

# FROM CRM 1.0 TO CRM 2.0 AND MOBILE CRM: A STUDY OF EUROPEAN RECRUITMENT AGENCIES

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## ABSTRACT

While companies are becoming more focused on customers and personalisation, mobile technologies and Web 2.0 have been pushing companies to evolve in this area by offering solutions to help them to approach their customers. The present research is focused on how Customer Relationship Management (CRM) systems are used, at a European level, by recruiting companies to assist candidates in finding a satisfactory job. More specifically, this paper presents a framework to identify how CRM 2.0 and mobile CRM (mCRM) can help candidates to find jobs in a personalised manner. The methodology was based on an exploratory study of European recruitment agencies, using online questionnaires. The results showed that the use of software in recruiting agencies is quite common as is the use of CRM 2.0. With concern to mCRM, their use by the agencies remains shy, leaving this channel's great potential yet to be explored.

## KEYWORDS

Recruitment agencies; CRM; CRM 2.0; mCRM; social networks.

## 1. INTRODUCTION

The subject of this paper lies within the field of customer relationship management (CRM), and deals with customer relationship management in European recruitment companies. This research explores how CRM systems, combined with the recruitment companies' use of email, the Web, social media, applications and SMS, help candidates to find jobs in a personalized way. It aims, thus, to understand the means by which the job offers reach people, and whether these are in accordance with the candidate's profile.

Eurostat data (2012) show that Portugal was the country with the third highest unemployment rate (15.7%) in the EU27 in July 2012. The highest values were recorded in Spain and in Greece, with 25.1% and 23.1%, respectively. Among the member states with the lowest unemployment rates were Austria, with a rate of unemployment of 4.5%, the Netherlands (5.3%), and Germany and Luxembourg, both with a rate of 5.5%.

It is possible to see that there have been large variations in unemployment rates over the years, particularly from 2000 to 2012. The records between 2007 and 2008 show the lowest values of unemployment rates both in the EU27 and in the EU17. However, in late 2008, with the worsening of the economic crisis, there was a gradual increase in the unemployment rate that lasted until the year 2012.

Because of these numbers it becomes important to explore the theme of CRM in recruitment agencies. This dissertation's main research question is: How can the CRM systems used by European Union (EU) recruitment agencies help their candidates to find jobs through the personalization of offers according to their profile?

Therefore, this paper has the overall objective of examining how CRM systems used by EU recruitment agencies help candidates to find jobs through offers customized according to the candidates' profile.

More specifically, this paper aims to: (1) analyze how CRM 2.0 assists candidates in their job hunt, by providing an understanding of how Web 2.0 and social media are used by the recruitment agencies, the advantages that the agencies offer to the candidates, and the advantages of using CRM 2.0 to the agency; (2) understand how mobile CRM assists the candidates in their job search, by analyzing the advantages of mobile CRM for the agencies and the benefits that the agencies present to their candidates; (3) and analyze how the CRM system can be improved.

## 2. CRM

Due to the complexity of the concept of CRM and the multitude of authors who, over time, have defined the

concept, it becomes difficult to offer a simple and single definition. To Gummesson (2002), CRM represents the values and strategies of RM which emphasize customer relations and which are transformed into practical applications. To Payne and Frow (2005), CRM is a strategic approach that aims to create value for shareholders through the development of appropriate relationships with key customers and key customer segments. Thus, CRM combines the potential of RM strategies with information technology (IT) to create profitable long-term relationships with customers and other stakeholders. Payne and Frow (2005) also focus on the importance of CRM in regard to the method it employs to use information to understand and create value for customers. This requires a multifunctional integration of processes, people, operations and marketing resources which are enabled through information technology and applications. Only the companies that accumulate data about their customers and keep direct contact with them have the ability to enjoy the advantages of CRM (Faase et al., 2011). Despite the multiplicity of and differences between existing CRM definitions, there is a common aspect, which is CRM's objective: customer satisfaction and subsequent customer retention.

The implementation of a CRM system in a company requires an understanding of the company, such as its culture, people, processes and technology, and to perceive CRM as more than an acquisition of software (Finnegan & Currie, 2010). Hence, it is necessary to develop a culture where all employees are encouraged to share and learn the new, customer-oriented work structure (Almotairi, 2008). Additionally, it is important to have a framework of qualified and skilled personnel to make the best use of the software (Ranjan & Bhatnagar, 2008) and to adopt a customer-centric strategy rather than product-based (Finnegan & Currie, 2010).

## 2.1 CRM 2.0

The swift advances in technology-based systems, especially those related to the Internet, have led to fundamental changes in the way companies interact with each other and with consumers (Parasuraman & Zinkhan, 2002). There are increasing numbers of people using smartphones, tablets and the Internet every day to obtain information swiftly from wherever they are. In this sense, it is important that companies rethink the best way to reach customers that are becoming increasingly interactive (Hart & Gamal, 2012).

The emergence of Web 2.0 and the growing use of its applications have increased the resources of CRM. According to Greenberg (2010), social customers are in constant contact with the Internet and mobile devices. They share information and they demand the highest levels of transparency and authenticity. CRM 2.0 is a business strategy supported by a technological platform, business rules, processes and social characteristics. It aims to engage the customer in a collaborative conversation and thus benefit the business environment, through trust and transparency. In terms of CRM 2.0, special attention is paid to the observation of and engagement with customers' activities and conversations online (Greenberg, 2010).

CRM 2.0 exploits social media as a CRM strategy. Kaplan and Haenlein (2010) state that social media represent a set of applications that are based on the technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content. Reinhold and Alt (2012) claim that CRM 2.0, also known as Social CRM (SCRM), takes advantage of this CRM strategy, which focuses on interaction (information between different parties), communication (exchange of information between the parties) and cooperation (collective creation). Social media are used to support CRM processes. They act as a communication channel for marketing campaigns and they are a key factor in providing information about the brand or the product. Moreover, they have an analytic function of discovering and evaluating new market perspectives, in which they analyse both the users and the content. They are also used as channels for transactions or sales and as a way to maintain contact with the customer.

According to Reinhold and Alt (2012), social media are an important resource for SCRM, because they provide five types of content: (1) the contents of posts, which can be analyzed by keyword or opinions; (2) data about the source, i.e. detailed information about the author; (3) the data provided by the users' profiles, which include information about e-mail, hobbies and interests; (4) information from the users' profiles about their friends and their activities; and (5) the connections that are established between posts and profiles, which provide information about the influence particular people.

Greenberg (2010) asserts that profiles on social networks have become essential for companies seeking information about the customer and what he/she wants. There is a growing need for companies to be where people are. Facebook, MySpace, Twitter, LinkedIn and Ning are the most popular social networks worldwide (Isafas, Pifano & Miranda, 2011).

## 2.2 Mobile CRM (mCRM)

There is a great potential in the use of mobile channels by companies in providing consumers with more complete services and in complementing the company's products (Hsu & Lin, 2008). Camponovo, Pigneur, Rangone and Renga (2005) define mobile CRM as a set of services that intend to nurture the relationships with clients: the acquisition or maintenance of clients, marketing support, and sales or service processes via wireless networks as a means of delivery to customers. The formats used in mobile marketing include SMS (Short Message Service), MMS (MultiMedia Service) and WAP (Wireless Application Protocol). These formats have a lower cost in comparison to traditional media and they reach their target more easily (Al-alak & Alnawas, 2010).

However, not all authors agree with this definition. Kumar (2004) argues that the terms "mobile" and "wireless" have their own specific meanings. The term "mobile" refers to an ability to access devices on the go, whereas "wireless" refers to the ability to have access to a device when it is not physically plugged in. Thus Sinisalo et al. (2007) argue that mCRM can be seen as a specific type of CRM, which works through mobile platforms and involves personalized communication, interaction with clients and a great flexibility in communication. The mobile and personal nature of mobile and wireless devices, combined with voice and data transmission capabilities, provides a set of unique features, such as ubiquity, 24-hour accessibility, location, personalization and convenience. These features are considered to be the most valuable and distinctive advantages of mobile services and they can build their own proposition of value (Camponovo et al., 2005). One of the advantages of knowing the physical location of users is having the opportunity to direct them to promotional offers. Another great advantage is the portability of mobile devices. These wireless capabilities allow them to be used in any location, thereby creating more opportunities for the transmission of messages. These devices are used continuously and there which is an easier way to get message through. Their main disadvantage is that the fact that they do not allow the delivery of long messages (Shankar & Balasubramanian, 2009).

## 2.3 CRM for Recruitment and Selection

Information technologies have caused changes in recruitment processes in recent decades. The Internet has begun to act as a channel of communication between employers and candidates. Technology has enabled corporate websites and job seekers to become more sophisticated and interactive (Barber, 2006).

The Internet and electronic communication systems, currently, facilitate the recruitment of candidates, who can now use computer applications to fill in their personal data online and submit them automatically. The techniques of e-recruitment (online recruitment) have a key role in storing CVs in a database for future job applications (Correia, 2010).

Currently, the online recruitment sector is expanding, and it is a useful application of information technology for people. On the one hand, it facilitates the job searches of interested candidates. On the other hand, it facilitates the work of the recruitment professionals, who use their database to search for candidates. In short, online recruitment or e-recruitment has considerable advantages for recruiting agencies, such as the low cost of their online publications, the simplicity of candidates' segmentation by searching the candidates' database, and the fact that it reaches a population which is distinct from that of traditional media such as newspapers. On the other hand, online recruitment also offers advantages for applicants: the receipt of offers appropriate to the candidate's profile and interests; the possibility of doing their job search from home and at any time; and the availability of their CV with professional information on a 24/7 basis and without space limitations (Peretti, 2007). Online recruitment involves not only the communication of job offers through the Internet but also a set of technological tools capable of selecting appropriate CVs and of maintaining an updated and efficient database to find people with specific characteristics (Mitter & Orlandini, 2005).

## 3. FRAMEWORK AND HYPOTHESES

This section presents a framework to identify how CRM 2.0 and mCRM can help candidates to find jobs in a personalized way. Also, it explores the advantages of using CRM 2.0 and mCRM for both the recruitment agencies and the candidates. On the basis of the literature review, various dimensions used in several studies to characterize CRM 2.0 and mCRM were identified. The proposed framework is a combination of the most important concepts.

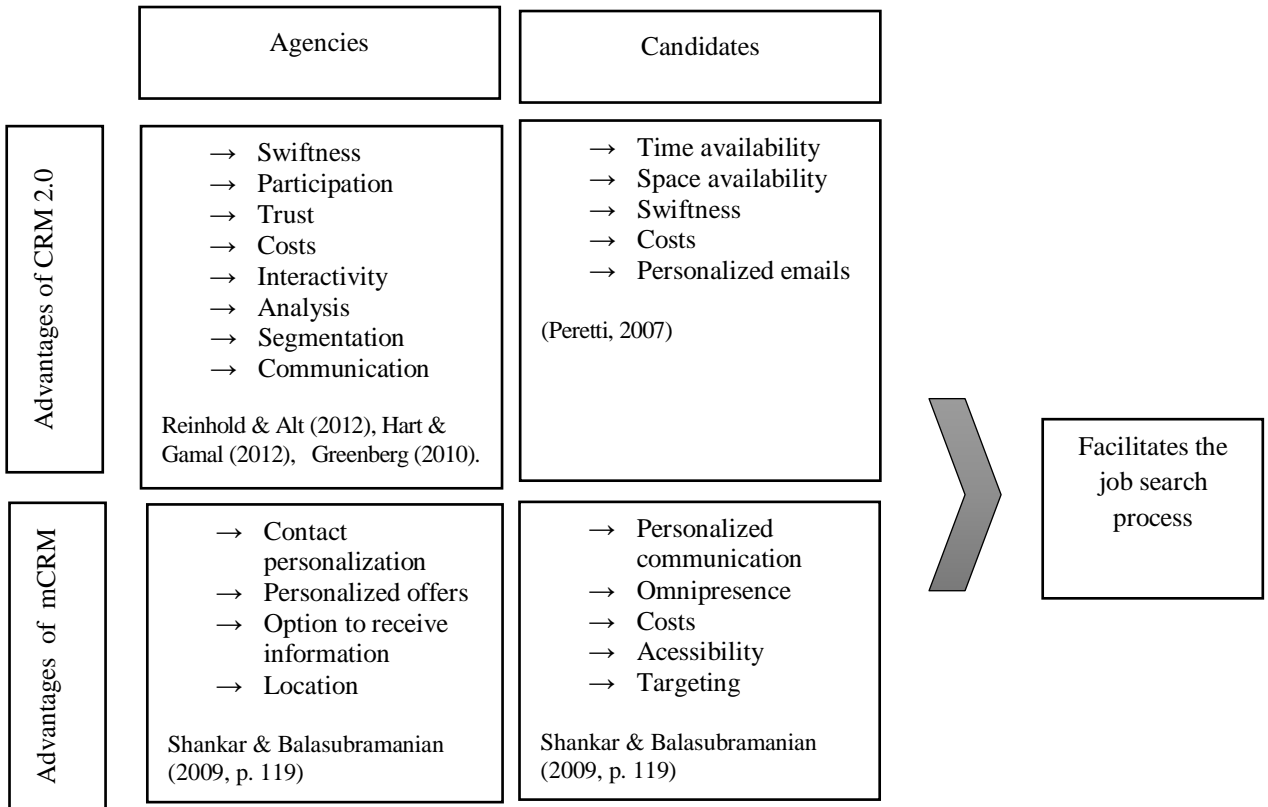


Figure 1. Framework proposal

Based on the framework proposed in Figure 1, it was possible to define four hypotheses that relate to the personalization of job offers, the use of CRM 2.0 and social media and the use of mCRM.

Online recruitment has advantages for applicants, in the sense that it is currently possible to receive job offers that are appropriate to the profile and interest of each candidate (Peretti, 2007). To this end the e-recruitment techniques have a key role in allowing the storage of CVs in a database for future job opportunities (Correia, 2010). This is the principal role of CRM software in data storage and the subsequent selection of candidates according to their characteristics. That said, the following hypothesis was constructed: *Hypothesis 1 - The delivery of customized job offers is influenced by the use of CRM software by enterprises.*

CRM 2.0 exploits social media as a CRM strategy (Reinhold & Alt, 2012), by focusing on interaction, communication and cooperation. According to Reinhold and Alt (2012), there is an analysis' component associated with social media, because they provide different types of content. The benefits of CRM 2.0 for recruitment agencies and their use of social networks created the following hypotheses: *Hypothesis 2 - Companies that use CRM software have increased awareness of the importance of CRM 2.0 for companies and candidates; Hypothesis 3 - Most recruitment agencies use social networks regularly.*

As for mobile CRM, it is important to identify communication, location, and targeting costs per contact, based on the characteristics presented by Shankar and Balasubramanian (2009, p. 119). It is also important to note the ubiquity, accessibility and interactivity highlighted by Camponovo et al. (2005): *Hypothesis 4 - Companies that use CRM software have increased awareness of the importance of mobile CRM for companies and candidates.*

#### 4. METHODOLOGY

This exploratory study used a non-probabilistic sampling based on judgment, a technique where the elements of the population are defined according to the judgment of the investigator, in order to provide a better answer to the research questions and achieve the research objectives (Saunders et al, 2007). In this particular

case, the selected recruitment agencies were those that were particularly informative and in conformity with the objectives of the study. The agencies were found on business listings from each country of the European Union. The choice of this method is based mainly on the wealth of the information that can be obtained with the selection of particular cases. The sample consists of 35 agencies from various European countries (mostly from EU) and USA. Most of them are based in Portugal (22.9%), the Netherlands (11.4%) and Belgium (8.6%). Most agencies in this study are private (91.4%), they have between 1 and 10 employees (34.3%) and they use CRM software (68.6%). The majority of respondents are between 25 and 34 years old (45.7%) and are female (71.4%).

The data was collected via an online questionnaire hosted by Qualtrics' platform. It was available both in Portuguese and in English and it was distributed by email to pre-selected contacts, after a pilot period. The questionnaire was available online from mid-July until the end of August.

## 5. RESULTS

In total, 400 questionnaires were sent and 44 responses were obtained. From those, 35 were considered valid and then analysed quantitatively in a univariate and multivariate statistical analysis with IBM SPSS.

### 5.1 Personalisation

The majority of the agencies used CRM software (68.6%) and sent job offers on a daily or weekly basis to the candidates via email (65.7%). Among the agencies that send jobs, 83.3% customize the offers according to the preferences of the applicants who previously selected them when they registered on the website/platform. Most of these agencies take into account the areas of interest of the candidates (32.1%), their academic qualifications (25%) and their location (23.2%). In order to test hypothesis 1 - *The delivery of customized job offers is influenced by the use of CRM software by enterprises* - we used a chi-square test. The data showed that, out of all the agencies that use CRM software (68.6%), most of them (85%) opt for the delivery of personalised job offers to the candidates. However, the differences between the agencies that use

CRM software and the agencies that do not use the software are not statistically significant ( $X^2(1) = 0,624; p > 0.05$ ), which prevents us from accepting the hypothesis that is being studied. This result may be justified by the sample size, so it becomes necessary to develop this issue in further studies by using a larger sample.

### 5.2 The Importance of CRM 2.0

To evaluate the importance of CRM 2.0, we proceeded to create two synthetic indexes to encompass the perception of the benefits of CRM 2.0 for the companies and for the candidates. In order to test Hypothesis 2 - *Companies that use CRM software have increased awareness of the importance of CRM 2.0 for companies and candidates*, the Kolmogorov-Smirnov test was performed. It became possible to see that the data did not follow a normal distribution ( $p = 0.000$ ) and for this reason we opted for the application of the non-parametric Mann-Whitney (M-W) test to make inferences about the differences between the averages of the companies using CRM software and the averages of the agencies that don't use the software. We began by testing the reliability of the indexes via Cronbach's Alpha, which has a value of 0.765 and 0.879 for the overall index of perceived advantage of CRM 2.0 for companies and candidates, respectively. These values ensure a good reliability. According to the results that were obtained from the descriptive statistics (Table 3), it is possible to observe some differences in terms of the averages between the agencies that use and the agencies that do not use CRM software. The agencies that use CRM software have an increased awareness of the benefits that CRM represents for the agencies. The average of ordinances is higher in the agencies that are using the software (ascending scale). However, the differences are not statistically significant (M-W = 89.500;  $p = 0.133$ ). It is also possible to observe that the agencies that use CRM software have a higher perception of the advantages of CRM for the candidates. The ordinance average is superior in the agencies that use the software (ascending scale). Nonetheless, the differences are not statistically significant (M-W = 89.000;  $p = 0.133$ ). These results do not allow hypothesis 2 to be accepted

### 5.3 Use of Social Networks

The data showed that 100% of the agencies used social networks. In order to verify hypothesis 3 - *Most recruitment agencies use social networks regularly* - there was an analysis of the dimensions related to the manner and the frequency of use of social networks. To allow this analysis, a synthetic index was created for the use of social networks that included the dissemination of job offers, the contact point with the client, and analysis of profiles, posts, keywords and opinions. The reliability and the consistency of the index are acceptable (Cronbach's Alpha = 0.648). The global average of the index is 3.19 points, which indicates that, on average, the use is positive. The average is slightly higher than 3 on the scale, thus allowing the confirmation of hypothesis 3.

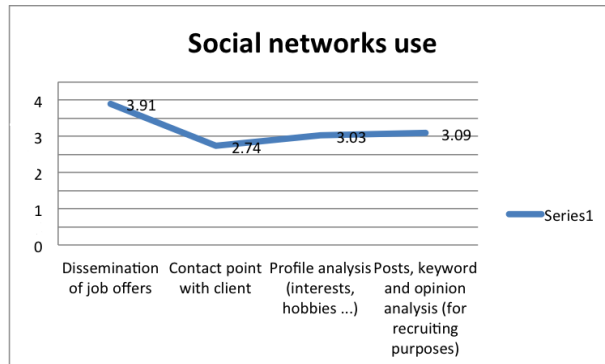


Figure 2. Use of social networks by the recruitment agencies

The dissemination of job offers had an average of 3.91 (Figure 2), on a scale from 1(never) to 5 (always). A total of 74.3% of the agencies use social networks *very often* or *always* as a dissemination method. With regard to the use of social networks as a point of contact with the candidate, the average does not present positive values: 2.74. A total of 34.4% answered *sometimes* and 28.6% chose *a few times*. The analysis of the profiles and the analysis of the posts and opinions for recruitment purposes have an average of 3.03 and 3.09 respectively. Additionally, LinkedIn is the most used (37.4%), followed by Facebook (35.2%) and Twitter (19.8%).

### 5.4 Mobile CRM

A total of 77.1% of the recruitment agencies use mobile technology to contact the candidates. Using the same scale of 1 to 5, the average score for SMS as a way of contacting candidates was 3.59, whereas email scored 4.41 (Figure 3). Nonetheless, there was an inferior average in terms of the use of MMS, Apps and QR Codes. In regard to the use of MMS, 96.3% chose *never* or *a few times*. With regard to the use of Apps and QR Codes, the scores of the agencies that replied *never* were 66.7% and 81.5% respectively.

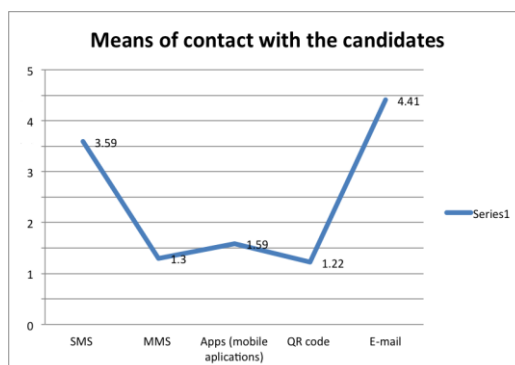


Figure 3. Means of contact with the candidates used by the recruitment agencies

In order to test hypothesis 4 - *Companies that use CRM software have increased awareness of the importance of mobile CRM for companies and candidates* - two synthetic indexes were created to include the

perceptions of the advantages of mobile CRM for the companies and for the candidates. Firstly, the reliability was tested through Cronbach's Alpha, which gave a value of 0.751 for the global index of the perception of the advantages of mobile CRM for the agencies. This means that there is a good reliability score. For the global index of the perception of the advantages of mobile CRM for the candidates, there was a reasonable score of 0.576. It had already been concluded from the Kolmogorov-Smirnov test that the data did not follow a normal distribution ( $p = 0.000$ ). Again, we chose to conduct a non-parametric Mann-Whitney (M-W) test to make inferences about the differences between the averages of the agencies that use the software and the agencies that do not use it. According to the results, there are some differences between the agencies that use the CRM software and those that do not use it. The agencies that use CRM software have a higher perception of the advantages of mobile CRM for the companies. The average of the ordinances is higher in the agencies that use the software (ascending scale). Nonetheless, the differences are not statistically significant ( $M-W = 116.500$ ;  $p = 0.587$ ). Also, the agencies that use CRM software have a higher perception of the advantages of mobile CRM for the candidates. The average of the ordinances is higher in the agencies that use the software (ascending scale). Nonetheless, the differences are not statistically significant ( $M-W = 109.000$ ;  $p = 0.430$ ). The results allow the rejection of hypothesis 4.

## 5.5 Improvements to the CRM system

Among the agencies that stated that there have been improvements in the last year with regard to the agency's processes (74.3%), the changes most frequently reported related to the software that they use (20.9%), to the maximization of the website (18.6%) and to foster the use of mobile channels (18.6%).

Most agencies, 54.3%, stated that they expect to make some modifications to the CRM system, in the short or long term. Among these modifications, it is possible to highlight changes to the software that is used (25.3%), exploring the website's potential (21.5%), and the interconnection of platforms of contact and an increase in the use of social media (16.5%).

## 6. DISCUSSION AND CONCLUSIONS

The results demonstrate that the use of CRM software and the personalization of the contact processes is increasing among recruitment agencies. The sample that was studied reiterates this conclusion: 68.6% of the agencies use CRM software and the vast majority of them send job offers via email and customize the content for the candidates. Generally speaking, it is possible to highlight that CRM 2.0 has a significant presence in the agencies that not only use the CRM system but also combine it with the development of their own website and a strong presence in social networks such as LinkedIn. In terms of mobile CRM, the developments in this area are not as evident. Despite the fact that the majority of the agencies use mobile technologies in their contact with the candidates, the most noticeable methods of communication are SMS and emails.

When they are properly employed by the recruitment agencies, CRM systems can be essential tools to facilitate both the work of the agency and the job search of the applicant. This study concluded that the agencies that use software that is appropriate for CRM send customized offers to the applicants more often and are more aware of the advantages of CRM 2.0 for the candidates and for their own agency. Also, it became clear that the agencies have a strong presence in social networks, especially in LinkedIn and Facebook, which are used mainly for the dissemination of job offers and sometimes to analyse the candidates' profiles and posts.

The highlight of this study was that 77.1% of agencies use mobile technologies to contact the candidates, but only frequently use SMS and email, and rarely or never use MMS, Apps and QR Codes. It was expected that the agencies that plan to make improvements in software in the short term would have the development of mobile channels as a priority. However, out of the 54.2% of the agencies that expected to make short-term improvements, only 5.1% mention improvements in their mobile channels. This warrants a recommendation to the agencies in terms of the maximization of their mobile channels, namely through mobile applications with job offers, in an era of growing use of smartphones.

Among the recently implemented improvements in the CRM system, it is possible to underline the concern of the agencies with the software they use, which reflects a rising preoccupation of the agencies with focusing on the client, and, in this particular case, the candidate. The improvements made by the agencies in terms of the maximization of their website and their mobile channels were also visible. When it comes to improvements that are planned for the short term, software, the maximization of the websites, the interconnection of the platforms of contact and a more frequent use of social media are the most cited. With respect to these improvements, it becomes

important to underline the growing use of CRM software and the interconnection of the platforms of contact, which have the ability to provide more information on the client and to assist the dissemination of job offers.

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