



MOBILE ASSESSMENTS

WHAT WE KNOW AND WHERE WE ARE GOING



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INTRODUCTION

Mobile device ownership in the United States is at an all-time high – 64% in 2015; this is up from 54% the previous year (Pew Research Center, 2015). People are coming to rely on their smartphones for many day-to-day activities. The Pew research group surveyed smartphone users to find out how people use their phones. They found that people are especially likely to use their phones for employment activities: 43% of those surveyed used their phone to look up information about a job and 18% had used their phones to submit a job application.

If more and more candidates are using smartphones and mobile devices in the job search process, how will this impact how organizations attract, screen, and select talent? Are your organization’s recruiting processes mobile-compatible? In this paper, we review some of the frequently asked questions about mobile device usage in the personnel selection process. We also summarize some of the research that has been conducted on the topic and provide some practical recommendations for organizations who are concerned about the implications and consequences of the introduction of mobile devices into recruitment.

BACKGROUND

To better understand how to handle mobile devices in recruitment, let’s first examine the prevalence of mobile use and the demographics of the common users.

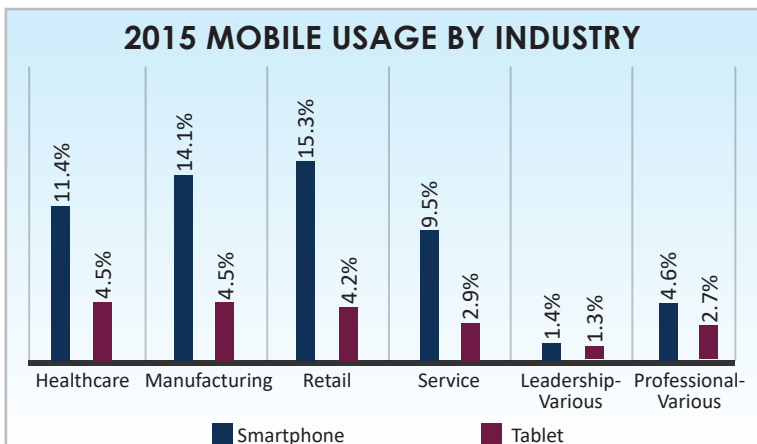
ARE CANDIDATES REALLY USING MOBILE DEVICES?

The short answer is yes. In fact, it is likely about 20% of your candidates are doing so! Additionally, if the current trend continues, the numbers are only going to continue to climb. Select International, a global selection and assessment consulting firm, has been tracking candidate mobile device usage across their clients since 2012. Candidate mobile device usage has nearly tripled during that time frame (from about 7% to about 20%). Given this trend, it’s important for organizations and human resource consulting firms to expect that many candidates will complete all phases of a hiring process on a mobile device.

A closer look at mobile usage in 2015 shows some interesting trends with industry and mobile testing. These numbers include organizations from numerous industries and represent 1.5 million candidates across job levels. Retail and Manufacturing organizations have the highest mobile usage.

WHO IS USING MOBILE DEVICES?

Another clear trend from the research is that as mobile device usage increases, so does diversity representation in the candidate pool. Women, racial minorities (particularly African American and Hispanic), and younger candidates are more likely to use mobile devices to complete online assessments (McClure-Johnson & Boyce, 2015). According to the Pew Research Center (2015), smartphone users relying on their device as their only source of the internet access is more common in certain demographics, particularly within African-American and Latino communities. This means that a hiring process that is mobile friendly will increase minority group representation in your candidate pool. However, we must be careful; a selection tool that is not designed appropriately for a mobile deployment could disadvantage candidates using mobile devices. If this is the case, allowing candidates to complete assessments using their own devices in an unproctored setting can recruit more diversity while treating them more unfairly at the same time. Obviously, this is not in-line with most organizations’ diversity goals!



IMPLICATIONS FOR PRACTICE

If the trends are showing that mobile devices are becoming more popular and minority candidates are more likely to use them, what should organizations be doing to better support mobile devices in their selection processes? In this section we summarize some of the research in this area to provide some guidance and best practices for companies looking to become mobile friendly.

ARE MOBILE CANDIDATES HAVING A POSITIVE EXPERIENCE?

In general, it appears that mobile candidates have greater opportunities to have a negative experience. Here is what the research has identified thus far:

- Candidates using mobile devices take longer to complete assessments than candidates using PCs (e.g., Arthur, Doverspike, Munoz, Taylor & Carr, 2014).
- When candidates are surveyed about completing pre-employment assessments, they overwhelmingly state that they would prefer using a laptop or personal computer (92%) over a mobile device (Fursman & Tuzinski, 2015).
- Applicant reactions to assessment on mobile devices depend on whether or not the assessment was designed for mobile deployment. Simply deploying an assessment to mobile devices without designing it for a mobile user context leads to less positive reactions to the assessment (e.g., Gutierrez & Meyer, 2013); however, when an assessment is specifically designed for mobile device deployment, applicant reactions are the same regardless of the device used by the job candidate (e.g., Kinney, Lawrence & Chang, 2014).
- Candidates who use mobile devices to complete assessments are more likely to encounter distractions and interruptions during the assessment process. Further, Kinney et al. (2014) found that distractions/interruptions impact the scores of candidates that use mobile devices more severely than PC users who report distractions/interruptions.
- Most mobile candidates are completing the assessment at home (not in a public place) but they are less likely to be alone and are likely to be disrupted (Chang, Lawrence, Kinney & O'Connell, 2016).

SHOULD ALL ASSESSMENTS BE ADMINISTERED ON MOBILE DEVICES?

To answer this question, you must determine if candidates who complete the process on a personal computer (PC) have the same general experience and probability of success as someone who chooses a mobile device. We already know that their experiences and reactions could be negatively impacted. From a probability-of-success standpoint, recent academic research has investigated this question across a number of different selection tools. Here is a quick summary of these findings:

- Some assessments measure candidate characteristics consistently across devices whereas other common types of measurement do not. Text-based assessments that do not measure processing speed or reaction time are not impacted by device type (e.g., Arthur et al., 2014; Illingworth, Morelli, Scott & Boyd, 2015). This means that most personality assessments and text-based situational judgment items should perform equivalently across devices.
- Research on cognitive assessments has been mixed. Several studies have shown performance decrements for mobile candidates on measures of general mental ability when the assessment was speeded (Impelman, 2013; King, Ryan, Kantrowitz & Grelle, 2014). Other studies have shown minimal performance decrements for cognitive assessments that have been mobile optimized or do not have a challenging timing component (Brown, Grossenbacher & Nguyen, 2016; Grossenbacher, Brown & Nguyen, 2016). Remember that almost all assessments take longer on mobile devices and mobile candidates are likely to be disadvantaged if there is a challenging time frame for the assessment.
- When assessments include the measurement of processing speed and/or have an interactivity component (where candidate speed and reaction times are taken into account), candidates using mobile devices consistently receive lower scores (O'Connell, Chang, Lawrence & Kinney, 2016). For some, simulations features of the device, such as screen size, matter. Chang, Lawrence, O'Connell & Kinney (2016) showed that score decrements for one interactive simulation decreased as screen size increased. Therefore, most interactive simulations and game-like assessments are not likely to measure candidates equally. It isn't recommended that simulations be deployed on mobile devices unless studies have shown that the measurement is equivalent across devices. Select International is

working on some approaches that would correct for device and make it possible for simulations to become device agnostic (Lawrence, Chang, Kinney & O'Connell, 2016).

- Assessments that disadvantage mobile users can drastically INCREASE adverse impact against protected classes because, as mentioned in the previous section, mobile device usage increases diversity in the candidate pool. Be aware of your assessment measurement to ensure that your candidates are being treated fairly.

HOW CAN I MAKE SURE OUR SELECTION PROCESSES ARE MOBILE FRIENDLY?

Knowing that not all selection tools are equal across mobile devices, ensuring that your tools are "device agnostic" is critically important.

- First, identify all of the online/unproctored steps of your selection process and make sure that the functionality used on a PC is also available on a mobile device. If using an assessment, make sure it launches on all mobile platforms (e.g., Flash programs will not run on Apple Safari). Ask your assessment provider for documented data about the measurement equivalence of your assessment across devices. Most assessment providers track mobile device usage and research differences across user contexts.
- Another useful practice is to deploy a short survey after the assessment to inquire about applicant reactions and the user experience. Candidates do not mind completing these short measures and they can provide a lot of useful information about trends in the perceptions of candidates using different devices.

If you identify that your hiring process is not consistent across devices, you have three options:

1. Replace the tool
 2. Reprogram the tool
 3. Block devices
- If you replace the tool, ensure that the new assessment was designed for mobile deployment. Often reprogramming the assessment to use responsive design is a good option and can improve measurement consistency and applicant reactions across devices. Another strategy to consider when replacing and reprogramming the assessment are not attractive options, is to block devices so that candidates cannot take the assessment on

certain mobile platforms. This approach ensures that everyone is measured consistently, but it also reduces diversity in the candidate pool.

- Note that warning candidates not to use mobile devices is not enough; rather, your technology must actually prevent the assessment from opening if you are concerned that the assessment does not provide a consistent experience across devices. In a recent study, a very strong warning was presented ahead of the assessment recommending that candidates complete the assessment on a PC and NOT on a mobile device. Despite the warning, 17% of the candidates used a mobile device anyway.

NEXT STEPS

With the writing on the wall, what does the future hold for mobile assessments and mobile recruitment? In this section, we discuss recommendation for both test vendors and organizations to be prepared for a future that includes mobile technology.

WHAT IS THE FUTURE OF MOBILE?

Mobile device usage is not going to decline. To prepare for this increasingly connected world, we have the following recommendations:

- Selection vendors and developers must plan for mobile devices when implementing and developing new tools, and this includes emerging technology, such as smart watches. If you allow your process to leverage mobile technology, you must continually ensure it works consistently across all user contexts.
- If you haven't already examined your hiring processes with as many devices as you can, borrow different devices from coworkers, friends, and family to look at how your process is displayed on different platforms. When you see clear differences, consider replacing, reprogramming, or blocking.
- Ask your candidates about their user experience (in a survey or as part of an interview later in the process). Keep tabs on the types of devices being used and how reactions are different to ensure that all candidates are given an equal chance of completing and passing the hiring process.
- Stay in touch with technology advancements and adapt accordingly – mobile technology is here to stay and it is continually changing. Mobile technology impacts our lives in every activity, but if you design your process with these technology advancements in mind, you can create a more efficient, more diverse, and more engaging experience for your candidate pool!

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