Mobile Recruiting and Video Enhanced Job Advertisements:
A Case Study Analysis within a German Job Portal

Stephan Böhm, Wolfgang Jäger, Sebastian Meurer

RheinMain University of Applied Sciences
Department of Media Management
Wiesbaden, Germany
e-mail: {stephan.boehm, wolfgang.jaeger}@hs-rm.de,
s.meurer@djm.de

Ulrich Rust, Wolfgang Achilles

Jobware
Online-Service GmbH
Paderborn, Germany
e-mail: {u.rust, w.achilles}@jobware.de

Abstract—The proliferation of smartphones has increased significantly in recent years. Due to the availability of higher data rates, video content is increasingly being accessed via these devices. Due to changes in media usage behaviour, companies are currently faced with the challenge of adapting their recruitment activities to enable access via mobile devices and increasingly to integrate multimedia and dynamic content. In view of the above, this study examines user reactions to the enhancement of job ads with video content using a case study in a German job portal. The results of this study are promising and suggest that the integration of mobile video may be appropriate to increase interest in job advertisements. In addition, initial findings for the design and integration of such recruiting videos can be derived. The limits of panel surveys, however, also became apparent and more extensive research will be required in order to be able to make general recommendations.

Keywords-Mobile Recruiting; Mobile Video; Job Advertisements; Video Enhanced Job Advertisements; Case Study.

I. INTRODUCTION

The adjustment of recruiting processes to changing market conditions and potential candidates' usage habits constantly presents employers and operators of job portals with new challenges. One such challenge relates to the present-day ubiquitous use of mobile devices such as smartphones and tablets. In the German market, more than 69 percent of Internet users were already accessing the Web using mobile devices in 2014. In the target group of 14 to 29 year old, this figure was even higher at over 75 percent [1][2]. The type of content consumed is also changing and the use of video content, for example, is steadily increasing. In Germany, almost every second Internet user (45 percent) aged 14 and above already accesses videos on the Internet at least once a week, while the usage rate among 14 to 29 year old is as high as 79 percent [1]. Particularly, high growth rates are evident as far as the amount of video content being accessed via mobile devices is concerned. In the US, video consumption via smartphone in 2014 increased by 73 percent compared to the previous year [3]. For the European market, a recent study from 2015 concludes that already about 60 percent of those surveyed consume short videos on their smartphones on a daily basis [4].

The need to integrate such developments –especially the shift in use to mobile devices– in corporate recruiting activities has been discussed for some time, also in international literature, under the name "Mobile Recruiting". Accordingly, mobile recruiting can be defined as "… any organizational information provided for or delivered to a mobile device in order to attract and hire potential applicants and employees."[5]. This implies continuous development and ultimately consistent mobile-optimisation in terms of technology, design and content of at least the central processing steps in the "recruiting funnel". For example, this could include the mobile optimization of career websites and job ads or even the possibility to apply directly via mobile devices. The ultimate goal of such development and optimization efforts would be to offer applicants a consistent and continuous „Mobile Candidate Experience"[6][7]. In addition to mobile-optimisation, the design of, e.g., job advertisements also needs to be adapted to the growing importance of dynamic and multimedia content. Accordingly, in a recent German study, more than 70 percent of the participating HR professionals assigned (high) importance to the integration of dynamic content such as recruiting videos in job advertisements. Besides written specifications, such as job description and profile requirements, photos and recruiting videos were identified as being important content elements of future online job advertisements [8]. A correspondingly comprehensive (mobile) recruitment strategy has, however, so far hardly been established in practice. Moreover, there are still no systematic studies that deal with the aspect of the integration of video content in (mobile-optimised) online job ads.

In view of the above, this study investigates user response to video-enhanced job advertisements using the example of a German job portal and the method of case study analysis. Currently available findings on the subject matter and relevant research are presented in Section II. The research methodology is described in Section III and subsequently, in Section IV, initial findings based on the study are presented. The paper ends with a discussion of fundamental conclusions for practical application in Section V. Furthermore, this closing section contains a discussion of the limitations of this study as well as the need for further research.

II. RESEARCH BACKGROUND

Initially, as the basis of our study and to define the research needs, the status quo with regard to mobile recruiting and the integration of video content in job advertisements are investigated using the example of the German job market. Following this, there is a brief presentation of relevant re-

search on mobile video to define the research needs and to set the boundaries of the research question.

A. Status Quo

According to a global recruiting study [9] in 2014 only 30 percent (34 percent) of the recruiting decision makers stated that their company provides mobile-optimized job postings (career sites). This study focuses on the German market. While mobile recruiting in the form of mobile job search is already common practice, companies often still lag behind the applicants' requirements in terms of what they offer. This is especially true for the consistent optimisation of the entire mobile recruiting process [10]. According to a recent study on the German recruiting market [11], nearly 40 percent of job seekers in 2014 already used their smartphones to search for job vacancies. About 8 percent also already apply via their mobile device. However, the optimisation of job-related content for mobile devices is still in need of improvement. According to the aforementioned study, about 70 percent of respondents report display issues on career websites when accessing them on their mobile devices. With online job advertisements on company websites, this figure rises to 75 percent. In principle, companies have, however, recognised the shift in usage habits when searching for job-related information. In a recent survey of German companies from the year 2014, 78 percent of study participants stated that the increasing use of mobile devices will have a major impact on recruiting. Nevertheless, only about 44 percent of the companies in this study reported that they provide a mobile career website. Similar to the aforementioned results of the global study, only about 31 percent of the companies in Germany mobile-optimised their job advertisements [12]. Another study, in which the recruiting offerings on the Internet of the 180 largest and most important employers in Germany [13] were examined, came to similar results. As shown in Figure 1, at the end of 2014, thus not even half of the companies included in the study provided a mobile career website, only 30 percent offered potential candidates mobile job advertisements and just one in ten companies offered the option to apply via a mobile device.
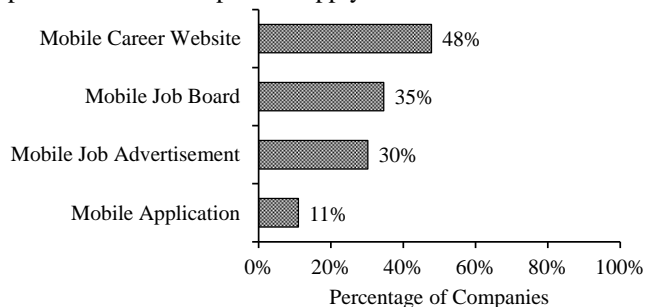

Figure 1. Mobile Recruiting Offerings in Germany [13]

Overall, job seekers in Germany still have to deal with recruiting offers which leave considerable room for improvement with regard to its mobile optimization. Therefore, many companies still need to improve the mobile experience by implementing new technologies, e.g., responsive design, to adapt their recruiting offerings to touch screens, small screen sizes and other characteristics and limitations of mobile devices. However, as mentioned above, companies are already encountering new challenges when adapting to the increased use of dynamic contents such as recruiting videos in job advertisements. As Figure 2 shows, only 10 percent of the companies in the study integrate job-related videos in their online job ads. Furthermore, mobile-optimised video job advertisements are used by just eight percent of these companies [13].
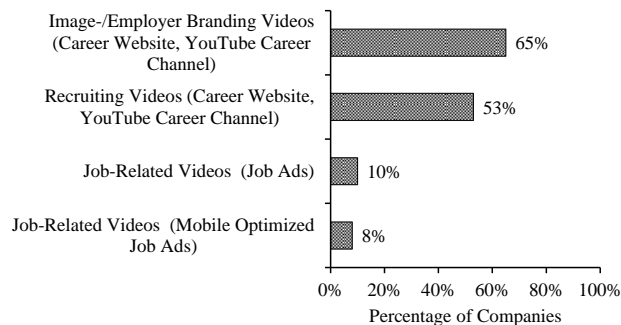

Figure 2. Implementation Status of Recruiting Videos in Germany [13]

Usage statistics of relevant YouTube channels confirm the increase in user demand for access to recruiting videos via mobile devices. According to the German job portal Jobstairs, in mid 2015 an average of 35 percent of recruiting videos on the Youtube channel were already being accessed via mobile devices. In a pilot study with mobile-optimised video-enhanced job ads, mobile access rates were as high as 40 percent [14]. Against this background, this paper focuses on video-enhanced job advertisements as a next level of mobile recruiting.

B. Related Work

A number of research studies can already be found on the structure and content of job advertisements. Relevant articles, however, often concentrate on the content analysis of these ads to identify requirements and characteristics in terms of job descriptions or professional fields [15][16][17]. A closer focus on requirements, usability aspects and design principles specifically of mobile job advertisements can be found in [7][18]. In these papers, however, specific aspects of the integration of video content in job advertisements have not yet been considered. The issue of mobile video has, however, already been investigated more comprehensively in papers dealing with the topic separately from the context of job advertisements and recruiting. These include various analyses dealing with the aspects of technical implementation of mobile video services or the perception of their quality and their market perspectives [19][20][21]. Research can also be found which deals with the use of (mobile) video for marketing and advertising purposes [22][23]. This research offers few findings with regards to the integration of recruiting videos in job advertisements. To our knowledge, the importance and the benefits of video-enhanced job ads have thus not yet been examined in any research papers. More specific recommendations on the content and user-oriented

design of video-enhanced job ads in the context of stationary and mobile use are also nowhere to be found. In view of the above, this study attempts to present initial findings to close this research gap. The focal point of the investigation in this case is the examination of user reactions that arise when presented with video-enhanced jobs ads.

III. APPROACH

The placement of video content in mobile job ads represents a very specific application of mobile video. In order to investigate the potential of enhancing mobile job ads with recruiting videos appropriately, the analysis must be applied to suitable applicant target groups. Not only do these target groups need to match the requirements for the advertised job, they must also be interested in applying for the position. In light of these facts, it can be assumed that limited findings regarding interest in and reception of video content in job ads, can be obtained by using a standard online survey and a fictitious job ad.

For this reason, this study is based on an analysis of real job ads that were posted on the German job portal *Jobware*. A systematic variation of characteristics of the job ads was therefore not possible. However, the case studies provide first insights into the interest in and the reception of video-enhanced (mobile) job ads. As a first step, three companies were recruited as partners that agreed to integrate recruiting videos in their job ads and to permit the analysis of usage data. These were businesses ranging from a medium-sized "hidden champion" to a major global player. Basic characteristics of these companies, which cannot be named directly due to the confidential nature of the study, and of the videos used, are shown in Table I.

TABLE I.   CASE STUDY RECRUITING VIDEO CHARACTERISTICS

	Video 1	Video 2	Video 3
Industry	Electronics	Insurance	Automotive
Enterprise Size (Employees)	~ 14.000	~ 147.000	~ 280.000
Enterprise Reputation	Hidden Champion	Blue Chip	Global Player
Position	Engineer	IT-Trainee	Engineer
Video-type	Job-related	Job-related	Image Video
Length	1:59 min	1:46 min	7:02 min

The differences in the type and length of the video are due to the fact that only two of the companies provided or produced a job-related video for the study. In the case of the third company, an existing recruiting/image video was used. Due to the cooperation with the job portal, it was possible to carry out four different sub-analyses for each of the job ads described:

- *Job Ad Analytics*: The statistics on retrieval of the job ad in the job portal form the basis of the subsequent analysis steps.
- *Video Analytics*: In addition to the number of video views, the system could also detect how often each

video was watched up to 25%, 50%, 75% or up to the end.
- *Online Questionnaire*: After exiting the video in the job ads, users of the job portal were asked to voluntarily fill in a short questionnaire.
- *Online Panel*: A survey was carried out in an online panel outside the job portal.

In the online panel, participants were asked to select one of the three jobs in accordance with their areas of interest and to fill in a questionnaire after viewing the accompanying videos. The results of the panel survey were intended to supplement and verify the previously obtained responses given by job seekers in the job portal.

IV. RESULTS

After recruiting the cooperation partners, the video-enhanced (mobile-optimised) job ads were posted on the job portal. The data for the job ads on the job portal was acquired for the period May 25th to June 22nd, 2014. The panel data were collected between June 20th and 27th, 2014. Table II shows the views of the job ads included in the study. The number of visitors to each job advertisement shows that the number of views significantly varies according to the size of the associated company. Presumably this is also an expression of either the company's prominence or the attractiveness of the position. Surprisingly, however, the click-through-rate from the job ads to the companies' career websites and application forms varied considerably. The click-through rate from the job ad to the career website of the lesser known company ("hidden champion") was almost three times as high as that of the global player. Furthermore, the click-through rate to the application form was more than twice as high for the hidden champion. Target groups and advertised vacancies in job ad 1 and job ad 3 were similar. The differences in click rates could therefore be seen as a first indication that job ad 1 was more able to arouse interest in not only the company but also applying for the job.

TABLE II.   JOB ADVERTISEMENT ANALYTICS

	Job Ad 1	Job Ad 2	Job Ad 3
Job Ad Visitors	182	263	287
Click-through Rate (Clicks) to Career Website	15% (28)	8% (21)	5% (13)
Click-through Rate (Clicks) to Application Form	19% (35)	10% (25)	8% (22)

When analysing the video views shown in Table III, a similar picture emerges. The hidden champion's video 1 had by far the highest play rate and was played during almost every tenth view by the users of the job portal. The difference is even more significant when considering the extent to which the video was actually played. Although approximately 24 percent of viewers discontinued video 1 a quarter of the way through, this discontinuation rate is nearly 63 percent for video 3. Only about 17 percent watched video 3 to the

end, whereas 56 percent of the viewers did so with video 1 and 42 percent with video 2. Here, the length of the video is likely to have had a significant effect. Both videos 1 and 2 were under 2 minutes while video 3 ran over 7 minutes. It is also interesting that although the two videos of companies 1 and 2 were similar in length and both job-related, they were played at very different rates of frequency. This could indicate that videos with job-related content and those with company-related content arouse different levels of interest or offer varying levels of benefit. As already mentioned, company 1 is not a very well-known company, while company 2, as a blue chip, is likely to be known by almost all the applicants. Thus, this may mean that applicants could have a higher need for information in the case of company 1.

TABLE III.   RECRUITING VIDEO ANALYTICS

	Video 1	Video 2	Video 3
Play Rate (overall)	9.5%	2.5%	2.2%
Completion Rate (minimum played video length)			
25%	23.9%	35.8%	62,7%
50%	8.5%	13.4%	16.9%
75%	11.3%	9.0%	3.4%
100%	56.3%	41.8%	16.9%

As mentioned earlier, an online questionnaire was implemented within the job portal, which could be answered voluntarily on exiting the job ad. However, the job seekers' willingness to participate was very low (job ad 1: 15; 2: 22; 3: 12). In addition, the participants did not always answer all the questions in the questionnaire. In total, the questionnaire included five questions. The participants were first asked whether they had even watched the video in the job posting (Job ad 1: 87%; 2: 68%; 3: 75%). Those that viewed the video were then asked about the authenticity and quality of the video. In addition, they were asked whether the video presented a better picture of the job and whether they generally considered videos in job ads to be useful. In this case, the respondents could answer in the form of a 5-point Likert scale (degrees of agreement). The results of this online survey are shown in Figure 3.
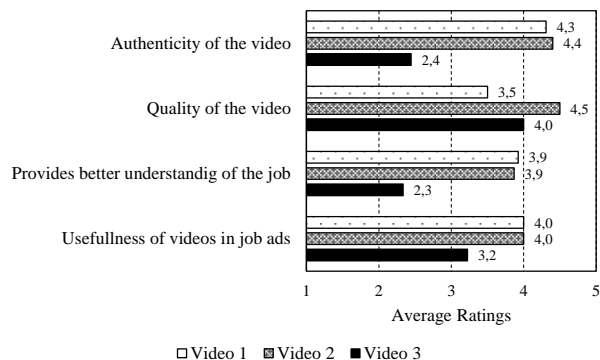

Figure 3.   Jobportal Results on the Online Questionnaire

Of particular note is the fact that the results are very similar for the job-related videos 1 and 2. Only the quality of video 2 is rated as being significantly higher than that of video 1. The ratings for video 3, which, in contrast to the other two, was a recruiting video more focused on image and employer brand, are however significantly different. Despite high quality ratings, the authenticity was rated as very low and the job seekers were not able to obtain a better picture of the advertised position. We can therefore assume that the added value of this video in the job ad was perceived as rather low, which may have also had an effect on the otherwise high rating of the fundamental usefulness of videos in job advertisements.

A final survey within an online panel with a total of 100 participants was intended to obtain additional information on the reception of the recruiting videos in the job ads and also to verify the results of the online questionnaire within the job portal. As a first step, the survey participants were asked to choose a suitable job advertisement and subsequently asked whether the video had also been viewed. The play rate identified here (video 1: 31%; 2: 32%; 3: 19%) turned out significantly higher than in the video analytics of the job portal, which is probably due to the test situation. Nevertheless, we can see here again that video 3 was accessed much less often. Subsequently, those who had not watched the video were asked for their reasons. In Figure 4, we can see that the importance of the reasons is similar across all the videos. The most common reason given was that the video had not been seen or found. Therefore, references to the video as well as its positioning in the ad must be improved. In this regard, only the visibility of the video in job ad 2 is better.
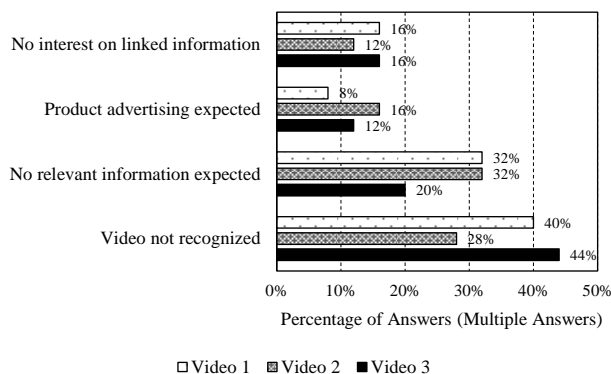

Figure 4.   Panel Results on the Reasons for Not Watching the Video

With regards to the reasons for discontinuing viewing, the study participants' presumptions of product advertising in the hidden champion's job ad and of non-relevant content in the global player's job ad turned out to be below average. This is likely to be connected to the differences in terms of (brand) awareness.

Finally, three of the questions already contained in the online survey on the job portal were posed to the participants of the panel survey. It should be noted that all participants in the panel survey (job ad 1: 35; 2: 34; 3: 31) were asked to watch the video in the job ad in order to answer these questions. The results of this survey are shown in Figure 5. The

question on the subject of quality was no longer asked as no additional findings were expected in the test situation of the panel. Overall, the results of the panel survey were rather disappointing and characterised by a significantly lower range of variation and less clear statements than the results of the online survey on the job portal. On the one hand, this could be due to the fact that the panel participants were randomly selected for the survey. Although screening questions were asked on the field of study and other socio-demographic characteristics, the respondents were not directly in the process of looking for a job.
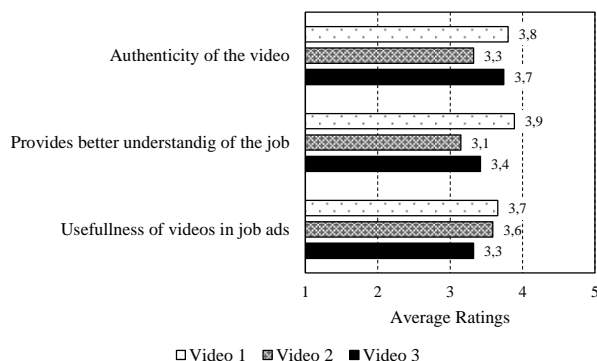

Figure 5.   Panel Results on the Questions of the Online Questionnaire

Additionally, in the second part of the survey, participants were prompted to look at the job ad regardless of interest. Thus, brand awareness or the professional appearance of the video may have played a role in the evaluation, rather than applicant-specific information needs.

V.   CONCLUSIONS

The current shift in Internet usage from stationary to mobile devices is a major challenge to companies to adapt their offerings in the area of e-recruiting. Online job ads, career websites and application management systems have to be optimised for access via mobile devices. While this initially affected primarily the presentation and layout of the user interface design, employers must now also increasingly adjust the content design of their offers. The integration of recruiting videos in job ads, for example, is a possibility here. Especially, when considering that many job seekers are now accessing the information via mobile devices, video will allow the presentation of more complex content and context in a mobile friendly manner. In this study, the integration of such videos in job advertisements was systematically investigated. As a result, in particular the following findings can be noted:

- *Usage*: Applicants generally consider additional video content in job ads useful. In the study, however, click rates of under 10 percent were identified.
- *Video duration*: The length of the videos should be less than two minutes. Longer videos lead to significantly higher discontinuation rates.
- *Video content*: Job-related videos that convey an authentic picture of the advertised vacancy are prefera-

ble to general corporate image videos and content related to employer branding.
- *Embedding*: The videos should be directly referred to in the job advertisement, also in order to clearly differentiate them from other advertising. Videos must be positioned directly in the job advertisement to make them easy to find.

Based on the results of this study, we can also assume that especially lesser known companies could benefit from video integration. While applicants probably already have some knowledge of companies with a well-known employer brand, lesser known employers can convey this information via an appropriate video.

The generalisability of the findings of the present study is limited. Firstly, the fact that the investigation was carried out as a case study is significant, as only three different job ads could be investigated and interventions in the ads were limited to the integration of the video. Furthermore, the system was not yet able to determine the share of observations directly attributable to mobile access. Such enhancements in the analysis should accordingly be the subject of further research. This could be done, for example, on the basis of structured A/B testing. The results of the panel surveys show that an integration of the analysis in real job portals is preferable in order to evaluate the attitudes and behaviour of real job seekers. In addition, differences in the content reception of video content in stationary and mobile contexts should be examined in further studies. Important insights could also be derived from such studies as to how the design and the contents of recruiting videos can be suitably adapted to mobile usage situations.

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