# A Mobile Career App for PwC in Moscow, Russia







#### A Mobile Career App for PwC in Moscow, Russia

#### AN INTERACTIVE QUALIFYING PROJECT REPORT SUBMITTED TO THE FACULTY OF WORCESTER POLYTECHNIC INSTITUTE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE

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This report represents the work of three WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on its web site without editorial or peer review.

# Abstract

The goal of this project was to determine if PwC Russia would benefit from the implementation of a mobile recruitment app. We conducted interviews, a survey, and focus groups in an effort to gather vital information. We designed a prototype and compared it to PwC Russia's website in the second focus group. We determined that the app would be a more effective recruitment tool. We recommended PwC Russia to develop an app and utilize the five key components described.

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# Authorship

All members of the team made contributions to this report and team consensus was reached on all major decisions. There were several edits done on each section. The original author(s) for each section are listed below-

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Background	Alexander, Dominik, Kushagra
Methodology	Alexander, Dominik, Kushagra
Results and Analysis	Alexander, Dominik, Kushagra
Conclusion and Recommendation	Alexander, Dominik, Kushagra
Appendices	Alexander, Dominik, Kushagra

## **Table of Contents**

A Mobile Career App for PwC in Moscow, Russia	i
Abstract	ii
Acknowledgements	iii
Authorship	iv
Table of Contents	v
Table of Figures	vii
Executive Summary	viii
1.0 Introduction	1
2.0 Background	2
2.1 Current Company Recruitment Methods	2
2.1.1 Employer Branding	2
2.1.2 Events	
2.1.3 Company Career Websites and Social Media	3
2.1.4 Other Methods	
2.2 Popularity of Mobile Smartphones and Apps with Implications for Recruitme	ent 4
2.3 Effectiveness of Mobile Recruitment Apps	4
2.3.1 Companies and Jobseekers are Disconnected	4
2.3.2 The Costs of Developing an App	5
2.3.3 Success of Company Recruitment Mobile Apps	5
3.0 Methodology	7
3.1 Evaluating Company Career Apps	7
3.2 Designing a Prototype for PwC Russia's Mobile Career App	7
3.2.1 Researching the Design Process	7
3.2.2 Design Prerequisites	
3.3 Assessing the Application Prototype	
4.0 Results and Analysis	
4.1 Evaluating Company Career Apps	
4.2 Designing the Prototype	
4.3 Assessing the Prototype	15
4.4 Estimating the Cost of a Mobile App	19

5.0	Conclusion	20
6.0	Recommendations	20
Bibli	ography	21
Appe	endices	25
Aŗ	ppendix A: Results of survey	25
Ap	opendix B: WPI Professor Interview Questions	28
,	2.1 Professor Agu Interview Results	28
,	2.2 Professor Tulu Interview Results	30
Ap	opendix C: Interview with WPI CDC Recruiting Managers	32
Aŗ	ppendix D: Chris Russell Interview	35
Aŗ	ppendix E: Interview with Sodexo	37
Aŗ	ppendix F: App Storyboard	39
Aŗ	opendix G: App Estimated Cost	40

## **Table of Figures**

Figure 1: Skill Building	. 11
Figure 2: Application Screen	. 11
Figure 3: Events	. 11
Figure 4: Average Rating for Question 1 and Question 2 for each component	. 14
Figure 5: Average rating for Question 3 for each component	. 15
Figure 6: Menu Screen	. 16
Figure 7: An average of how students responded to the third question for each component	. 17
Figure 8: An average of how students responded to the first and second questions for each	
components	. 18
Figure 9: Average rating of the whole app by participants	. 18
Figure 10: Average rating of individual components by participants	. 18

# **Executive Summary**

#### **Problem and Goal**

The goal of our project was to determine if PwC Russia would benefit from the implementation of a mobile recruitment app. Mobile smartphone recruitment apps have been successful. Currently, PricewaterhouseCoopers (PwC) Russia has not implemented such an app.

#### **Objectives and Methods**

The project consisted of three objectives:

- Evaluate company career apps We read literature concerning mobile apps and their usefulness for adoption by companies, focusing on large international corporations.
- Design a prototype We conducted interviews with a company that has a recruitment app, two WPI professors who have experience with mobile app design, and a professional app designer. Once we arrived in Moscow, we conducted a survey to students at the Financial University to gather general information on smartphone use. Before designing the prototype of the app, we organized a focus group in order to determine if students would use a mobile recruitment app. We used *Justinmind*, an app prototyping software, to build the prototype for PwC Russia's career app. We divided the app into five main sections: company information, events, skill building, trivia and rewards, and application process.
- Compare the prototype to PwC Russia's website After designing the prototype, we conducted a second focus group to compare it to PwC Russia's website.

After we completed our objectives, we presented our recommendations. From our research, we concluded that PwC Russia should develop a career app. We further presented the company with three recommendations:

- $\circ$   $\;$  Implement all five main components in the app
- Prioritize development of highest rated components
- Natively incorporate the application process

## 1.0 Introduction

Mobile technology is "growing at the speed of light" (Latest mobile app development trends for 2016.2016). Businesses of various sizes are using mobile apps as an effective tool to improve customer engagement, build brand recognition, and ultimately differentiate themselves from their competitors (Haselmayr, 2014). As society is becoming more technologically-oriented, many companies are beginning to adapt by creating mobile apps to increase their successes. Recruiting apps in particular are becoming popular as employers are using them to create concrete matches with candidates. In addition, recruiters and applicants can access each other's information without scheduling any appointments. Given the amount of efficiency presented in such apps, companies can find quality candidates faster versus using standard methods such as career fairs or company websites. One example being *HireVue*, a recruiting platform, which managed to receive 13 percent more top performers and 17 percent fewer poor performers through a recruitment app (Tantry, 2015).

PricewaterhouseCoopers Russia (PwC Russia) is one company that is interested using this unique approach of obtaining quality candidates. By creating a mobile app, PwC Russia will appeal to today's generation of students and be able to connect with them. Other companies such as Deloitte and Ernst & Young have already created mobile career apps, but these apps lack user engagement since the content in each is a compressed version of each company's respective website. The core values of PwC are teamwork, excellence and leadership. With the recruiting mobile app market being so new, PwC Russia has a substantial opportunity to be a leader in company recruitment through differentiation and innovation.

The goal of this project was to determine if the company would benefit from implementing a mobile smartphone recruitment app. By using this modern approach, the company has an opportunity to advance its recruitment efforts and obtain quality candidates. To accomplish this goal, we formulated the following three objectives:

- 1. Evaluate company career apps
- 2. Design a prototype
- 3. Compare the prototype to the website

We first conducted a series of interviews with sources that have experience with mobile app design. Then, we reviewed the apps that PwC and its competitors have published to get an idea of the existing apps in the market. Next, we conducted a survey to gather design prerequisites on what features students would like to have. Finally, we organized a focus group to determine what features would appeal to university students the most. Using this information, we designed a prototype of a career mobile app that addressed students' needs along with suggestions from PwC. We conducted a second focus group to compare the prototype to PwC Russia's website in order to offer a final recommendation.

## 2.0 Background

In this section, we begin with a brief overview of current company recruitment practices. Next, we discuss the popularity of the mobile smartphone market. Finally, we present examples of successful recruitment apps.

### 2.1 Current Company Recruitment Methods

A goal of any good "leadership team" is to attract quality candidates (Anderson, 2013). In order to survive and be able to adapt to changing markets, companies need employees that fit the company. There are various recruiting methods, but many employers have not taken full advantage of the mobile smartphone market. Until the advent of mobile devices, company recruitment has come in four main forms: branding, events, online job search portals, and other unconventional recruiting methods.

#### 2.1.1 Employer Branding

Employer branding has been the most important focus for companies looking to recruit the most talented employees (Wei, Y., Chang, C., Lin, L., & Liang, S., 2016). Teetz (2013) observes that "committed employees start off as convinced candidates." Three important components of employer branding are as follows: identity, conviction, and application (Teetz, 2013). Company identity is what the company projects itself to be. A job seeker wants to work for a company that shares his values and beliefs (Wei, Y., Chang, C., Lin, L., & Liang, S. 2016). "Job seekers will project certain features onto the organization," which is why it is important that a company connects with them through painting a positive picture (Lu & Liou, 2015). According to Toops (2014), building a relationship with an employee through mentoring and teamwork is essential to maintaining a high retention rate, which is the measure of how many employees stay at a company during a given period of time. Mentoring provides employees, especially those hired just out of school, with support, guidance, and leadership (Toops, 2014). Teamwork allows millennial employees to be engaged with work since they "prefer to work in teams" rather than individually (Toops, 2014).

Consumer branding helps companies attract consumers, and a clearly defined employer brand helps to attract skilled candidates. Suzanne Chadwick, Head of Employer Branding, Digital & Sourcing Innovation for Hudson RPO, said that "a clearly defined employer brand will help ensure that those they hire will not only have the right skills, but also be a solid fit with the company's culture and work environment". This helps employees have "increased levels of engagement" and leads to "higher rates of retention" (Millar, 2014). A LinkedIn survey found that the cost per hire is cut in half for companies with stronger branding. The indexed cost goes down from 125 to 67 with more employer brand strength. Moreover, there is a 28% decrease in turnover rate for companies with a strong brand (Gultekin, 2011).

#### 2.1.2 Events

Companies organize a variety of on-campus events to interact with students. Career fairs have been one such type of event (Ozkan, Goldsher, & Foote, 2014). A direct interaction between students and the employer helps to get students more interested in the company, and build brand awareness. There is a correlation between a company's reputation and the candidate's desire to apply to that company (Daniel & José, 2010). According to Suzuno (2013), companies also organize information sessions. These events serve as a platform for advertising the company by talking about its background, industry, and vision. Information sessions help to engage students and further build the company brand on-campus. Hackathons are used to attract students in computing-related fields. According to Drake, they are 24 to 36-hour long coding events where students compete to win prizes. It's a great way for companies to learn how students solve a problem in the given amount of time (Drake, 2014). Suzuno mentions that a representative from the sponsoring company can give tech talks and info sessions during the hackathon (Suzuno, 2013).

#### 2.1.3 Company Career Websites and Social Media

Many companies have developed websites and a social media presence to reach out to jobseekers. Wigeman (2015) introduces the findings of a survey by Potentialpark consisting of more than 23,000 job seekers in more than 100 countries. The survey results indicated that 80% of respondents actively find company information using career websites, 51% use professional networks, and 32% use social media. In addition, the survey found that young applicants prefer a more personal website for finding information on a company (Wigeman, 2015). Social media has played an important role in filling job openings, as "92% of the companies are using social media for hiring". 45% of Fortune 500 companies include advertising for their social media accounts on their career websites. 73% of candidates were hired through social media, and 42% of companies responded that candidate quality has increased through social recruitment (Torres, 2013).

#### 2.1.4 Other Methods

Some companies have also utilized unorthodox methods to locate good employees. One company utilized methods such as airing 15 second commercial videos, creating billboards, and even using an RV from which to hand out flyers (Anderson, 2013). Fields (2014) mentions that gamification is another unique recruitment method that is gaining popularity. Gamification is the process of adding "gaming principles and metrics to procedures and a way to test candidates which increases engagement, collaboration and communication." Gamification allows a company to make recruiting more interactive and helps to identify people with qualities that best match the company's expectations. Gamification has been utilized by entities such as Marriott Hotels and

the United States Department of Defense (Fields, 2014). Unique methods of recruitment are innovative and fresh ways to reach out to talented people.

# 2.2 Popularity of Mobile Smartphones and Apps with Implications for Recruitment

Gurtner, Reinhardt and Soyez (2014) state that the launch of the App Store in 2008, coupled with the popularity of the iPhone and iPod, caused the mobile app market to grow tremendously. Since the introduction of other app markets such as Google's Play Store, the revenue from mobile apps across all platforms hit \$185 billion in 2014 (Gurtner, S., Reinhardt, R., & Soyez, K., 2014). In 2014, the smartphone penetration rate in Russia was 41.20% and is predicted to hit 66.73% in 2021 (Statista, 2016). Coupled with traditional recruitment methods, a mobile app grants students a convenient way to look for job opportunities as well as apply to those positions. However, many companies have not invested in creating a mobile app for recruitment. As of 2014, only 30% of the Fortune 100 companies have created a mobile app (Redmond J., 2014).

We conducted an interview with WPI CDC staff members Allyson Bernard and Bailey Rand about WPI's career fair app (see Appendix C). They told us that the purpose of the app is to simplify the process of preparation and attending career fairs at the university. The app provides information such as a detailed floor plan and advice on how to talk with company representatives. Since the app was implemented, the amount spent on printing costs used for marketing brochures was reduced significantly. Overall, the app has been successful and students have given it positive reviews.

There are many aspects of smartphones and apps that lend themselves well to employee recruitment. According to Böhm, the most important of these aspects is that the mobile smartphone is ubiquitous. Smartphones travel with their owners, unlike desktops (Böhm, S.).

## 2.3 Effectiveness of Mobile Recruitment Apps

#### 2.3.1 Companies and Jobseekers are Disconnected

Smartphones are being used to browse the web and download apps for a variety of purposes. According to Kathryn Dill (2014), job seekers generally feel disconnected with companies in the area of job recruitment. When polled about existing recruitment methods, only 16% of people looking for jobs agree that current methods are effective (Dill, 2014). Now, according to statistics gathered by *SimplyHired*, 86% of people who owned smartphones would use them to search for job openings, and 45% would also like to use it to apply for jobs (Reilly, 2013). By "lagging in mobile strategies," companies are "losing millennial applicants" (Dill, 2014). Millennial applicants, fresh out of school with current knowledge and practices add value to the companies they decide to work for. Industry leaders have taken advantage of the

smartphone, but many companies are unprepared for the huge shift to mobile job hunting (Alsever, 2014). By not taking advantage of the mobile application space, employers are losing out on talented minds. Although research into mobile apps for job recruitment is scarce they have proven to be effective.

#### 2.3.2 The Costs of Developing an App

Yarmosh (2015) states that the price of an app depends on its "features, complexity and platform". The cost of a simple mobile app can start from \$25,000 and for a complex app the cost can be "six figure[s]". In rare cases, the cost may even hit over \$1,000,000. There are multiple factors that cause the cost of an app to vary, such as if it has a back-end server and if the development is outsourced. Other costs such as app updates, marketing, and the salary of the developers should also be taken into account (Yarmosh, 2015).

Shaoolian (2015) states that based on a general development cost of \$150 per hour, an app will typically range in total expense from \$35,000 for a simple app to over \$200,000 for a "highend, complex and deeply tailored" app (Shaoolian, 2015). However, an article by Formotus shows how cost estimates can vary from different app development agencies. Applico's average cost ranges from \$100,000 to \$300,000. Savvy Apps' average is between \$250,000 and \$450,000 while Fueled's average cost ranges from \$150,000 to \$500,000 (Figuring the costs of custom mobile business app development, 2016).

#### 2.3.3 Success of Company Recruitment Mobile Apps

In a survey conducted by Glassdoor, 89% of job seekers said that a mobile device is an important "tool and resource" for their job search. In the same survey, 84% of respondents said that they believed "mobile devices will be the most common way people will search for jobs within the next five years." Currently, 30% of job seekers use their mobile devices once a day to search for jobs and about 68% use it once a week or more (Glassdoor Team, 2013).

One case study conducted on top German companies showed that large corporations are not investing enough in the mobile application space (Böhm, S.). The few companies that have implemented a mobile recruitment app have been successful. One such example is PepsiCo UK's career app. Within 60 days of the app being released on the App Store, it was downloaded 3,500 times, and it sent out 2,100 job alerts. Katie McNab from PepsiCo's talent acquisition team explained that it was a "nice surprise" (PepsiCo careers app to launch in UK later this year, 2011). Over a period of about three years, the number of jobseekers that applied through PepsiCo's app increased by a factor of eight (Alsever, 2014).

ExxonMobil has also seen success with a mobile career app. The company created its app *Working at ExxonMobil* in just three months using *Adobe Digital Publishing Suite*. In an interview with Adobe, Recruiting Consultant Jeff Paul of ExxonMobil stated that the application and campus recruitment go hand in hand, and since top students "want to work for innovative companies," the mobile app shows that innovation is a corporate value. With ExxonMobil being an environmentally conscious company, creating the mobile app has reduced the amount of brochures that had to be printed, thus lessening the impact on the environment (ExxonMobil aims to attract top talent with "Working at ExxonMobil" app, 2015).

AT&T's mobile career app, since it launched in 2009, has become an effective tool for hiring employees. Within each team in AT&T they have designated a "Talent Attraction Manager." There was a decrease of 74% in paper printing with an overall reduced cost per application to \$3.11. Moreover, the cost per hire was also reduced. In total, AT&T's app reached more than 20,000 downloads by December 2009, and currently has over 200,000 members in the talent network since its launch in February 2009 (Corbin, 2010).

According to Rafter, National Instruments Corporation, a computer-based measurement tool company, developed a mobile career app as well. According to Roxanne Green, University Recruiting Manager of National Instruments, developing a career app was a "no-brainer" as 80% of its 150 to 250 new employees are recent college graduates. She further mentions that students have many companies that they apply to and the career app is a way for students to apply quickly. Also, in order to advertise the app, information about it appears on the career website, in emails, and in presentations given at career fairs (Rafter, 2010).

Sodexo is another company that was very successful with its app implementation. We conducted an interview with Chloé Rada, Senior Marketing Manager of Sodexo, and she mentioned that the app has been beneficial (see Appendix E). The main purpose of the app is to assist "candidates stay connected to the community and to learn about new jobs." After a year of development, it was launched into the market and since then it has gained popularity with about 50,000 downloads within four and a half years of its release. In total there were 815 people hired through the app and the company received multiple awards in interconnectivity. When we asked what made the app effective, she said "The key for any company recruiting app is to apply right from the phone. If the candidate does not have a profile in the company, they should be able to create a profile and upload from a cloud service like Dropbox, or be able to transfer it from LinkedIn." Sodexo is considering investing further in its app to enhance the content and to update it regularly with job openings.

## 3.0 Methodology

Our goal was to determine if PwC Russia would benefit from developing a mobile career app. In order to achieve this goal, we formulated three objectives for our project:

- 1. Evaluate company career apps
- 2. Design a prototype
- 3. Compare the prototype to the website

## 3.1 Evaluating Company Career Apps

In order to find out what features should be incorporated into PwC Russia's career app, we looked at the content and design of apps that other companies have implemented. We searched the Fortune 100 Companies list and marked which companies had career apps. We evaluated several of the apps and noted their content and structure. By the end of this process, we had a concrete set of information listed along with different formats for organizing the data. We then narrowed the information into five components. Next, we received general feedback from students in our survey and focus groups about which were the most important to them. In addition to content and design, we interviewed Sodexo about its app to find further information such as the cost of developing an app and the results of having one (see Appendix E). We were also able to determine what criteria are needed in order to meet the basic standards of career apps.

Before building the app, the development cost is an important factor to take into consideration (Ballester, 2014). To understand the estimated cost of the app, we were able to get mobile app estimates from various app development companies like Crew, Otreva, and VenturePact. These companies' estimate tools asked for various features that the app will require. Moreover, Crew and VenturePact were able to give us the estimated development cost specific to Russia or Eastern Europe.

## 3.2 Designing a Prototype for PwC Russia's Mobile Career App

#### 3.2.1 Researching the Design Process

In order to design the application, we needed to first become familiar with the design process. Then, we determined which features the PwC Russia app should include. We surveyed students to decide which mobile OS to design for. Finally, we identified a tool that would allow us to design for this platform.

We started by interviewing two professors from WPI who have expertise in the field of app design and implementation. We asked them questions (see Appendix B) about what they thought of career apps in general and received recommendations on how to structure such apps along with which software to use. We also asked the professional app designer, Chris Russell, about the process of designing (see Appendix D). The responses we received helped us plan the rest of our methodology, so that we would be able to gather all the information we needed.

Our app design process can be broken up into several steps:

- Determine the purpose of the app The purpose of the app is to build a relationship between PwC Russia and the users.
- Review competing apps We reviewed other company apps to determine what content should be in our prototype.
- Design the layout of the app When we constructed our prototype, we made decisions about typography and structure.
- Test the design After creating the prototype, we tested the design to see if it appealed to students (Sandu, 2015).

### 3.2.2 Design Prerequisites

Our Russian student partners conducted a survey using a sample of convenience of 100 students from the Financial University. The questions were designed to help us determine which mobile operating system is most popular amongst students, how much time students spend on their smartphones, and how they would like to spend points gained from using the app. These questions helped us to determine what features they would like to have. The list of questions can be found in Appendix A.

After the survey, we also conducted a focus group with nine students in order to determine if an app with the listed features is something that students would download and use. For this focus group, we used *Poll Everywhere*, a software that allowed students to answer the questions via the internet on their smartphones. The responses would be shown in real time which gave us an opportunity to ask any additional questions openly.

As for the prototyping software, we ultimately chose to use *Justinmind*. This program offers similar functionality to that of Apple's *Xcode* but does not involve any source code. This allowed us to design more screens in a less amount of time. Another useful feature that *Justinmind* provided was the ability to view our prototype on our own mobile devices. The aforementioned feature was especially useful when demonstrating the prototype in our second focus group.

## 3.3 Assessing the Application Prototype

Our final objective was to compare the prototype to the website. To do this, we conducted a second focus group with students at the Financial University. We utilized the same questions as the first focus group. However, before each set of questions, we displayed PwC Russia's website

side-by-side with the prototype for the students to compare. After the focus group, we were able to make our final recommendation to PwC on whether or not it should develop a career app.

# 4.0 Results and Analysis

In this section we discuss the results of our interviews, survey, and focus groups to determine if PwC Russia would benefit from a career app. We start with highlighting the content and structure of successful company apps. In addition, we interviewed a company with a career app to get an idea of the costs and benefits of developing one. The second section discusses the results from our survey and first focus group and how we structured the prototype. The final section analyzes the results of our second focus group, which compared the prototype to PwC Russia's website. We used the results of our background research and focus groups to make recommendations.

## 4.1 Evaluating Company Career Apps

In order to determine the content and structure of PwC Russia's career app, we looked at the Forbes Fortune 100 Companies and made a list of those companies with career apps. We evaluated several of these apps by analyzing the purpose and content of each. A majority of the company apps contained company information. However, three of them stood out from the rest. These apps were:

- 1. Deloitte by Deloitte. (iOS)
- 2. *PwC Talent Exchange* by PwC (US branch)
- 3. DTNA Careers by Daimler Trucks North America LLC

*Deloitte* incorporated a skill building section that offers users tips on how to improve their interview etiquette (Deloitte, 2014). Although it is limited to just interview tips, we took this idea and expanded upon it by incorporating training on a wider variety of skills as seen in Figure 1.

*PwC Talent Exchange* is an app entirely dedicated to applying for vacancies within PwC's U.S. branch. Even though it is still in its beta phase, it has one of the best looking user interfaces, along with features to facilitate applying for job vacancies. Some of these features include:

- 1. Resume Parsing When a user uploads his or her resume, the app will parse it based on its sections.
- 2. Fit Score This system matches the user to current open positions in the company based how well the user's resume matches the job requirements.
- 3. Role Tracking The app keeps track of the status of where the user's application stands for positions he has applied to.

We viewed these three features to be the key elements of an application component. One of the ideas for the application portion of our prototype was to have it redirect the user to the career website (PricewaterhouseCoopers (PwC), 2016). After reviewing *PwC Talent Exchange*, we decided to model this section after it, and build the functionality natively into the prototype as

seen in Figure 2. We did this in order to prevent having the user alternate between the web browser and the app.

In our initial conversations with our liaisons, they highlighted the importance of company events. The *DTNA Careers* app includes an events component. The app gives the option to display the events in a calendar or a list format (Daimler Trucks North America LLC). We used this idea as a basis for our prototype. It displays information about events on a calendar as seen in Figure 3. Users can register for events and get notifications for upcoming company events.



Figure 1: Skill Building

**Figure 2: Application Screen** 

Figure 3: Events

While we took the main sections of the apps that we reviewed and incorporated them into our prototype, we also wanted to include a component that will make the prototype stand out. One of our liaisons suggested incorporating a game. "Gamification" has proven to be an effective method of recruitment as discussed in our background chapter. We divided the component into two different types of games: a skill test, which tests a user's knowledge in a specific field, and a trivia game, which tests a user's knowledge of general information about PwC. This, combined with a rewards system, was the most appealing part of the app to students in our focus groups.

In conclusion, we determined that the prototype should have five main components. Those five main components are: company information, application process, trivia and rewards, skill building, and events. These features, along with their main functions, are summarized in Table 1.

Component	Purpose
Company information	Displays information on company history, company achievements, and company news.
Application Process	Allows the user to upload a resume from LinkedIn, search for job according to specific parameters, apply to jobs, and check the status of finished applications.
Trivia and Rewards	Allows the user to play a trivia game or take a skill test. The user gains points for correct answers and can spend them in a rewards store. Completing the skill test allows the user to win certain rewards based on where he or she ranks with other users.
Skill Building	Presents the user with short tutorials on how to improve in an area or in a skill that the company values.
Events	Allows the user to view upcoming events, get information on the events, and to register for events.

Table 1: Summary of the features we incorporated into our prototype.

## 4.2 Designing the Prototype

Before we delved into the process of designing the prototype, design prerequisites had to be determined. The operating system was the first of the design prerequisites. In our survey (see Appendix A), we asked 100 students at the Financial University what operating system they have on their phones. 74% of students responded that they had phones with iOS while 25% had Android. With this information, we were able to design a prototype that majority of the students would be familiar with.

We also gathered information about what features students were looking for in a mobile career app. One question that we asked students was; "How would you like to use your points [gained from the trivia game and skill test]?" The options presented were:

- 1. Company Rewards Store Users would be able to buy company related items i.e. a mug by spending their points like currency.
- 2. Leaderboard System Users would be ranked on a leaderboard based on how many points they scored in a given time. Prizes would be awarded to a percentage of the highest scored users.
- 3. Both A mix of a company rewards store and a leaderboard system.

4. Other

Option three scored the highest at 37%. Therefore, we implemented both a leaderboard and a rewards store into the prototype. As a result, we also addressed the desires of the 44% of students that chose either option one or option two. Since the trivia and rewards component is unique to this app it was important that it appeal to a majority of students.

Noting our sponsors' interest in promoting LinkedIn to students, we decided to incorporate it as an alternative method for logging into the app. In addition, we asked students what social media they use the most. A significant number of students responded with VKontakte at 91% and Facebook at 5%.

We wanted to determine if the five components that we proposed appealed to students. We conducted a focus group with nine students from the Financial University. The questions were designed using a Likert scale for the responses in order to receive specific data. For each component, we asked the same three questions:

- 1. How likely would you download a company app with a [Component]?
- 2. How frequently would you use a company app with a [Component]?
- 3. [Component] would be better on the company's website compared to an app.

In order to quantitatively evaluate the results, it was necessary to assign point values to responses. We assigned a score of zero to the answers that did not favor an app and four to the answers that highly favored an app. We were then able to graph participant responses by simply averaging the scores and dividing it by four to get a percentage. An app with the five components appealed to the students, who rated it a 3.11 out of 4.00. To discern which components students were most interested in, we asked them two questions: 1) How likely are you to download an app for a specific component? and 2) How frequently would you use an app for this component? According to Figure 4, students were most likely to download an app for the application process and trivia and rewards components. With the exception of company information, students favored downloading an app with the other four components. The application process also scored the highest for frequency of use. Since the majority of respondents were third year students, we concluded that they are more interested in applying than learning about company information.



Download and Usage Percentage by Category

Figure 4: Average Rating for Question 1 and Question 2 for each component

Since the application process was ranked the highest for the first two questions, we wanted to determine if it was the same when it came to preference of platform. We presented students with a statement for each component and asked which platform they would prefer the component to be on. Once again, the application process scored the highest as all students agreed that this would be better on the app since it's convenient and easy to use (see Figure 5). Company information was the only component that students preferred on the company's website. When asked for their reasoning, one student had commented that she would not initially search for company information on an app. Another mentioned that the information presented would also be limited in comparison to a company website.



Prefered Platfrom for Each Category by Percentage

Figure 5: Average rating for Question 3 for each component

## 4.3 Assessing the Prototype

Before designing the prototype, we created a storyboard (see Appendix F) in order to get an overall visualization of how the app would be structured. In total, we had 17 screens that needed to be designed along with some minor functionality. The general structure of the prototype involved a login screen that would bring the user to a menu screen. From there, the user could navigate through the rest of the prototype using the navigation bar at the bottom of the screen. This is key for any iOS app as it puts the ability to traverse through the app within thumb's reach.

The first screen that appears upon logging in is the main menu screen (see Figure 6). Trivia and rewards was one of the most highly rated components. Therefore, we chose to display their points and ranking on the main menu screen. In order to provide the user information about what has changed in the app since its last use, we included a notifications section for the sake of convenience.

	23:23 PM My Profile	*	80% 🔳
Pr	ofile Nar	ne	
1,755	1	op 10%	6
			17:51
Application Status Change	au		
<ul> <li>Application Status Change</li> <li>Event Tornorrow</li> </ul>	au		
Application Status Change Event Tomorrow Trivia New Question	si		

Figure 6: Menu Screen

Once the prototype was finished, we conducted a second focus group with nine students. We asked the same questions as in the first focus group. However, before asking the questions on each component, we showed the students the prototype and website side-by-side. We analyzed the data the same way as in the first focus group.

When we asked if a specific component of the app would be better on a company website compared to a company app, most responses were either neutral or for the website, as shown in Figure 7.



Preferred Platform for Each Category by Percentage

Figure 7: An average of how students responded to the third question for each component

A majority of the students responded that each component of the app would be better suited for the company website. Generally, students responded neutrally for a skill building and a trivia and rewards component. The result for the trivia and rewards section surprised us the most, because we thought that it made the most sense to have on an app. Not one student believed that company information or skill building would be better on an app than the website. The responses to this question were very different from the first focus group.

When asked if they would download the application for a particular feature, most students responded in the affirmative (see Figure 8). We then asked students how frequently they would use an app with each component. Students responded negatively for all of the components except for events and trivia and rewards. The trivia and rewards component was the most appealing to the students.



#### Download and Usage Percentage by Category

Figure 8: An average of how students responded to the first and second questions for each components.

The next step was to compare the ratings students assigned the individual components to the ratings of the app as a whole. Students rated the whole app at a 2.7 out of 4.0, while the individual components were rated at a 2.2 out of 4.0. Similar to the results of the first focus group, the app as a whole appealed to students more than each individual category (see Figures 9 and 10).



Average Rating of all Individual Categories



Figure 9: Average rating of the whole app by participants



## 4.4 Estimating the Cost of a Mobile App

After it became clear which components were needed, it was possible to collect cost estimates for the development of the app. The estimates that we received from various sources are as follows:

- AppVsWebsite.com Before using the cost estimator, we validated that the app will be better than the website in a simple calculator. The cost estimator asked us eight questions about what features the app will include. The results indicated that developing an app is a sound idea. Next, we used the online app cost estimation tool. It asked for multiple key app development parameters. Finally, the tool estimated a cost of \$35,000 for building the mobile app.
- Crew Crew is a company based in Canada that has its own freelance community. It has completed thousands of projects for many companies such as Google and Apple. The estimated total cost of making a "Fully-featured Product", by a developer located in Moscow, will be between \$36,000 and \$54,000.
- Otreva Otreva provides a web and app development service and is based in northeast Pennsylvania. The company's online estimator tool asked what features are required for the app. Its cost estimate was \$99,825. A complete breakdown of the email sent by Otreva with the estimate can be found in Appendix G.
- VenturePact Venturepact is a company based in New York City that provides Software Development as a Service (SaaS). Some of the companies they have worked for are Coca-Cola and Samsung. After entering the requirements and the features of the app, they estimated the app's cost at \$36,725 for development in Russia and \$73,450 for development in North America. For further details, please refer to Appendix G.

# 5.0 Conclusion

Based on our research, we believe that PwC Russia will benefit from implementing a mobile career app. By developing an app, the company will have an effective addition to its current recruitment tools. The data that we gathered through our survey and focus groups support this conclusion. The students in our focus groups generally agreed that they would download and use PwC Russia's career app. Future projects could include researching methods for marketing the app.

Not only will this app assist in building students' loyalty to the company, but it will also reduce printing and hiring costs. The company can hone in on well-qualified candidates who fit its values. By implementing a career app, PwC Russia will become a leader in recruitment and will set a benchmark for other companies.

# 6.0 Recommendations

After collecting and analyzing our data from our interviews, survey, and focus groups, we formulated the following recommendations for PwC Russia:

- 1. We recommend that PwC Russia's career app have all the five main components, i.e., company information, events, skill building, application process and trivia and rewards. When we conducted both the focus groups, we found that the ratings of the individual components were overall lower than the app as a whole. This means that students valued the entire app more than they valued each individual component. Depending on the student's year of study, different components were rated higher than others. For example, first year students rated company information higher than the third year students. Similarly, the third year students rated the application process higher than the first year students. Thus, by keeping all the components, the app will appeal to students of all years of study.
- 2. Based on the results of our focus groups, we recommend that PwC Russia focus its time on developing the trivia and rewards component. This component was rated as one of the highest amongst the other components. The app should also incorporate both a leaderboard system and a company rewards store. From our survey, we discovered that students want to be able to compete with one another as well as buy company souvenirs. This helps students test their knowledge in a field and ultimately give PwC Russia better students when they apply for the company.
- 3. We recommend that PwC Russia build the application component natively into the app instead of opening a web browser. Overall, students rated this component high in terms of their likeliness to download and frequency of use. This promotes convenience by not having users switch between the web browser and the app, thus keeping the app engaging.

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# Appendices

## Appendix A: Results of survey

### Number Reporting in: 100

1. What is your gender? Male 43%

Female 57%

2. What is your year of study?

4%
49%
34%
13%

3. What is your residency?

On campus	27%
Off campus	73%

4. What operating system is on your phone?

Android	25%
iOS	74%
Windows	1%
Other	0%

5. In a day, how often are you away from a computer?

Never	7%
Rarely	20%
Sometimes	29%
Frequently	34%
Almost always	10%

6. When away from a computer, how much of that time do you spend on the phone?

Never1%Rarely2%Sometimes9%Frequently45%Almost always43%

7. How often do you use your phone for:

-	Never	Rarely	Sometimes	Frequently	Almost always
Watching videos	5%	21%	30%	30%	38%

Shopping online	27%	35%	23%	23%	13%
Puzzle games	32%	37%	21%	21%	9%
Social media	0%	0%	4%	4%	30%

8. What is your most used social media application?

VKontakte	91%
Facebook	5%
LinkedIn	0%
Other	4%

9. How often do you use a company's website to find information?

Never	2%
Rarely	31%
Sometimes	45%
Frequently	19%
Almost always	3%

10. How often do you use a company's website to find information about:

	Never	Rarely	Sometimes	Frequently	Almost always
Events	16%	31%	40%	12%	1%
Job search/Application	19%	39%	22%	17%	3%
Information about the company	10%	34%	38%	16%	2%

11. If there was an application had those listed things, would you be willing to use it?

Yes	85%
No	15%

12. How inclined are you to learn about a company that you are applying to?

Not at all	7%
A little	17%
Most of the time	38%
Very much	38%

13. Would you be more inclined to learn about a company if there would be a reward?

Yes 95% No 5%

14. Have you heard of mobile career applications?

- Yes 15%
- No 85%

#### 15. Which ones?

- McKinsey Hn.ru EY Russia Careers Bain Insights Headhunter Career.ru Grintern
- 16. How would like to use your points?

Leadership board	18%
Rewards Store	26%
Mix of both	37%
Other	19%

17. The average rank of importance of categories (Max = 5, Min = 1)

Company information	3.60
Events	2.70
Game	1.00
Skill building	2.80
Application process	2.80

## Appendix B: WPI Professor Interview Questions

#### 2.1 Professor Agu Interview Results

This appendix contains a concise summary of the most important information learned from the interview with Professor Agu, followed by the exact notes taken during the interview.

Summary: During the interview with Professor Agu, the most important thing that the team learned was the importance of conducting focus groups. Focus groups, as he described, bring out information that an application designer wouldn't be able to get anywhere else. For example, on the application for diabetic patients that he co-developed, during a focus group with a group of diabetic patients, he discovered that they did not like the color red, due to having to draw blood frequently to check blood sugar levels. Professor Agu recommended that we perform at least three focus groups, with the first one's purpose being to get a general idea of what the target audience wants.

#### Notes:

May we use your name and responses in our project report? - Yes

What part of the design process on mobile applications have you been a part of?

- Most parts of it, applications are designed where they do focus groups with patients draw up designs, show to patients, start with screenshots that have no function, show alternatives, take what they like and integrate it, repeat this process. Did focus groups about 3 or 4 times (depends on size, complexity)
- Advised grad student that was doing the coding

How long have you worked on these projects for?

- Been in mobile computing for about 18 years
- android /healthcare around 6 years

Have you heard of companies using mobile apps for recruitment?

- Not specifically, mobile apps are good for things that are location-dependent or changing (like email)
- App is for convenience
- Good for convenience, students can use them anywhere, postings probably change every few days or weeks, maybe not a huge advantage over a desktop

Do you think this is an effective way of recruiting? Why or why not?

• If a student is using it in a big city and also away from a desktop for extended periods of time

• Check how available PCs are, locations, travel times, how often they're within accessible range of a PC

In general, what key features should there be in an effective mobile app?

- Efficient use of the screen
- Things must be visible and clear
- Minimalist sometimes
- Make sure it's functional
- Have to replan career website to figure out what's important, figure out what 20% is critical
- Google has hired artists to build material design how is artist qualified? for elements/specific types of users, each has things that are specific to them
- Diabetes app: older patients didn't like the color red -- didn't know why specifically, came out in focus groups (maybe it's because they must draw blood all the time?), learn things about that target audience
- Android Studio (Is it something you would suggest? Is it easy to learn?) -- Yes, couple of weekends, look at Android Screen as blocks
  - Can just click on visual elements and drag it onto the screen
  - Android Studio 2.0 is THE way -- Google stopped supporting Eclipse around 2014

For mobile app recruitment, in your opinion, would it be better to have a quality or quantity candidates or a mix of both?

• Quality is preferred, people of low quality waste the company's time, emphasize requirements

Finally, do you any recommendations or advice for designing a mobile app template?

- Start with clear requirements
- Plan focus groups ahead of time, design for focus groups, that's how we understand how they will react to final product
- How long does it take from beginning to end? depends on the app, iterative process, diabetes app, took about a year, had to change button sizes (make bigger and bigger font)

(Non interview question, can you recommend any more professors that have a similar background as yourself?)

• Professor Tulu at the School of Business (works with Professor Agu on the healthcare apps)

#### 2.2 Professor Tulu Interview Results

This appendix contains a concise summary of the most important information learned from the interview with Professor Tulu, followed by the exact notes taken during the interview.

Summary: Professor Tulu stressed that an application must provide some value to the user. Especially since job applications are more easily filled out using the keyboard of a traditional computer, an application must provide some added value so that a user wants to keep it on his or her smartphone. She suggested that the team could include some kind of pre-screening process, matching candidates with positions they are most qualified for, and or a feature so that an applicant can check the status of an application to a position.

#### Notes:

May we use your name and responses in our project report? - Yes

What part of the design process on mobile applications have you been a part of?

- Has been a part of them from the very beginning: what it should do, talking to users, development, testing, whole cycle
- Leads teams of students that would do the developing
- Runs focus groups

How long have you worked on these projects for?

• Since 2009

Have you heard of companies using mobile apps for recruitment?

• No, has never seen one before

Do you think this is an effective way of recruiting? Why or why not?

- Would probably go to university's career center first
- People might be interested in one organization, app might be good for that, but desktop is probably better
- Would rather just Google it than look for the application and download it
  - Not very cost-effective

In general, what key features should there be in an effective mobile app?

- If app can be used to apply, Professor Tulu would download it to apply
  - Locking in audience, app might be more convenient this way
  - Or, if someone needs to find an event to sign up for
  - How long am I going to use it? If it's a one or two-time- thing, won't be worth it to download it

- Status update on application would be a useful feature
- If you tie an application to the app, there is value there, you're logged in and on that app, don't have to also go to the website
  - If not committed or interested in company, probably won't use it
  - Would have to know about company first

For mobile app recruitment, in your opinion, would it be better to have a quality or quantity candidates or a mix of both?

- Would want more quality applicants
  - If recruiting for a CS position, don't want all WPI students to apply, only want CS majors, this is less overhead as a recruiter
- If a smaller company, would you argue for quantity?
  - probably have limited resources, quality and relevance, don't want to waste resources

What should the app look like in order to meet that characterization?

- Something that's appealing to quality applicants, go through questionnaire, OK you're qualified, now promote position
- First screen someone, then promote the position
- Can also have something available that will allow anyone to get more info (allows someone to see requirements)
- Can waste a lot of resources talking to someone who won't bring you value
- Downloading an app is a commitment, have to do something beyond just searching
- Application needs to provide value that can't be gotten on website

Finally, do you any recommendations or advice for designing a mobile app template?

• Android studio? - Yes, easy to use

How long do you think process will take?

- Development is the process that takes longer
- Time of designing template should be quick

How many iterations of focus groups?

- First, have one with around 5 people, imagine this is the application, what should we put in, what they would like
- Second real design prototype
- 2-3 iterations at least

## Appendix C: Interview with WPI CDC Recruiting Managers

This appendix contains notes taken during the interview with the WPI CDC Recruiting Managers.

Summary: During the interview with the Recruiting Coordinators for WPI, we learned more effective ways of contacting companies to schedule interviews to learn more about their mobile applications. The CDC building has computers that give a list of people's names, contact information, and employers in a database, with this information taken from companies that have attend the WPI career fairs. They warned us, however, that companies shift these positions around often, so the information listed on the database may no longer be valid.

1. What are your job positions and how long have you been working for that position? Bailey Rand - recruiting coordinator, almost 2 years, works with marketing - newsletter, social media

Allyson Bernard - senior recruiting coordinator, 3 years, works with companies, career fair, manages on-campus interviews, works with Job Finder, data collection - survey companies to see how many students they hire

2. Could you explain what that job position entails you to do?

• Allyson - approves jobs, looks through 20-100 job posts a day, questions/concerns from employers, big project changes

3. Does your job title involve the setup of the Career Fair? If so, what is the process of setting up a Career Fair?

- Allyson sets up the Career Fair, some companies want interviews on campus, like GE, keeping everyone informed, make sure info is out there
- Bailey led first career fair this spring, day-to-day, September/October, Jan/Feb = heavy recruiting months
- Nail down space and dates for fairs, market out to employers, open up registration so companies about 3 months early
- 80-200 companies
- Rely on facilities, electricians, events office, marketing to students, catering,

4. Generally, who initiates contact first? Does WPI ask companies to be at the career fair, or is it the other way around?

- Allyson: at the point where companies regularly reach out to WPI, have partnerships with a lot of companies, reach out to desired companies a lot,
- Bailey: go to a lot of external events, Mass Econ small companies, summer try to do more outreach, update companies, mostly email correspondence and website, registration form link, personalized reminder to regular companies that haven't registered yet

5. Which is the best way to get in touch and stay connected with companies? Phone, email, social media (LinkedIn)? Is there anything that we're missing?

- Allyson: best bet is to contact HR first, ExxonMobil has an alumni coordinate WPI recruitment, some have , send out an email first say here's what we're doing, letting them know will make them more open, see if there are any alumni (WPI does this to try to make first connection) at that company, try to send message over LinkedIn to alumnus at the company, response to emails varies, during call: I sent you the email yesterday, good first step: use computers at CDC to find companies that have attended, get in contact with Alumnus
- Bailey: majority of people are on email, scan business card of people who attend, Career Shift, search company and title, outputs a list of contacts with email address, send 20 emails to get one response

6. Aside from ExxonMobil and Intel, other companies that we have listed with mobile career apps are:

- Citigroup
- Goldman Sachs
- General Electric
- How can we get in contact with these companies?
  - Check computers out front, all contact info is in front computer, Crystal Parker, applicant tracking systems (ATS), internal program that will track everyone that should have the information, each have own internal system

7. As we mentioned earlier, companies have mobile apps that are used for recruitment, have you heard of or used any before?

- Liberty Mutual came and had a focus group with students, Raytheon has an application, Rescaloo (?) each student had QR code, companies could scan it and get all of the information
- Is it successful? It could be, but at this time, it is heavy website-based, requires more time for the shift, cross-promotion, on website market application, on-campus recruiting is heavy (companies should have campus-specific info on application)
- Talk to students on campus about applications, students complain about having to wait in line to fill out info and about having to fill out info after handing out resumes (ask students in Russia), what's common in different countries varies

8. Can you tell us about the development of the WPI Career Fair application? How many times has it been downloaded? Has it been a success?

- Career Fair Plus has base application, customizes it for WPI, WPI sends a spreadsheet with information about what it wants in the application, map of fair and table numbers, application can only be as good as the information,
- Successful? Yes, feedback has been very positive, prefer that they can click through and, reduces booklets that must be printed out, application can be updated on the fly
- No real big complaints, but if a student has no smart-devices, he can't use it

9. How does a mobile recruitment application compare with a Career Fair? Do you think it is more or less effective?

- Career fairs are still the way to go, way for student to differentiate himself, nothing beats face-to-face interaction,
- In advance of career fair, companies should post job openings on job finder around 2 weeks before the fair

10. How would you define effectiveness? Is it more quality applicants or more quantity of applicants?

- Focus on making it a smooth process, reducing work that is required to apply, keep it concise, simple interface
- A student won't use it if it's not appealing, and if not enough info isn't there it won't work

11. Are there any questions you have for us or anything that we missed that either of you would like to tell us?

• Add Liberty Mutual to our list, contact them and ask about focus groups

## Appendix D: Chris Russell Interview

This appendix contains notes taken during our interview with Chris Russell, followed by the exact notes taken during the interview.

Summary: Chris Russell, also known as the "Mad Scientist of Online Recruiting" was one of our most valuable interviewees. He's worked with companies as a consultant to revamp their e-recruiting presence and practices, and has designed and published job searching applications over several years. When designing the application, he told us that it should not be data-heavy, but should be very visual. The application should work to sell the company to the user in order to turn the user into an applicant.

Ask him for permission to use his name and responses - Yes and yes

- 1. How long have you been working with mobile recruitment applications?
- Position: online recruiting tools since 1999
- Built half a dozen applications, job is to figure out what seekers and companies want
- Online job boards, mobile apps: 5 years ago: job seek host jobs on the phone, 30 second audio clip, companies record what they want, but it didn't take off because it was too early in the market, it had a small user base, app was free, more experiment than business, the app was eventually shut down
- 2. What companies have you worked with? Are there any companies with an international presence on that list?
- Worked with dozens of companies, have worked with some bigger corps. Intel, McDonald's, Wal-Mart, Walgreens
- 3. Should apps be a supplement to something like a career fair, or should they be able to stand on their own?
- Not a lot of mobile apps for mobile careers, Pepsi, has unique stuff, apps act as an extension of the website, app has information that one can get on the website, presents info in a clear and more easier to understand experience, should have short job description, not a lot of mobile applications being built by companies themselves, hasn't been a huge need, value proposition for apps hasn't been great enough, ones that do it tend to be the larger companies
- Have to keep updating them, build them for Android, iOS, pain to do this, becomes a project that must be updated on a yearly basis
- Ask how often is one away from a desktop? Benefit of mobile phone: right there in the pocket, if one spends the day in front of the computer, why use a mobile application? Website can accomplish the same needs
- 4. What are the best methods for companies to advertise the fact that they have an application?

- Its own website, the more it markets there the better, can also do it in an online job posting, social media, but the career site is number one driver of downloads
- 5. What makes a company recruitment application effective? What should one focus on (looks, information, etc.)?
- Gives insight about the company, gives sense of what it's like to work for the company, should be an inside look at office environment, should do something different from the website
- 6. Should the application focus on gaining quality applicants or a greater quantity of applicants?
- Definitely quality, should be very visual and not data heavy
- Ideal app top 3 features: visual experience, want to sell the company, value proposition as an employer, ability to see what one's status is, be able to communicate with someone about job application
- 7. We read in an interview Adobe did with ExxonMobil that Exxon's application saved the company money at career fairs, since the recruiters didn't have to print out a bunch of handouts. What are the costs and benefits of building and maintaining an application?
- Pros: another channel, spend less on recruitment advertising, free advertising, candidates won't have to find it on a job board
- Cons: building it, maintaining it
- 8. What is your process when designing an application or a website?
- Wireframes: design each screen, hand it off the developer, build mockups, can do some beta apps and have recruiters test it
- 9. How many iterations of focus groups should we have?
- maybe 2, get initial feedback, design, come back with design

10. Advice on conducting it?

- mockups, storyboard, walk them through the process of the user experience, "click on this you get this, etc." get feedback on the content in there
- 11. How long does it take to design the mockups?
- maybe a day, depends on the app, last app he built had about 15 screens
  - Didn't use any tools, but there are some wire framing tools
  - Doesn't use Android Studio since he builds mostly for iOS, Gliphy it will be easy to get the hang of since it's an online tool
- 12. Are there any questions you have for us? Is there anything else you would like to mention that we didn't cover?
  - No

## Appendix E: Interview with Sodexo

Company: Sodexo Person we interviewed: Chloé Rada, Senior Marketing Manager Day: 6/17/2016 Time: 12:00 PM EST

#### **Questions:**

1. What is the main purpose of your mobile recruiting app? OR What primary function does the app serve?

The main purpose of the Sodexo app is to make candidates stay connected to the community and to learn about new jobs.

2. Can you break down the app into its main components? OR Can you explain the process of how a user uses it?

The main components of the app were- connect, search, and apply.

Connect - Job seekers can connect to the community, connect to blog, Facebook, YouTube, etc.

Search - Search is simple and one can find jobs within its specified radius.

Apply - Can apply on the app in 5 steps, one of the first few companies that had the application process on the mobile app

3. In your opinion, which feature of the app is the best?

Apply section is the best part because its convenience.

The app could track number of downloads. App was launched 4.5 years ago and have won awards in interconnectivity. There have already been 50,000 downloads and 815 have been already hired from the app. They also get better diversity from mobile.

a. Which section do you think people typically spend the most time on?

Search - Being able to see what jobs are available around you at a distance that you are willing to travel to work. With so many search preferences, users spent most their time on choosing the filters and finding the jobs

4. Is the company satisfied with the overall outcome of the application?

Yes - definitely

5. How long was the application in development before being published?

Chloe had just started (January 2012) when the app was published. Her first project was to move the mobile app project forward. Mobile site and app developers were working since a year before the app was published.

a. We see that your application has been on the AppStore for about 4 years now, would you consider investing more into the future development of the app?

Yes, they would consider investing more into the future development of the app.

**b.** If so: What would you change or improve?

Enhance the content. Sodexo will always update information on new job positions and locations available throughout the U.S.

Recently they have made a pop up on their website where if the user is looking at the website through their mobile phone, it asks the user if they would like to download the mobile app.

6. How would you define the effectiveness of mobile applications for company recruitment?

The key for any company recruiting app is to apply right from the phone. If the candidate does not have a profile in the company, they should be able to create a profile and upload from cloud service like Dropbox, or be able to transfer from LinkedIn.

a. Does your company define effectiveness of its mobile recruiting app by a larger quantity of applicants or a higher quality of applicants?

Quality for sure. Don't need quantity as it would not be a good use of resources to have a larger pool of less talented candidates.

7. According to this definition, would you consider Sodexo's career application to be effective? Why or why not?

Yes, because of reasons mentioned above.

8. Is there anything that we did not ask you that you would like us to know?

No, but she will let us know if she has any "aha" moments.

Thank you for your time. If we have any further questions, may we contact you again? (If we don't have info and it's OK): What is the best way for us to reach you?

Email is the best contact.

## Appendix F: App Storyboard

This is the storyboard that we created for the prototype. Each block contains a short description of what the screen is and some main features and buttons. The arrows show how the buttons navigate between the screens.



## Appendix G: App Estimated Cost

## AppVsWebsite-

The website used for Advice and Budget was <u>http://appvswebsite.com/</u>

- If need an app- http://appvswebsite.com/estimates/results
- Estimated cost of the App= \$35000

To know more about the chosen app features please go to the link: <u>http://howmuchtomakeanapp.com/e/wi1u0rtlo1py</u>

## Crew-

The website used for App Budget- <u>https://app.crew.co/submit\_new\_project/</u> Estimated cost of the App=\$36,000-54,000

The Project Summary for the app is below-

### **Project Summary**

Looking for a professional to create an app for networking. A brief summary of the app's desired functionality is:

Help recruit students from universities

I am looking to create the app for:

• iOS

I love the following styles:

• LinkedIn, Deloitte, PwC Talent Exchange, US Possibities

Location:	Moscow, Russia
Start Date:	Flexible
Completion Date:	Flexible
Package:	Fully-featured Product
Budget Range:	\$36,000 - \$54,000 USD

## Otreva-

To know view or modify the features added in the app, please go to the linkwww.otreva.com/calculator/?saveId=n9Dimvp0TjKGWUH-Z9b59gGV4UA-VNBHGNe189NkIy

An estimated budget was also emailed by Otreva. The breakdown of the cost in the email are as follows-

"For the most part, the bulk of the budget you are putting forward is for development time for experienced software engineers, UX designers, and product managers. Getting to a single number for your project without knowing anything about the project is pretty difficult for any development team but hopefully this is a good start."

E-mail Login	
2 mail 20gm	1,650
Social Login	3,300
Dashboard	2,200
Activity Feed	6,600
GeoLocation	3,300
	1,650
User Profiles	3,300
Maps	2 200
Shopping Cart	5,500
Search	6,600
Calandar Integration	4,950
	2,475
Social Sharing	1,650
3rd Party API Integration	< c00
Push Notifications	0,000
Dynamic Content	3,300
	4,950
Reservations	6,600
Event Listings	4 950
Email / Mailing Lists	1,500
	1,650

	\$99,825
Total	9,900
User Administration	
	16,500
Content Management System	0,000
Reporting	6 600

## **VenturePact-**

To understand the estimated cost, we went to the linkhttps://venturepact.com/mobile\_app\_price\_calculator

The total estimated cost for our Mobile Application was \$22,600 in South Asia, East Asia, South East Asia & Africa \$36,725 in Eastern Europe, Middle East, Central & South America (This includes Russia), and \$73,450 in USA, Canada, Western Europe & Australia

To get a further breakdown of the app development cost please visit this linkhttps://venturepact.com/site/GetCalcResult?link=a2t1bWFyQHdwaS5lZHU%3D