manually. This and the limited availability of resources on the company's side together create a critical need for the technology solutions that can provide well-organized and efficient maintenance in all steps of the contingent employment. These issues might be the most cultivated out of all mentioned previously as many technology tools emerge on the market monthly. Nevertheless, there are still countless opportunities for digital companies to fill in the gap in the needs of the HR departments with technologically advanced solutions.

To sum up, in countless businesses today there is a scarcity of the culture as well as tools that they need to for employee engagement, performance tracking, and effectiveness measuring of HR strategies (Oxford Economics, 2019a). The next chapter will focus on reviewing the case company's solution that meets the demand of contingent employment and supports companies with attracting, engaging and hiring contingent employees and creates a convenient environment for contingent talents to search and apply for jobs using modern technologies and human touch.

4 CASE COMPANY STUDY

4.1 Introduction

The area of the contingent workforce despite being not fully formed has grown and developed so drastically. Nowadays it is quite complicated to describe it as a single type of arrangement. During the past years, it has become a complex system that can be divided into fundamentally different sectors. It is comprised of diverse processes and therefore requires congruent ways to approach it.

There are various types of contingent arrangements. Consequently, there are various management and recruitment practices as well as approaches how to cooperate with workers. Also, there are distinctive requirements for the digital platforms that can support their needs.

For instance, one of the most popular types of arrangement is previously mentioned “typical freelancing”, some of the types of professions that can illustrate it being a web-developer, a translator, and a graphic designer. Usually, this kind of job or gigs does not require workers to leave the digital environment. Their job can usually be done on a computer and can be delivered via the Internet. It does not require any physical interaction between the client and the executor. Platforms that aggregate these types of projects and workers are called marketplaces. These platforms provide a place where employers can post projects and find candidates for it. Freelancers, on the other hand, can find projects to be done. In most cases, the aggregator of these projects and freelancers is acting like a middle-man between the client and executor ensuring that the cooperation will go well and secure. However, marketplaces are made for a niche and represent only one of the types of arrangements.

SIA (2018, 3) declares that while companies are discovering and rearranging contingent work worldwide across marketplaces, the growing attention is caught by the fastest-growing division of modern technologically advanced gig economy - the Human Cloud. The term “Human Cloud” refers to a developing group of models of work intermediation which enable establishing and completing different types of work arrangements completely through a digital/online platform. Additionally, the services of the platform usually include payment arrangements for workers and sometimes even the management and the enactment of work. It is essential to clarify that job boards (like Indeed) or social networks (like LinkedIn) are not included in the context of the Human Cloud. Although, both of these tal-

ent trade kinds of platforms might provide sourcing and recruiting fragments of work arrangements, mostly they do not support further work arrangements like payment of workers, tax filings and so on.

Nowadays, several digital solutions have already emerged to start filling the gaps in the needs of the contingent workforce landscape. More solutions are expected to appear on the market in the very near future as the topic is becoming more and more acclaimed and the companies worldwide are starting to realize the potential of contingent employment. These solutions differ from one another and solve problems in the industry.

The chapter will firstly explore the solution of the case company and will provide an overview of its major functions and processes. In addition, the analysis of the key stakeholders of the solution will be done and the product's chief value propositions will be defined. The final part of the chapter will include the analysis of the solution based on The Product-Market Fit Pyramid framework.

4.2 Solution Review

The Twago solution is comprised of an online platform and additional supportive services. The solution is built for the large corporates that recognize the need for the contingent workforce. Those companies want to engage workers with their brand, create a database of potential pre-checked candidates and fill the positions with the most effectiveness and cost savings. The solution is designed to create connections between the client company, its brand and different types of contingent talent workforce such as independent contractors, temporary talents, freelancers, interns, etc. In addition to the contingent workers, the solution can be aimed towards the acquisition of interns, seasonal employees, and silver medalists. Moreover, the solution allows job seekers to conveniently find and apply for projects.

Twago Talent Pool is a white-label solution, which means that Twago develops a digital platform, but the platform is branded as if it was developed by the client company. Twago labels the platform's pages with client logos and designing the landing page in the company style. In addition, Twago also does the marketing campaigns related to the platform on behalf of the client company. White-labeling allows to create a tighter connection between the contingent worker and the company brand and allows them to engage talents in a more personal manner in comparison to the solution where all the jobs would be aggregated under the brand of the recruitment agency.

Twago provides not only software as a service but also a Managed Service Provider service on top of that. Managed Service Providers (MSPs) are recruiters who source and

manage candidates for the positions within the platform. They vet candidates for the talent pools, source candidates internally and externally on the platform, administer job applications and select best-suited candidates for the jobs, that later would be reviewed by the client company hiring managers.

One of the chief processes of the platform is talent pooling. As has been discussed previously, creating a pre-vetted base of potential candidates is vital in the current state of the talent scarcity. Creating a database of talents based on certain criteria allows faster and more efficient talent sourcing and position filling. A client can define desired parameters for the pool, for example, area of expertise, location, level of seniority, and possibility to relocate.

In addition, to the mentioned functionalities Twago Talent Pool also provides marketing support. It uses marketing automation to manage internal email campaigns. Furthermore, it reaches out to external talent bases and potential candidates with the support of social media and email campaigns.

4.3 Value Proposition

Anderson et al. (2006, 92-93) elaborate that companies generally adopt one of the three approaches towards defining a Value Proposition (VP) of the service or product. The first of the approaches is identifying value proposition as all the benefits that a company is bringing to the customer. The second one is presenting a VP as an outline of all advantageous points that make the company stand out against the second-best offer on the market. The third approach is recognized as the most relevant. It implies that a value proposition should be perceived as one or two most beneficial properties that will create great worth for the customer in the foreseeable future. In the following part, the value propositions of the case company will be defined.

One of the main value propositions of the Twago Talent Pools solution is engaging talent with the brand and nurturing relationship with talents on behalf of the client company. "Talent is a family" states Twago. Keeping close connections with the base of pre-vetted candidates allows Twago to effectively reach for suitable candidates and match them to the vacancies. Twago creates client private pools of talents meaning that only one client would have access to the base of pre-checked candidates that have indicated their interest in working with that client company.

The second value proposition is cost savings. Going through other types of suppliers such as recruitment agencies might place bigger fees on top of the rates allocated for the recruitment. Meanwhile, Twago provides lower fees since many processes that usually performed manually are automated or eliminated.

4.4 Talent Acquisition Flow

The Twago Talent Pool solution is a part of a broader flow of talent procurement. It integrates with other relevant platforms and services to ensure that the company has a smooth and effective end-to-end process starting from realizing the necessity of hiring a contingent talent to the billing and reporting of the employed worker. In the following part, the general flows of talent acquisition and the processes within the Twago Talent Pool solution will be defined and analyzed. Figure 4 below illustrates the general flow of obtaining a talent using a Twago Talent Pool solution.

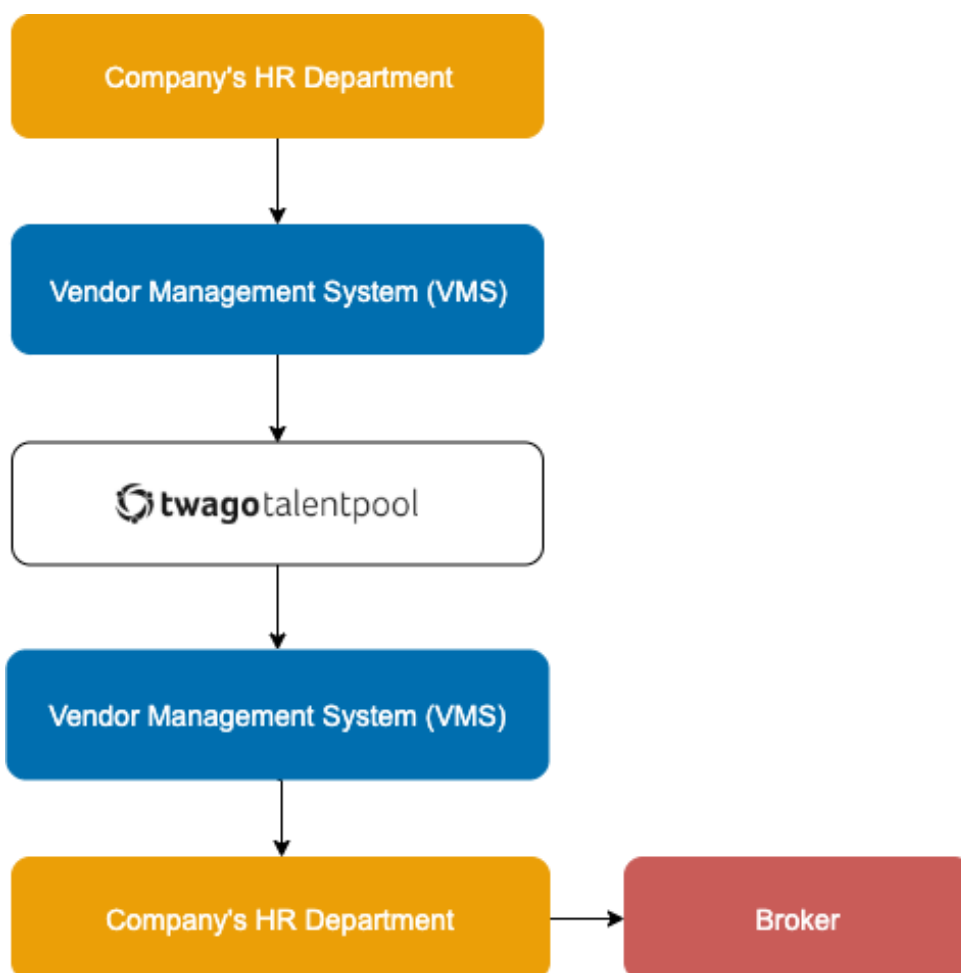


Figure 4 The flow of talent acquisition using Twago Talent Pool solution

The flow starts at the client company's HR department where the position or project is being formed. The title, the description, the budget, the working period and other relevant information is being decided and after that, all this data is transmitted to the Vendor Management System (VMS). VMS is an application, typically web-based, that allows companies to distribute vacancies, bill contingent workers and track their progress. VMS generally focus on attaining and managing contingent talent but also can be used to acquire permanent workers. From the VMS, the vacancy can be passed to the hiring agencies, individual recruiters, social networks or to the digital platforms with talent databases such as a case company solution. All the instances that deliver candidates to the company are called suppliers.

Once the project posting is received in the Twago Talent Pool the internal process of talent engagement and candidate selection is starting. Figure 5 below demonstrates the main phases of flow within the platform.

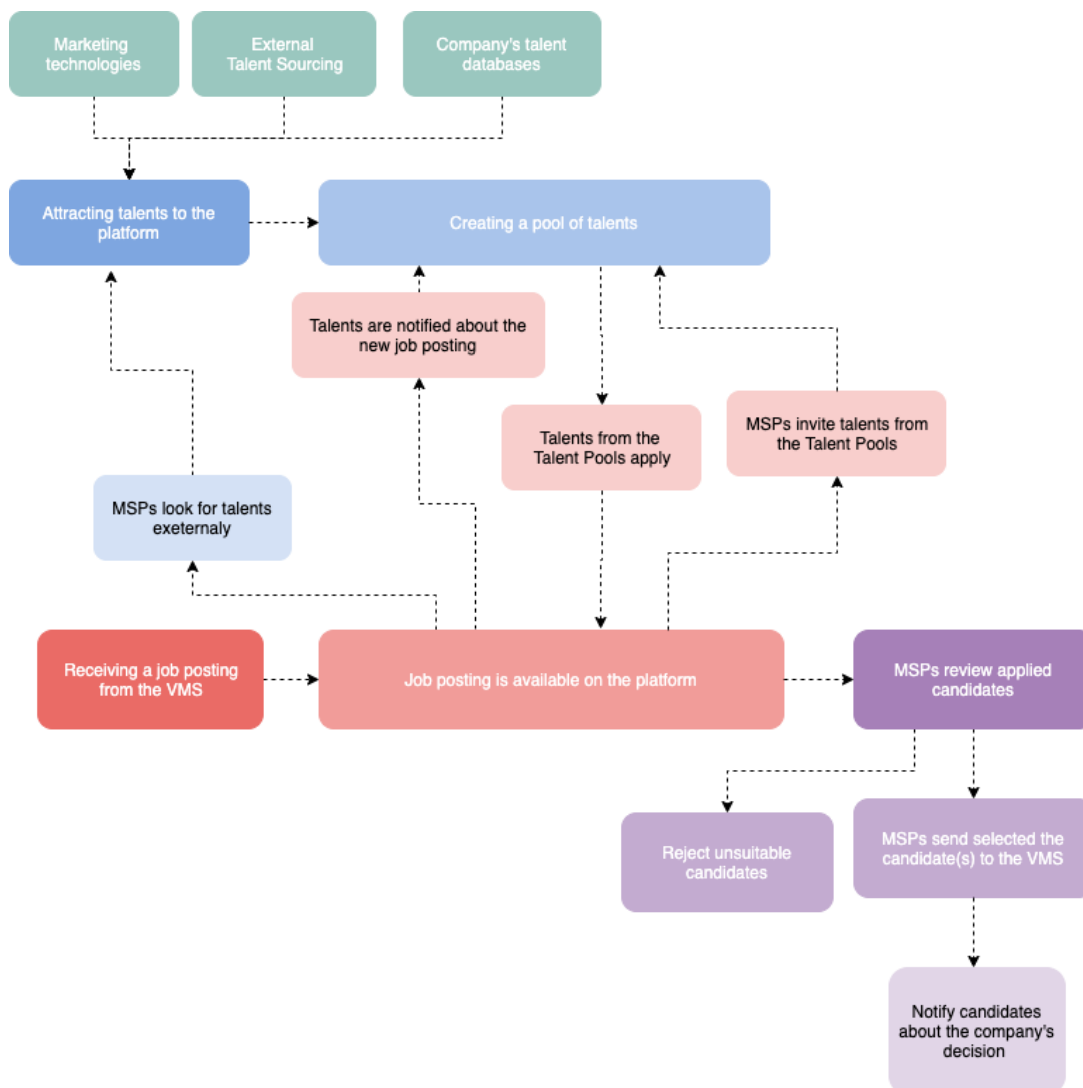


Figure 5 The flow within the Twago Talent Pool platform

Two major parts of the overall flow within the Twago Talent Pool platform are talent acquisition, sourcing, engagement as well as talent pooling and vacancies' fulfillment. The first chief flow, Talent Pooling, starts with getting new talents to register on the platform. Talents are attracted to the platform through different channels: reaching the client company's talent databases, with the support of various marketing techniques and campaign through email and social media. Also, by recruiters looking externally in open databases of workers, for instance, on LinkedIn. Once the talent is attracted to the platform, after his/her registration talent goes through the vetting process. Once the candidate is checked he/she becomes part of one or several Talent Pools based on the criteria set by the client company.

The second flow, offering the candidates for the positions, starts with receiving a job posting from the VMS. After the job posting is received, it is carefully reviewed by MSPs and then it becomes available for the talents on the platform. Job postings are usually associated with particular skills, experience as well as other criteria. That is why job postings are generally aimed at the certain Talent Pools, members of which meet the required benchmarks. Members of those targeted Talent Pools receive notifications that the new opportunity has been published. Once the job posting is available on the platform, anyone registered can view it and apply for it. Additionally, MSPs are also searching for candidates within the platform and externally. If the matching candidate was found on the platform, a recruiter can invite him/her to apply. However, if the candidate is found outside the platform he/she would need first to register and create a profile before applying for the position. When MSPs receive job applications they analyze them cautiously and either reject the candidate or send the candidate profile back to the VMS platform for the company's hiring manager to review. Later, candidates sent to the hiring managers are notified about the status of their hiring (whether they were accepted or rejected).

Following, once the candidate is hired all the next necessary arrangements, for instance, contacting and reporting is done through the VMS system. Additionally, the company usually resorts to the help of Broker, a party, who arranges the transaction between the employer and employee, to do billing and invoicing of contingent workers.

The Twago Talent Pool plays a major role in the process of talent acquisition and engagement and help companies and talents find a right match. The next part will summarize the main types of stakeholders of the solution and the actual users of the platform and their profiles.

4.5 Customers and Stakeholders

To get a better overview of the product it is essential to determine its customers as well as its main stakeholders. The customers are the ones purchasing or receiving the product or service, while stakeholders are people or any other instances that have an interest and involvement in the product or service. Figure 6 below illustrates the structure of the stakeholders of the Twago Talent Pool product.

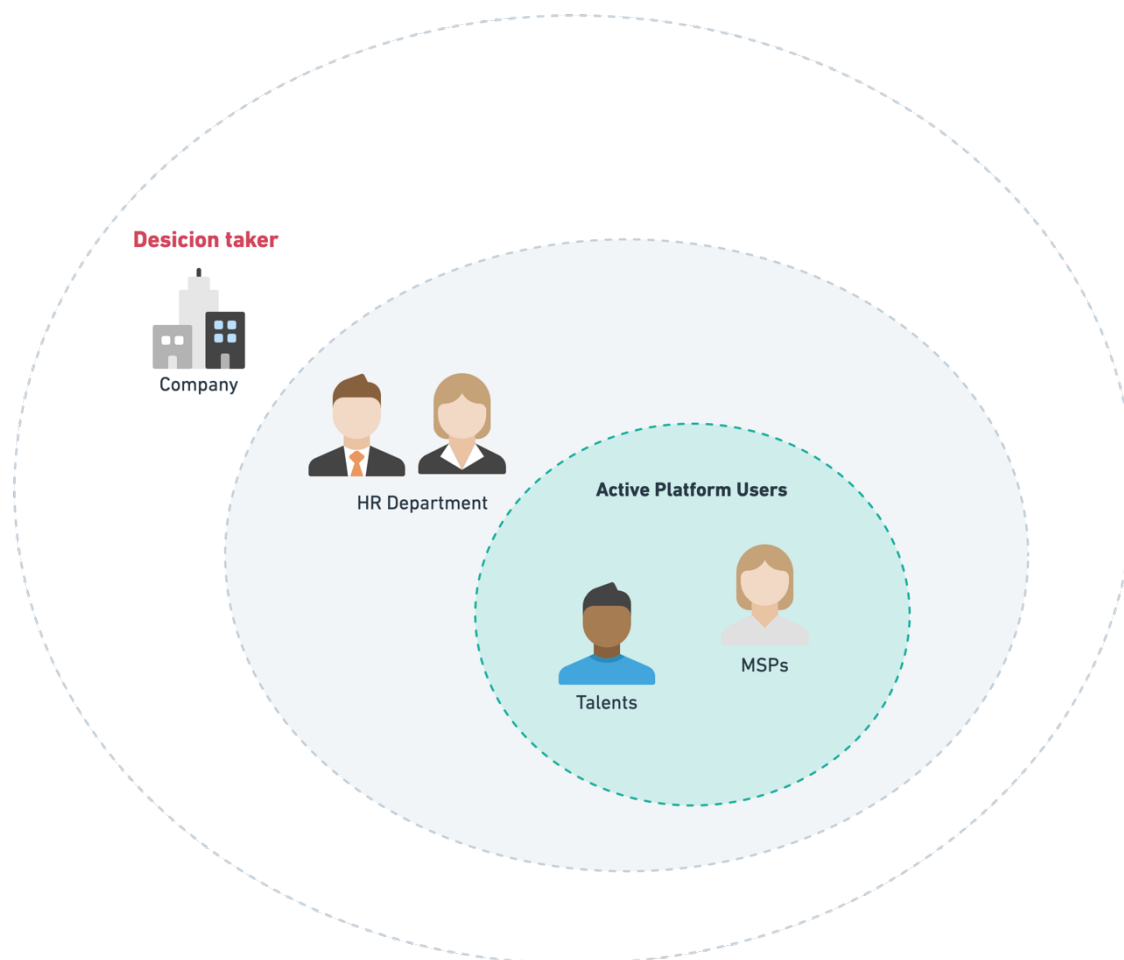


Figure 6 Stakeholders of the solution

Globally, the target customer and the stakeholder of the solution is the company that wants to adopt the contingent workforce strategies and engage talents with its brand. This is the customer who decides whether the solution would be adopted or not. Often one of the main stakeholders within the company who influences the decision of whether the solution should be procured or not is the procurement manager. This person is responsible for the purchasing strategy of the company. Furthermore, the company is the customer to whom the platform performance and overall results should be reported once the solution is implemented.

Going further, the deeper level of the stakeholder is the department that is responsible for the employment of the contingent workers internally within the company. Generally, it is the HR department. These are the stakeholders who would continuously and directly interact with people supporting the solution, such as MSPs. Also, with the HR department the communication channels will be organized.

Another stakeholder is an MSP who source candidates and manage job applications. He is not a direct customer of the product. However, MSP has its share of interest in the solution which makes him a stakeholder. MSPs are the ones who support the whole activity of the platform and help to connect the company with the talent.

The final stakeholder and a customer of a platform is the talent that searches and applies for positions. He/she is the one actively using the product and bringing value for the client company. One of the key goals for the solution is to attract talents and convince them to choose to apply for projects of the client company through the platform.

4.6 User Flow

It is essential to point out that only MSPs and talents are the direct users of the platform – people who interact with it daily. The following part will define the user flow of the talent as well as review the fragments of the platform user interfaces. Figure 7 below illustrates the flow of a talent user within the platform.

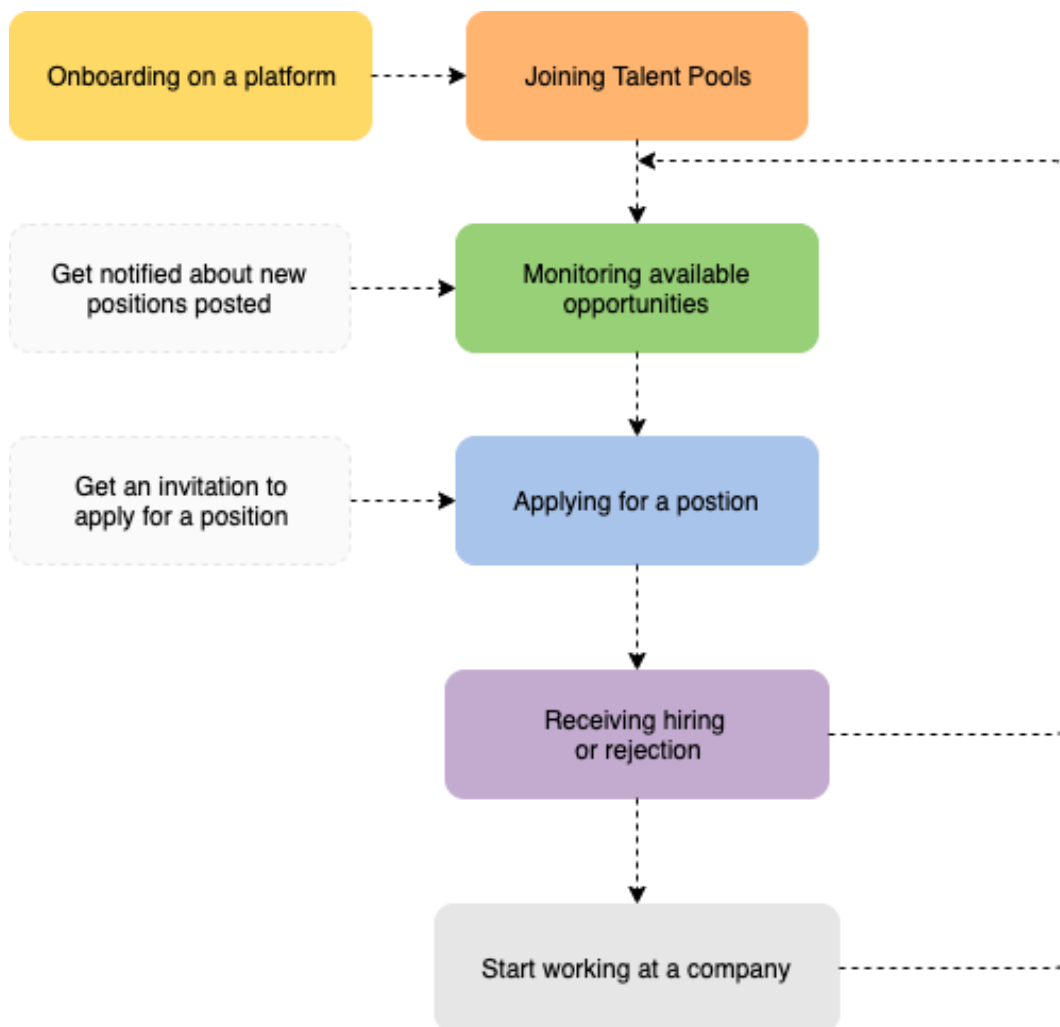


Figure 7 The flow of a talent user

As has been mentioned earlier, various marketing techniques are used to attract new users. Unregistered talents that come to the platform generally arrive on the landing page designed based on the client company's needs and requirements. There all the information on the client company as well as basic information on the aims and functionalities of the platform is gathered. In addition to the landing page, unregistered users can view job postings that are open to the public view. The access to some of the job postings gives a better overview of the example expertise the company demands. New users have an option to simply start with creating a profile or they can create a profile and right away apply for the job. Picture 1 below showcases the UI for the sign-in page.

Already have an account? [Login](#)

[Sign up with LinkedIn](#)

or

Firstname

Lastname

Email

Password

Country of residence

Subscribe to our newsletter

I am legally authorized to work in the U.S.

I accept the [Terms & Conditions](#) and [Privacy Policy](#)

[Join now](#)

Picture 1 Sign-In page

After basic sign in, the talent is creating a profile of him/herself. He/she has a possibility to upload a CV that would be scanned to retrieve the needed information for profile fulfillment and then saved as the attachment to the profile. Another option is to fill the profile from scratch. The profile consists of basic information such as name, address, contact information, photo, work experience, and education. In addition, it contains fields such as skills, tools, languages, preferred job title, possibility to relocate and work remotely. This information allows hiring managers to get a better overview of a candidate. Pictures 2, 3 and 4 illustrate the user interface of the first onboarding steps.


Create your Twago account

1 2 3 4

Step 1: Upload cv

Add your resume

We value your interest and time taken to apply.



Drop your CV here or click to upload

OR [Fill out your online resume](#)


Picture 2 Adding a CV

Create your Twago account


1 2 3 4

Step 2: Fill your profile

Image (optional)



Freelancers with a friendly, professional-looking portrait are more likely to be hired.

 Upload image

Personal Information

Please provide your Personal information

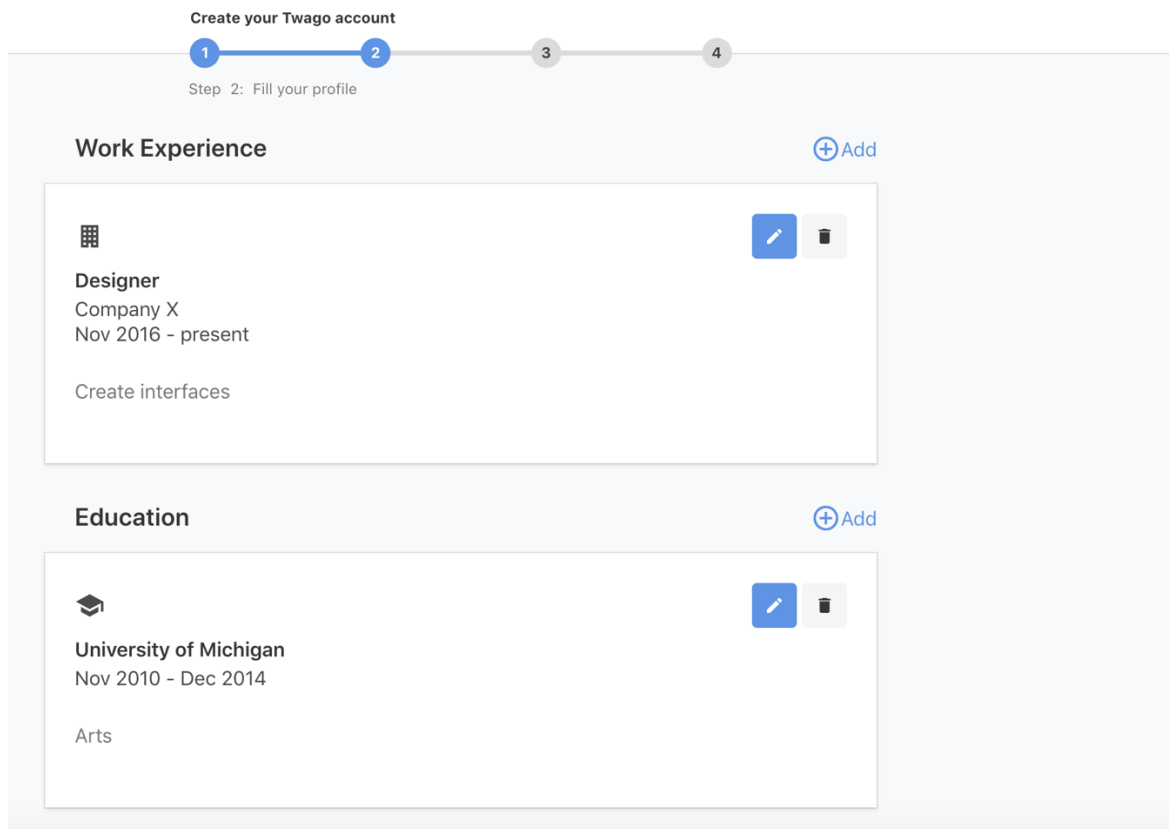
Salutation

Mr. Mrs. Ms. Dr.

First Name

Last Name

Picture 3 Creating a profile



Picture 4 Filling profile information

Following, once the profile is created the user is offered to choose the areas of her/his expertise. The range is limited to the categories of jobs and projects that are offered by the company. In the next step, the user is offered to request membership for pools from his chosen areas of expertise. After that, the user is landed on the list of all available jobs. The last step of onboarding is to activate his/her account via email. Once the user has clicked an activation link in the email, his/her account becomes active. Pictures 5 and 6 demonstrate the user interface of the some of the mentioned steps.

Choose your area of interest...
and we'll show you matching talent pools

Business

Design ✓

Quality ✓

Technical & IT

Marketing

←
Next →

Picture 5 Choosing areas of expertise

Choose the talent pools you want to join.
Pick at least 1 at most 5. You can still join or unsubscribe to talent pools later.

Design

Cocreate Design ✓

Projects for Cocreate Designers, Experience Designers

Colour Materials & Finishing Design

Projects for Colour Materials & Finishes Designers, Product Graphics Designers, Trend Researchers, 3D Visualizers

Communication Design

Projects for Colour Materials & Finishes Designers, Product Graphics Designers, Trend Researchers, 3D Visualizers

Digital Design

Projects for Data Designers, (Product) Interaction Designers (UX/UI), Visual Designers, Design Technologists, Creative Prototypers

People Research

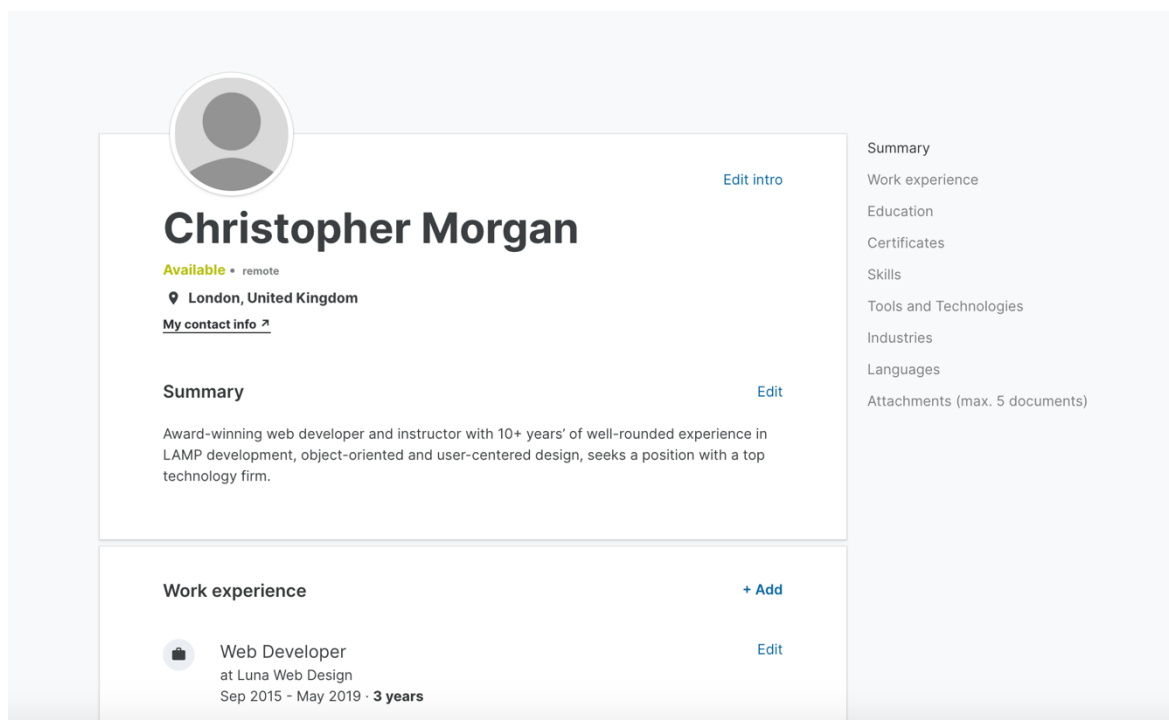
Projects for Colour Materials & Finishes Designers, Product Graphics Designers, Trend Researchers, 3D Visualizers

Product Design

Projects for Colour Materials & Finishes Designers, Product Graphics Designers, Trend Researchers, 3D Visualizers

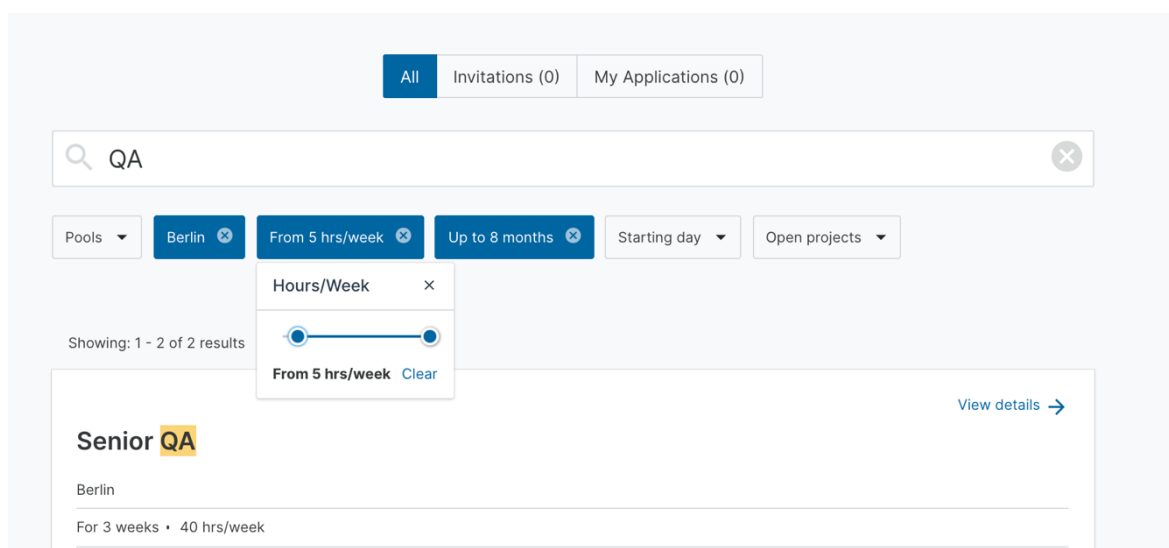
Picture 6 Requesting membership for talent pools

After the onboarding is completed the user has full access to the platform where he/she can edit the profile, request and cancel pool memberships, search and apply for jobs and manage job applications. On Picture 7 below the UI of the profile page can be viewed.



Picture 7 Profile page

One of the key functionalities for the talent user is the job search. The user has access to the list of all jobs and projects currently displayed on the platform. He/she can sort the results using the text search or the number of filters. The user can filter the results based on the job pay rate, the pool that the job is associated with, the location where the employee would need to work, the number of working hours per week and the duration of the work. The talent can combine all the filters and text search to configure desired criteria for the jobs. Pictures 8 and 9 below demonstrate the UI for the mentioned functionalities and the example of the job posting page.



Picture 8 Job filters

OTE Platform Worker

Posted Apr 19, 2019
in Business consultancy

Project ID: XXXXJ333307226

[Apply](#)

📍 **Location** NLD Rotterdam

📅 **Duration:** 7 months (Apr 29, 2019 - Dec 12, 2019)

🕒 **Hours/week:** 5 hrs/week

💰 **Payrate range:** unknown

Description:

There is a need for a sustainable packaging dashboard in Beauty & Personal Care. This dashboard should contain a clear and visual overview of all initiatives that are going on in the field of sustainability in BPC. Currently this is tracked in a lot of separate Excel files, so this needs to be collected and converted into a dashboard in PowerBI. The dashboard should be automatically updated.

type of work: Data (build a dashboard)

Key deliverables:

A comprehensive, easily understandable dashboard that updates

Picture 9 Job posting

Another significant functionality is the job application. Once the user has found a suitable vacancy he/she can apply for it on the platform. Depending on the client company requirements the steps of the application can vary. Though, typically the application involves the following steps: submitting the desired pay rate for the job, attaching the CV for the position or selecting the one generated from the user's profile, adding a motivation letter and finally the applicant might be asked to answer a set of the custom questions specified by the client company. After the user has submitted the application, he/she would see the status of his/her application and track the progress. Picture 10 illustrates the UI of the CV upload step of the job application.

Your Resume

Your resume should show your specialist knowledge, experience and any interests of relevance for this project; preferably not be more than two pages.

Submit your own Resume

Submit a PDF version created from your Profile

Resume created from your profile:

PDF **cv_generated.pdf**
[preview](#)

Hiring Managers are usually not connected with this system. They will only receive a PDF version of your application. Please make sure your profile is up to date before you send.

[Update profile](#)

Add a motivation for this project (optional)

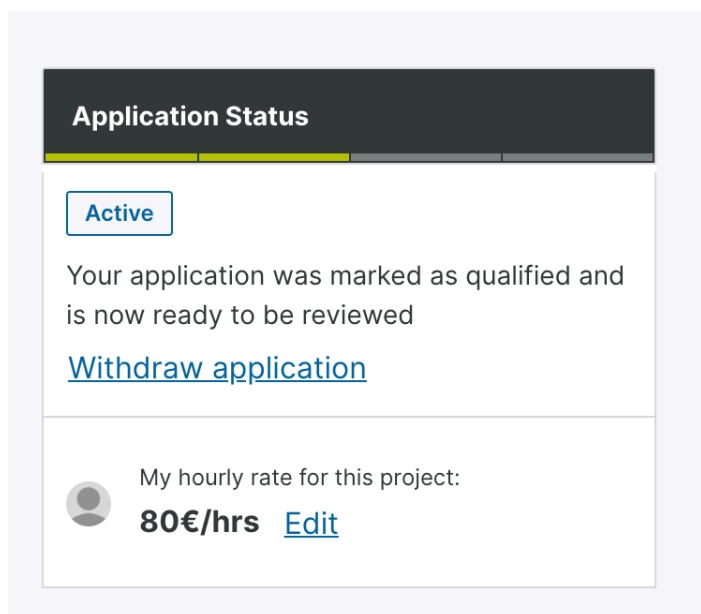
max. 700 characters

[Preview motivation letter ↗](#)

[← Back](#) [Next →](#)

Picture 10 CV upload and motivation

Finally, following the job application submission, the process of application tracking takes place. The progress of the application can be viewed through the specialized panel. Additionally, to displaying the status of the application on the platform the talent is notified about the application progress and any changes via email notifications. The applicant can be contacted by a hiring manager of the company to be invited to the interview. In case of successful hiring, the user will be notified via email. In case of rejection, he/she would also be notified and receive a rejection reason. Picture 11 below demonstrates the UI of the job application tracking panel.



Picture 11 Job application tracking panel

4.7 The Product-Market Fit Pyramid

To summarize the review of the case company, the company's product – the Twago Talent Pool platform will be analyzed based on the framework suggested by Dan Olsen (2015, 5). The model is called The Product-Market Fit Pyramid, it analyzes how successful the product is in meeting customer needs thus your way is better than other alternatives on the market. The framework consists of five layers: Target Customer, Underserved Needs, Value Proposition, Feature Set and User Experience (UX). The two bottom layers are the market while the three top layers represent the product. Based on the suggested framework the Product-Market Fit can be perceived as a good resonance between the market layers and assumptions and decisions on the product layers. Olsen states that for the product to be successful on the market all five layers should be solidly executed.

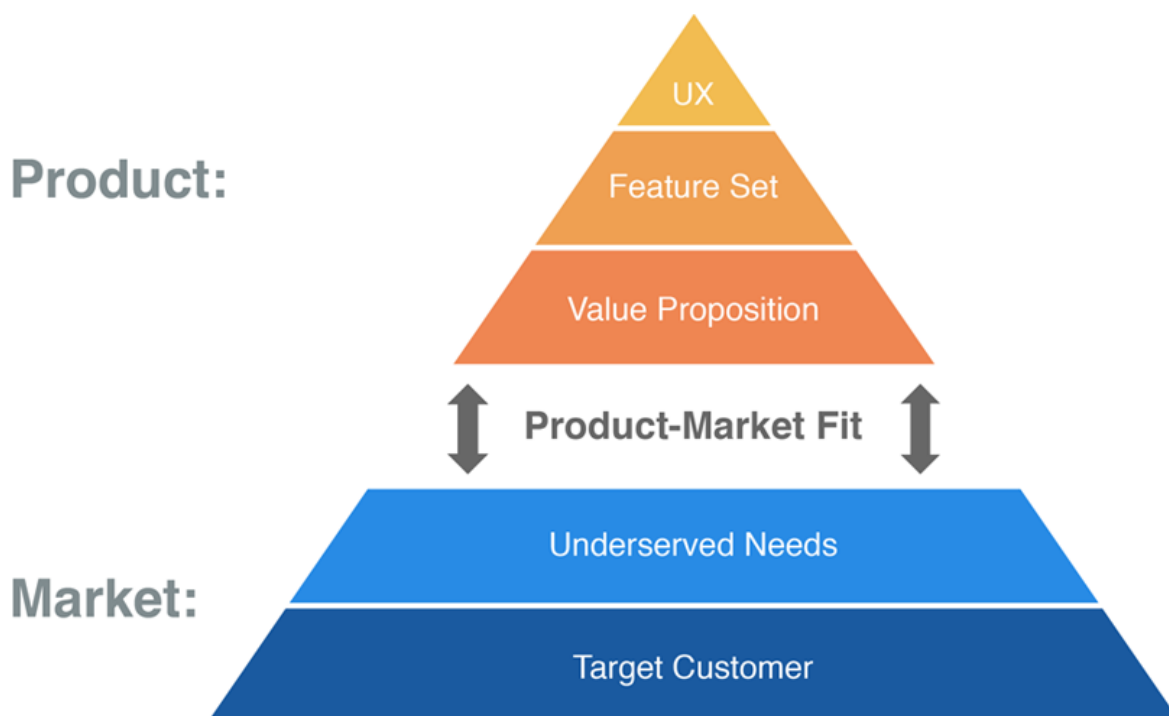


Figure 8 The Product-Market Fit Pyramid (Olsen 2015)

Target Customers of the Twago Talent Pool are large corporations that want to acquire contingent talents. Additionally, the contingent workers themselves can be names as the target customers.

The Underserved Needs of the company are to engage contingent workers to the company's brand and create the base of pre-vetted candidates that can be easily and quickly accessed. The Underserved Needs of the workers are to connect with the large corporations and conveniently search and apply for jobs.

The chief value proposition of the product, as was defined in the previous parts of the chapter, is building and nurturing strong relations with the on-demand talents, engaging them with the company brand and being cost-efficient.

Feature set of the product include marketing automation, web-based platform with functionalities such as job posting, job application, application tracking as well as a provision of a Managed Service Provider maintenance.

Lastly, the product is developed to be ease of use and provide a convenient and efficient user experience. All the features are designed in a user-friendly manner to meet the needs of the customers.

5 EMPIRICAL RESEARCH AND DATA ANALYSIS

This chapter introduces the reader to the empirical research that was conducted for the thesis. The purpose of the research is to identify the needs of the platform users and analyze how the platform can be improved to meet those needs. It starts with a description of the data collection process and the methods that were chosen for the gathering of the data. After that, the collected data is analyzed and the customer journey of talent that is constructed based on the processed information is presented. In the end, the improvements will be suggested based on the reviewed literature, explored needs of the HR department and contingent talents, examined solution of the case company, collected data as well as on the information on the currently available technologies and techniques.

5.1 Data Collection

The data for the research was collected among the active users of the platform – the talents. The target groups included people using the solution tailored for 2 different client companies of Twago Talent Pool. The users to observe were selected in the way to make sure that the group would include recently registered talents as well as more experienced users. All the researches were conducted anonymously in order to provide a sufficient level of privacy for the observed ones.

The data for the research was collected through the following sources:

- Feedback collection tool that gathers comments from the users on the platform
- Customer experience data app that captures and analyzes the user interaction with the platform
- Phone call interviews with the users

Feedback comments were collected as answers to the following open-ended question:

- What can we do to improve?

The pop-up window with the question and the text field for the answer would appear randomly on the platform for the users that have been registered on the platform for more than 3 months. This limitation was made to make sure that responders would have some experience with using all the features.

The interaction between the platform and the users were examined using a designated tool. The researcher carefully observed the following parameters:

- How much time the basic steps of the flow were taking for the user to complete?

- What were the actions that were performed by the user in the manner that was not expected from the specialists designing the features?
- What were the actions that led to the errors in the system or confusion of the user?

The phone call interviews were conducted among 30 users. The target group was picked to include newly registered users as well as people that have been using a platform for a long time. The questionnaire for the interview included the following questions:

- How did you hear about the platform?
- How was the registration process? Was everything clear?
- Did you understand right away what is the talent pool and why it is needed?
- How did you find the project application process? Was everything clear?
- What do you think about the platform overall?
- Do you have any complaints, suggestions, suggestions for the features you want to see on the platform in the future?

The mentioned data sources and data collection methods are used by the case company to collect customer feedback on a regular basis and were identified as the most suitable for the purpose of the research. The Gantt chart below demonstrates the timeframe of the data collection and analysis process.

Activity	June 2019	July 2019	August 2019	September 2019	October 2019
Collecting comments on the platform					
Tracking users' interactions with the platform					
Phone call interviews					
Data Analysis					

Table 1 Gantt chart of the data collection and analysis process

The data collection was done from June until August. During September and October, the collected data was analyzed.

5.2 Data Analysis and Customer Journey

The following part summarizes the findings of the research. Firstly, the collected data will be grouped in the list of statements and themes that were raised or observed most often. Secondly, based on the analyzed data the customer journey of the talent will be created.

Firstly, all the data gathered was grouped. The first principle for grouping was to present the most common answers to the questions of the phone call interviews. The second principle was to assemble in topics recurring complains and comments, received in the form of comments or as answers to interview questions. In addition, when it was needed to develop or clarify the issue, data gathered from observations of users interacting with the platform interface was added.

The following common themes, opinions, problems, and topics of concern were outlined based on the analysis of the collected data:

- Most of the new users come to the platform because they were referred by a friend, a colleague or previously worked at a client company.
- The registration process is clear. The process of creating a profile on average takes between 5 and 25 minutes.
- Users hesitate on the step of requesting a membership for a Talent Pool. It might be complicated to choose the pools to apply for as well as generally understand what is the benefit of applying to one.
- Users want the platform to suggest job postings that would match their profile.
- The job application process is clear and easy. However, it is not clear when the job application will be closed.
- There are too many email notifications. Users want to have better functionality for adjusting email notifications based on their own unique personal requirements.
- The communication between the platform and the user seems very non-personal and standardized.
- When a candidate is rejected, the rejection reason is generalized and does not give any constructive feedback.

Today great customer experience is the chief concern for the companies. There can be numerous channels and touchpoints through which customers interact with the company's product or service. Thus, companies are forced to integrate various business functions and external solutions to create positive customer experiences. A Customer Journey is a conceptualized representation of customer experience. (Lemon & Verhoef 2018, 69-74.)

Based on all the collected and examined data the Customer Journey of the Talent was created and visualized in the form of a chart. The formation of the Customer Journey has started with identifying journey stages – the identifiable phases of the activity flow of the customer. The following 7 stages were outlined: Attraction, On-boarding, Talent Pool Application, Job Search, Job Application, Application Tracking, and Feedback Reception. Each step was examined and analyzed based on the following parameters:

- Customer activity – the practical actions that customer is taking during the stage
- Customer goal – the chief aim that the customer pursues on the stage
- Touchpoints – any places or channels of interaction between the product and the customer
- Feelings and thinking of the customer at that stage
- Pain points and frustrations or any difficulties of the customer that he/she might experience during the examined stage

To evaluate the defined journey stages based on the selected criteria, user interaction on each stage was carefully observed using a specialized tool of capturing users interplay with the interface. 40 users' sessions were observed on each of the established stages. In addition, users' feedback which was collected through the phone interviews and in a form of free feedback comments and has a relation to one of the defined journey stages were analyzed. The chart below represents the Customer Journey of the Talent that was created based on the processed data.

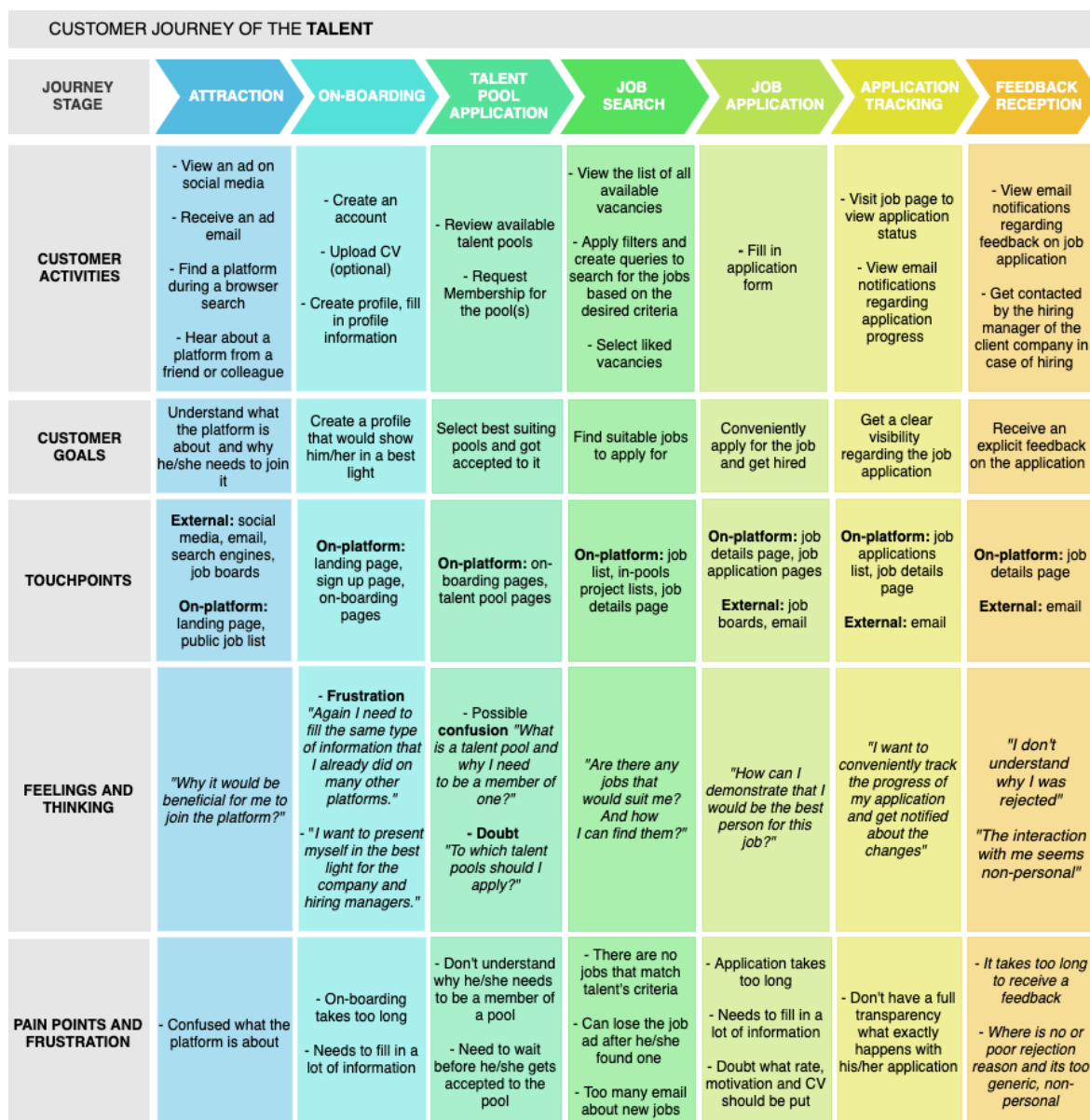


Figure 9 Customer Journey of the Talent

5.3 Improvement Suggestions

This part suggests some improvements for the case company solution. The recommendations are based on the examined collection of materials on the topic of contingent workforce, on the studied articles and reports as well as on the review of the case company solution and the collected and analyzed case company data.

Firstly, based on the evaluated feedback from the users as well as on overall low awareness about the concept of contingent workforce, and about its benefits for the workers, it can be suggested to provide more information and clarification on the mentioned topics on the platform. The clear and transparent set of information as well as some guidance on

the matters of contingent workforce set-up, law regulations, legal aspects, and welfares placed right on the landing pages or on a special info page would provide a necessary level of understanding and support for the new users and could even spark an interest for the permanent workers to try themselves in the contingent workforce and attract new customers.

Secondly, the collected data has shown that most users come to the platform because they were referred by someone or heard about the platform from the client company. Advertising on social media, doing Search Engine Marketing, video or display ads can attract new users and bring additional traffic to the website.

Thirdly, based on the direct demand of the users as well as overall development and popularity of machine learning technology, it can be suggested to integrate matching algorithms on the platform that would suggest to the candidate projects and jobs based on the information a person has provided in his/her profile. Job suggestions that would be distinctly marked among other job posting on the platform will make a job search for talents significantly easier and convenient.

Fourthly, one of the most raised issues among the users of the platform as well as generally among users of many products and services is lack of personalized communication. The communication on the platform is established via email, widget which is sending emails and, in addition, the phone number is provided. Meanwhile, communication can be improved with adopting a live chat widget or software that would be available for the users to ask any concerning questions or clarification, express doubts or report a problem and get a personalized answer from a person from the customer support in a real-time format. That would significantly improve the customer experience and provide an additional level of human touch, which is one of the values of the case company product.

Finally, another issue that can be a concern for both companies and workers is the career development and skills enhancement. As have been discussed previously, companies require highly skilled and experienced workers. It is a benefit for both talents and employees to agree on paths for future development and skills enhancement that would bring both parties to the route of improvement. Thus, it can be suggested to integrate on the platform career development and training plans, recommendations for the candidates for the skills improvement and learning opportunities. The plans on the mentioned topic can be generated from analysis of the talent's profiles and needs of the company as well as it can come directly from the inquiries and demands of the company.

6 CONCLUSIONS

This chapter concludes the thesis. Firstly, the chapter provides the answers to the research questions defined in chapter 1. Secondly, the reliability and validity of the research are stated. Finally, the chapter contains suggestions for further research.

6.1 Answers to the Research Questions

The aim of the thesis was to analyze how the case company can improve its platform with modern technology solutions to better meet the current trends and needs of the contingent workforce arena. Below answers for the research questions are provided. The main research question is answered after the sub-questions.

The sub-questions of the research were:

What are gig economy and contingent workforce?

Gig-economy is a kind of arrangement in which companies contract independent workers for short-term or project-based work instead of hiring them for a permanent position.

The contingent workforce is the labor group that consists of workers who provide temporary services for an organization on an on-demand basis.

What are the current and future trends in the field of the contingent workforce?

Some of the major contingent workforce trends are the growing amount of available data, millennials entering the workforce, diversity at workplace, faster decay of knowledge value, increasing talent scarcity, the need to be fast and flexible in processes and decisions, increasing attention to the company culture.

What are the needs and challenges of the HR departments of companies and contingent talents?

The challenges of contingent workers are lack of legal protection, imprecise law regulations, deficiency of support in regulatory issues such as invoicing and taxation, poor contingent employee management within the organization. They need easy and convenient tools to search and apply for jobs and want to ensure that a company that they are applying to is trustworthy.

Companies' HR departments are challenged with a lack of funding, legal aspects, scarcity of skilled talents, shortage of technologies and tools. They need to recognize the potential of contingent employment and realize its benefits.

How can the case company's digital platform be improved to better meet the needs of the company's HR department and contingent talent and to better support their interaction and cooperation??

The following improvements can be suggested for the case company solution:

- Provide more information and guidance on the contingent employment
- Advertise the platform more through social media, doing Search Engine Marketing, or displaying video or static ads
- Integrate data algorithms to match jobs to the candidates and visibly display suggestions on the platform
- Enhance communication and customer experience with the use of a live chat widget or a software
- Suggest career development and training plans, provide recommendations for the candidates for the skills improvement and learning opportunities

The main research question was:

How can current trends and needs of contingent workforce be met with the help of technology?

Digitalization of business operations, automatization of manual processes, and data algorithms can provide contingent workers and HR departments intending to hire them with the needed level of speed and flexibility. Moreover, technology can offer additional communication channels and improve accessibility.

6.2 Reliability and Validity

The thesis used secondary and primary data sources. Secondary sources were books, peer-reviewed articles and online publications from the experts of the field. Primary data was collected by the means of phone call interviews, capturing and analyzing the user interaction and collecting feedback comments. The objectives of the research were met and the research questions were answered based on the literature review, case study, and primary data analysis. Thus, the research can be considered valid.

The general findings of the research have a high reliability at the current time. However, the field is developing and transforming rapidly, so the outcomes of the research might be different if the research will be conducted later. The results of the case study and data analysis are reliable for the case company. However, they cannot reflect the situation for other companies.

6.3 Suggestions for Future Research

As have been mentioned earlier, the contingent workforce is currently undergoing rapid development, so further observation of the trends and transformations in the area is suggested. The review of the statistics, studies, and publication on the topic repeated in 2-3 years might uncover new insights and ways for improvement.

The collection of the case company data was made among the contingent workers. A further data collection among the HR specialist and companies' executives can provide a new perspective on the subject.

7 SUMMARY

Today the human resource environment is developing and transforming rapidly. Executives and HR experts begin to understand the potential of employing workforces in a contingent way. However, contingent workers and companies hiring them need tools and technologies to solve their needs and challenges.

The main aim of the research was to study how the case company can improve its platform with modern technology solutions to better meet the current trends and needs of the contingent workforce arena.

Chapter 1 introduced the aim and objectives of the thesis. It stated the research questions and discusses the research limitations, methodology, and structure.

Chapters 2 discussed the topics of the gig economy and the contingent workforce. The chapter provided the definitions and history of these two concepts, reviewed statistics available on the subjects and analyzed the current and future trends in the contingent workforce.

Chapter 3 outlined the needs and challenges in the contingent workforce. It provided an overview of the worker's and HR department's perspectives.

Chapter 4 comprised of the case company study. The chapter reviewed the case company digital platform for the contingent workforce market, analyzed the company value proposition and customers, and examined some of the platform functionalities and processes.

Chapter 5 contained empirical research and data collection. It described how the primary data for the research was collected. Moreover, the collected data was analyzed and in the end improvements for the case company were suggested.

Chapter 6 provided the conclusions of the thesis. The chapter presented answers to the research questions. Besides, it discussed the validity and reliability of the research. Finally, suggestions for further research were provided.

LIST OF REFERENCES

Printed Sources

Allan, P. 2002. The contingent workforce: Challenges and new directions. *American Business Review*. 20(2). 103-110.

Anderson, J., Narus, J., & Van Rossum, W. 2006. Customer value propositions in business markets. *Harvard Business Review*. 91-99.

Bristol, D. 2016. Companies Are Now Fighting For Talent!: Ramping up the utilization of contingent workforce. *Workforce Management (Time and Attendance) Excellence Essentials*. HR.COM.

Cooksley, K. 2017. On Demand Talent: The key to surviving the talent scarcity crisis. *Talent Management Excellence Essentials*. HR.COM.

Creswell, J. 2012. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Fourth Edition. Boston: Pearson Education, Inc.

de Ruyter, A., Brown, M., & Burgess, J. 2019. Gig Work And The Fourth Industrial Revolution: Conceptual And Regulatory Challenges. *Journal of International Affairs*. 72(1). 37-50.

Flanagan, F. 2017. Symposium on work in the 'gig' economy: Introduction. *Economic & Labour Relations Review*. 28(3). 378–381.

Hipps, C. 2018. How Do Organizations Battle Talent Scarcity?: The problem of talent shortage is getting worse. HR.COM.

Lemon, K., Verhoef, P. 2016. Understanding Customer Experience Throughout the Customer Journey. *The Journal of Marketing*. American Marketing Association. 80(6). 69-96.

Matusik, S., Hill, C. 1998. The Utilization of Contingent Work, Knowledge Creation, and Competitive Advantage. *The Academy of Management Review*. 23(4). 680-697.

Olsen, D. 2015. *The Lean Product Playbook: How to Innovate with Minimum Viable Products and Rapid Customer Feedback*. Hoboken, New Jersey: John Wiley & Sons, Inc.

Parks, P. 2014. Onboarding Contingent Workers: Challenges and Solutions. *SDCExec.com*. AC Business Media.

Scott, K. 2017. 63% of gig economy workers believe government should regulate to enable access to benefits. *Employee Benefits*. Centaur Media USA Inc.

Smith, D. 2018. How HR Professionals Can Keep Pace In The Gig Economy. HR Strategy and Planning Excellence Essentials. HR.COM.

Spalla, E. 2018. Adopting A Contingent Workforce Strategy. Workforce Management (Time and Attendance) Excellence Essentials. HR.COM.

Stewart, A. & Stanford, J. 2017. Regulating work in the gig economy: What are the options? *The Economic and Labour Relations Review*. 28(3). 420–437.

Thompson, J. 1997. The contingent workforce: The solution to the paradoxes of the new economy. *Strategy & Leadership*. Chicago: Emerald Group Publishing, Ltd. 25(6). 44-45.

Victor, T. & Dalzell, T. 2007. *The Concise New Partridge Dictionary of Slang and Unconventional English*. Taylor & Francis. 288.

Wasley, P. 2016, Contingent Workforce: Six factors that drive them. Talent Acquisition Excellence Essentials. HR.COM.

Williams, C. 2007. Research Methods. *Journal of Business & Economic Research*. 5(3). 65-72.

Digital Sources

Anwar, A. 2018. How Marx predicted the worst effects of the gig economy more than 150 years ago. NS Tech [accessed 27 September 2019]. Available at: <https://tech.newstatesman.com/guest-opinion/karl-marx-gig-economy>

Bureau of Labor Statistics. 2019. Frequently asked questions about data on contingent and alternative employment arrangements. U.S. Bureau of Labor Statistics [accessed 14 October 2019]. Available at: <https://www.bls.gov/cps/contingent-and-alternative-arrangements-faqs.htm>

Business Dictionary. 2019. Craigslist [accessed 28 September 2019]. Available at: <http://www.businessdictionary.com/definition/Craigslist.html>

Cambridge Dictionary. 2019. Meaning of gig economy in English [accessed 5 September 2019]. Available at: <https://dictionary.cambridge.org/dictionary/english/gig-economy>

Collins English Dictionary. 2019. Definition of 'gig economy' [accessed 1 November 2019]. Available at: <https://www.collinsdictionary.com/dictionary/english/gig-economy>

- Deloitte. 2011. Global Business Driven HR Transformation: The Journey Continues. Deloitte Development LLC [accessed 12 October 2019]. Available at: <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/HumanCapital/dttl-hc-hrtransformation-8092013.pdf>
- Duffin, E. 2019. Freelance participation in the United States as of 2018, by age. Statista [accessed 19 September 2019]. Available at: <https://www.statista.com/statistics/531012/freelancers-by-age-us/>
- Oxford Economics. 2019a. The rise of the contingent workforce. Oxford Economics [accessed 16 September 2019]. Available at: <http://www.oxfordeconomics.com/publication/open/261334>
- Oxford Economics. 2019b. Workforce 2020: The Looming Talent Crisis. Oxford Economics [accessed 15 September 2019]. Available at: <http://www.oxfordeconomics.com/publication/open/250945>
- Oxford Economics. 2019c. Workforce 2020: Infographic: The Contingent Workforce. Oxford Economics [accessed 23 October 2019]. Available at: <http://www.oxfordeconomics.com/publication/open/261312>
- Mazor, A., Houillier, S., Tremblay-Charland, M., Zucker, J. & Winsor, S. 2019. The digital workforce experience: Getting technology to work at work. Deloitte [accessed 9 October 2019]. Available at: <https://www2.deloitte.com/global/en/insights/topics/digital-transformation/improving-digital-employee-experience.html>
- Randstad Sourceright. 2019. Talent Trends Quarterly: Q3 2019. Randstad Sourceright [accessed 21 October 2019]. Available at: <https://content.randstadsourceright.com/hubfs/Global%20campaign/TTQ/2019%20Q3/Randstad-Sourceright-Talent-Trends-Quarterly-total-talent-management-190924.pdf>
- SIA. 2018. The Human Cloud, the Gig Economy and the Transformation of Work. Crain Communications Inc. [accessed 9 September 2019]. Available at: https://www2.staffingindustry.com/content/download/266526/9732110/2018_GigEconomy_Summary_Web_1810.pdf
- Upwork. 2019. Freelancing in America 2018. Upwork Global Inc. [accessed 19 September 2019]. Available at: https://s3.us-west-1.amazonaws.com/adquiro-content-prod/documents/FIA_full-infographic.pdf