

Data collection: the smartphone way

As the number of respondents taking web surveys on mobile phones continues to rise, optimizing web surveys for this technology is essential. Here, we explore differences in mobile phone usage around the world to get a better understanding of why optimizing for mobile technologies is so important. We also explain key elements of survey design that can improve response accuracy, reduce survey abandonment, and increase the integrity of data collected with mobile technologies.



The background on mobile

Without question, the utilization of mobile technologies has grown exponentially over the past decade. With the advent of the smartphone and related technological advances in recent years, capacity for mobile research has increased steadily, giving researchers more ways to reach respondents. Not surprisingly, Service Management Group (SMG) has seen a steady increase in web surveys taken on mobile phones, from 2% in 2008 to 13% in April 2012.

U.S. usage on the rise

To uncover details about the prevalence of smartphones in the United States, we look to Pew Research Center’s Internet & American Life Project, which tracked an increase in U.S. smartphone ownership from 35% to 46% over a period from May 2011 to February 2012. This study found that 88% of U.S. adults are now cell phone owners. Two in five adults (42%) own a cell phone that is not a smartphone, meaning that smartphone owners are now more prevalent within the overall population than owners of more basic mobile phones.

The future looks bright for American smartphone usage, with predicted use (as compared to total mobile phone usage) rising to 75% by 2016.* FIGURE 1 shows past and projected trends in smartphone user numbers from 2008 to 2016.

It’s global

Smartphone usage isn’t limited to the United States; it’s on the rise across the globe. Adoption rates in North America, Middle East/North Africa, developed Asia, Latin America, and Europe are all greater than 30%. Usage of mobile phones to take surveys varies greatly around the world. More than 20% of surveys are taken on a mobile device in emerging Asia and Western Europe, while the figure is 15% or less in the Caribbean, Latin America, and South America. Top 10 and Bottom 10 mobile usage rates for survey responses are detailed in FIGURE 2. >>

* SOURCES:
<http://email-marketing-reports.com/wireless-mobile/smartphone-statistics.htm>
<http://all.pro/blog/smartphone-statistics-2012-rise-smartphones-920>
<http://mobilethinking.com/mobile-marketing-tools/latest-mobile-stats>
<http://www.statistica.com/statistics/201184>
 TNS Mobile Life Survey (2012)

FIGURE 1

Trends in communication illuminate an opportunity

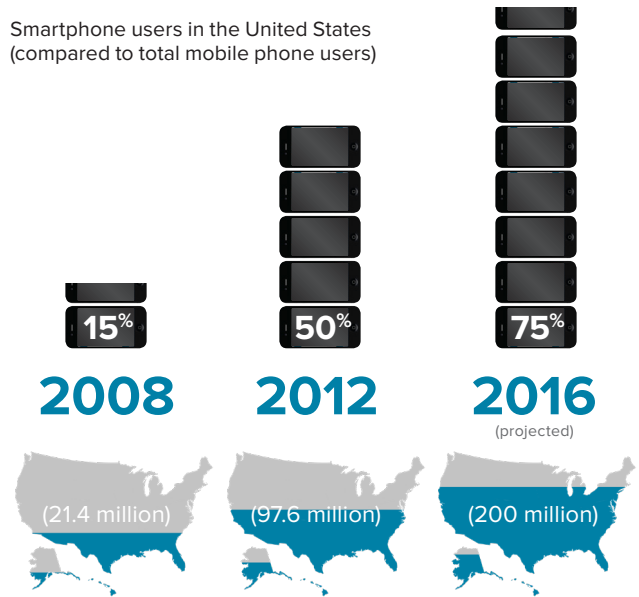
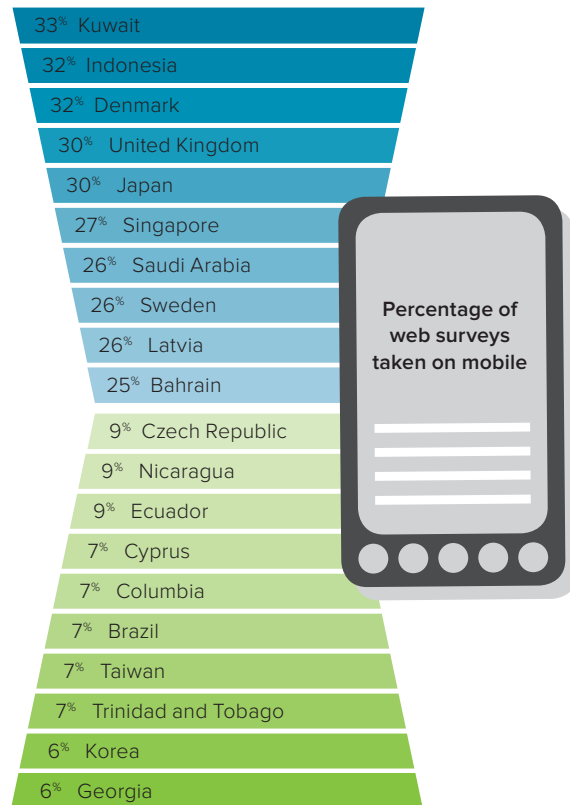


FIGURE 2

Top 10 and bottom 10 mobile usage rates



Adapting your survey for mobile

With mobile usage skyrocketing, SMG has quickly moved to optimize surveys for use on smartphones. The first step in optimizing surveys for smartphones was to conduct tests to uncover the best design for this new technology. While many of the same designs for web- and paper-based survey methodologies can be used for mobile technologies, there are unique features of mobile devices that impact the design process.

SMG conducted two studies designed to define best practices for mobile technology surveys. The studies focused on the type of survey inputs that worked best on mobile technology and the appropriate length of a survey administered on a mobile device.

Screen size matters

The most obvious difference between smartphones and traditional desktop or laptop computers is screen size. Smaller screens have a major impact on survey design. First, the smaller screen does not allow for as many questions and answers to be seen as on a full-size computer. Second, with response options on mobile screens much closer together, human error frequently occurs as a respondent is trying to choose one answer and accidentally selects another.

From a survey design perspective, the most troubling aspect of smaller screen size is the fact that not every response option is visible. With a survey that is not optimized for mobile, it can get pretty ugly (and frustrating). See FIGURE 3 for an example of a non-optimized survey.

Beyond the lack of visual appeal, a non-optimized survey can produce bias. FIGURE 4 demonstrates the results of a test showing that respondents using mobile technology are more likely to select the left-most scale point on a horizontal radio button scale while avoiding options that are not visible (Stapleton, 2011). >>

RECOMMENDATION:

Replace horizontal radio buttons with vertical radio buttons. This change will lead to less biased data by allowing all response options to be seen with the question itself.

FIGURE 3

Example of non-optimized mobile survey

Small screen size makes it difficult for the user to find and select appropriate responses.

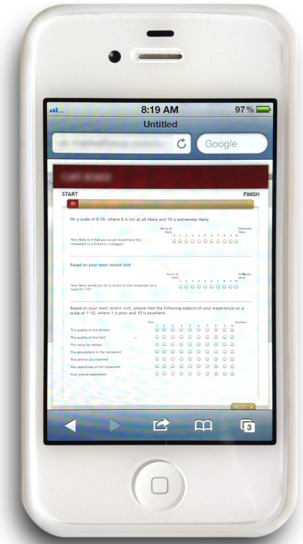


FIGURE 4

Impact of horizontal radio buttons on responses

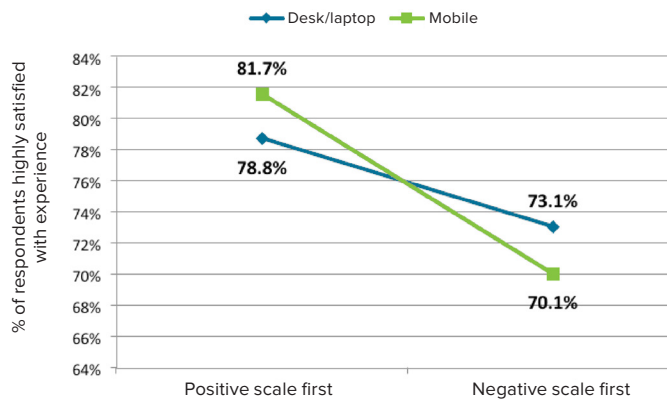
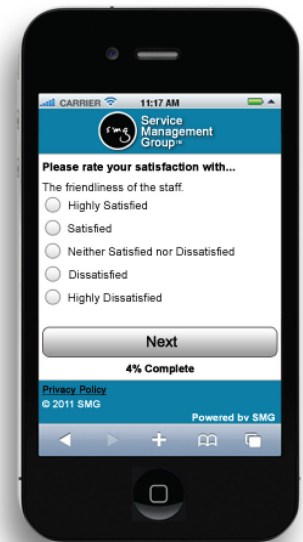


FIGURE 5

Example of optimized mobile survey

The survey format provides ease and accuracy for the respondent.



Survey length impacts abandonment rates

Research shows that survey abandonment rates are significantly higher for mobile respondents than computer respondents (Callegaro & Macer, 2011). This is likely due to increased task difficulty when interacting with smaller screens (Hardwick, Pulido & Adelson, 2007). Also, surveys that are not optimized for mobile phones often have graphics that will increase individual page load times, causing frustration for respondents.

RECOMMENDATION:

Keep surveys simple to make the experience easier for respondents. Surveys on mobile devices should be free of elaborate graphics in order to accommodate the small screen and slower Internet connection.

SMG designed a study to examine the impact of questionnaire length on abandonment rates. Respondents were randomly assigned to receive a survey with either 44 or 26 questions (FIGURE 6).

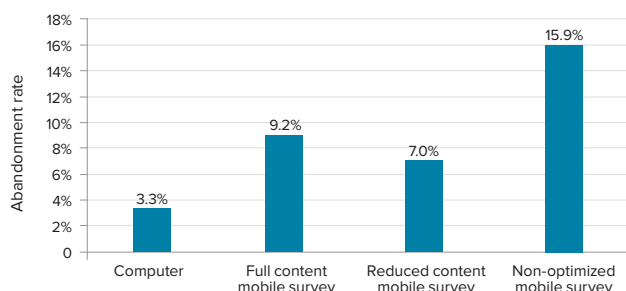
Although respondents assigned to the reduced-content mobile survey had lower abandonment rates than those assigned to the full-content mobile survey, both mobile groups had higher abandonment rates than computer respondents. In order to match abandonment rates across platforms, additional questions need to be cut from mobile surveys. While lower abandonment rate is important, researchers must weigh the cost and difficulty in acquiring survey respondents before deciding how many questions to cut from their mobile-optimized surveys.

RECOMMENDATION:

To match abandonment rates across platforms, reduce the number of questions in mobile surveys. To retain other questions in your survey that are valuable but not needed on every survey, we recommend asking them to every “nth” survey respondent.

FIGURE 6

Abandonment rate comparing computer respondents with mobile respondents



Conclusion

With the explosive growth of mobile technology and smartphone usage, survey optimization for this platform is crucial for researchers. They must design and implement mobile surveys that are fully optimized for today’s technology-savvy, time-strapped consumers. This means using vertical radio buttons as response options and considering shorter survey duration. As the pattern of usage continues to grow around the world, this optimization must occur now. ●

REFERENCES:

Callegaro, M., & Macer, T. (2011). *Designing Surveys for Mobile Devices*. Presented at the American Association for Public Opinion Research Conference 2011, Phoenix, AZ.

Hardwick, M.E., Pulido, P.A., & Adelson, W.S. (2007). The use of handheld technology in nursing research and practice. *Orthopaedic Nursing*, 26, 251-255.

Pew Research Center’s (2011). Internet & American Life Project.

Stapleton, C. (2011). *The Smartphone Way to Collect Survey Data*. Presented at the American Association for Public Opinion Research Conference 2011, Phoenix, AZ.

TNS Mobile Life Survey (2012).



About Service Management Group

SMG inspires experiences that improve people’s lives. We are a catalyst for change, providing actionable customer, patient, and employee insights that boost loyalty and drive business outcomes. Our unique model puts a dual focus on platform technology and professional services—making it easier to collect, analyze, and share feedback and behavioral data across the enterprise. To learn more about our customer experience management, employee experience, and brand research solutions, visit www.smg.com.