



Evolving Best Practices in Mobile Surveys and Online Administration

Kinesis Survey Technologies
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Introduction

As the industry that both predicts and drives marketing strategy for corporations and brands, market research must always stay abreast of tools and technologies that can expand marketing channels. In today's world, mobile technologies are considered to be critical tools for marketing, advertising and customer loyalty strategies, and are already making a significant impact across all industries. By 2013, the installed base of mobile devices worldwide will surpass that of PCs¹ and therefore must play a significant role not only in marketing practices, but also in market research.

There is no question that there is an immediate need for development and delivery of effective mobile research. As device capabilities have advanced, interest in mobile-accessible surveys has continued to increase among consumers; data released within the last year by Kinesis Survey Technologies² and other mobile survey software providers indicates that survey respondents are increasingly attempting to take surveys on their mobile devices, whether researchers intend for this or not. While researchers can attempt to block respondents from accessing surveys via their mobile devices, respondents are the ones who will ultimately demand which mechanisms they are willing to utilize when participating in research activities, and the industry has no other choice but to support them.

Mobile data collection remains an uncharted platform for most market research companies primarily because it is unfamiliar territory, but in reality mobile survey projects are not highly complicated to implement. The primary challenge for researchers lies in designing surveys that both meet research objectives *and* provide a satisfactory user experience for mobile respondents. Researchers need to examine each project's objectives and determine which methodologies to employ, which mobile device types to support, and what mobile design strategies to utilize. Beyond these steps, researchers must also consider the implications of online research administration -- including panel management practices and the versatility of multimode (web and mobile) survey implementation.

As the leading mobile and multimode research software provider since 2003, Kinesis has hosted all varieties of mobile research projects and has successfully processed millions of mobile surveys to date. Based upon this extensive experience, Kinesis offers the following best practice recommendations and considerations for all researchers who are new to mobile survey research. As is always the case with rapidly evolving technologies, few scientific studies have been conducted, and common sense and experience in fielding prior studies must serve as your guide.

Mobile Survey Methodologies

Long or more complex surveys that many researchers employ may not be suitable for mobile devices. A primary consideration for all of the market research industry is how best to gather substantial and meaningful insights while utilizing shorter, simpler surveys that suit these mobile devices. Online research methodologies must evolve to encompass mobile, and new mobile-specific methodologies must be established as well.

¹ Gartner Research Report (<http://www.mobilemarketingwatch.com/forecast-mobile-web-access-to-surpass-pcs-in-2013-by-more-than-100-million-4920/>)

² Kinesis whitepaper "The Mobile Survey Landscape – Today and Tomorrow" (<http://www.kinesisurvey.com/resources/whitepapers/>)

While researchers should always reexamine project methodologies on a case-by-case basis, some of the successful approaches used to evolve surveys for mobile implementation have included the following:

- Utilize larger sampling frameworks, while displaying a shorter question set to each respondent. This process may entail presenting questions or question blocks randomly or in rotation to a subset of respondents.
- Leverage prepopulation as much as possible. Any fields that can be prepopulated eliminate the requirement to display another screen to respondents, thereby shortening the survey.
- For concept testing, two to three concepts are more than likely the maximum quantity that will yield a respectable response rate in any one survey.
- Trim project objectives and conduct more projects, rather than attempting to apply multiple objectives to a single project. The data set may need to be married across projects on the basis of behavioral or other sampling methodologies, and not tied to individual respondents.

Mobile Survey Design

Once a project's research methodology has been determined, the next step is to consider various aspects of the survey design. The chief consideration in mobile data collection concerns which mobile device types to support. Obviously smartphones provide much deeper functionality than feature phones. Tablets (Apple iPad, Samsung Galaxy Tab, Blackberry Playbook, etc.) and Netbooks further blur the distinction between computer and mobile device, but because of their size, portability, and touch-screen control, should be managed similarly to mobile devices. A broader technology perspective to keep in mind is that the computing industry is converging to a point where screen size and user input (i.e., mouse vs. touchscreen) may be the only differentiating factors among computing devices. Today's tablets and smaller screen devices do not yet have comparable computing power to that of desktop PCs, but in a relatively short timeframe they will and thus will be able to render the web's richer content.



With the many design advantages offered by smartphones (and tablets and Netbooks), some researchers elect not to support feature phones in their mobile survey projects. This decision should be made on a project-by-project basis; at least for the next few years, some projects will require feature phone support in order to obtain a representative sample. In April of this year, Kinesis and StartSampling Inc. partnered to conduct a survey among primary household purchasers that gauged current mobile behaviors and views about mobile research participation. Among those polled, 30.4% utilize feature phones and 84.1% utilize smartphones to conduct the most common mobile activities (with some obvious overlap represented by individuals who utilized multiple devices), and while smartphones were found to be the dominating mobile device, feature phone usage still outnumbered both Netbook and tablet usage.

Five years from now feature phone usage will have decreased significantly among many populations, as smartphone penetration continues its rapid growth and mobile device domination. Based on the mobile device offerings of today, however, below are the primary elements to consider when designing a mobile survey.

Survey Length. It is intuitive that mobile surveys should be shorter in length than typical web surveys. Since mobile devices offer small screens and are intended to be utilized on-the-go, long surveys that take more than a few minutes to complete are not ideal. Researchers who are already conducting mobile research do seem to understand this; in a random sample of Kinesis surveys completed during the July-December 2010 timeframe, the average number of questions (data points) programmed for PC surveys were 312.4, versus 17.2 for mobile surveys.

Branding. Branding design must also be optimized for mobile surveys. All mobile screens offer limited display size when compared to computer screens, so researchers must be cognizant of how much content can ideally fit on any given page. Minimal branding should be used so the majority of the viewable area can be devoted to question content. Survey branding for smartphones and feature phones should be handled differently from one another as well. Nearly all phones, except some older models of feature phones, support embedded footers that contain customer support email addresses, copyrights, and privacy policies, so the respondent can access this important information on every page. Cascading Stylesheets (CSS), which are used extensively in desktop-based surveys to provide branding and background theming, are only supported on phones that support XHTML or full HTML (which excludes WML-based feature phones). Please note that your survey solution should be able to detect which type device any given survey respondent is using and render branding appropriately based upon that device.

Supported Question Types. For the most part, feature phone browsers support only radio, drop down, checkbox, and open ended questions. Smartphone browsers, however, can also render drag and drop questions, table structures, and other dynamic question types. While a majority of mobile survey traffic comes from smartphones, feature phone usage is still prevalent (23% of mobile traffic at Kinesis is from feature phones). Therefore, it is recommended to limit mobile survey design to the four basic question types unless (1) there is a decision made that supporting only smartphones is sufficient for purposes of the research; or (2) the survey programmer takes the added time to mask display elements conditionally based upon device type.

Question Text. Questions and response options should be written as concisely as possible to optimize the limited display. Option lists should be kept as short as well, and instructional language, definitions, and redundant explanations should be eliminated completely. This may mean that mobile respondents experience not only a shortened survey, but also a variation of the answer sets. As a practical limitation, many would argue that the number of response options should be determined by how many options can fit on the screen without scrolling. Kinesis believes that scrolling is generally necessary, but if there are more than 10 to 12 responses in a list, the options should either be shortened or divided into multiple questions (and then merged into a common data set either through behind-the-scenes processing or in final data processing). Common sense is your guide here – and the amount of scrolling that respondents are willing to accept is relative. If there is only one screen which requires scrolling, the tolerance of respondents is likely to be greater than if this is the case across multiple screens. Keep in mind that demographics and the type of device being used may also play a role in the amount of scrolling that will be tolerated by respondents.

Table Structures. Many researchers argue that table structures should be eliminated from all mobile surveys because they cannot be displayed by feature phones, nor some early generation smartphones. Because many feature phones can only support a single question per screen, it is not possible to display more than a single table row per screen on these devices (and it would not render as a table row, but simply as an individual question). Newer smartphones (and some feature phones) can render tables, but scrolling – horizontally and vertically – often may be necessary in order for the respondent to see the entire table structure. Short, simple tables (such as those that ask for a percentage allocation across two to four number fields) may be achievable. Longer grid tables must either be broken into separate questions or subsets, or eliminated from use altogether. For all of these reasons, table structures should be utilized with caution.

Use of Media. When media – both images and video – are used in mobile surveys, there are several considerations. Some older feature phones have limited color configurations that could result in a distorted visual appearance of images, and others cannot render images or videos at all. For the vast majority of mobile devices that can display images, it is recommended that the media scale dynamically to fit respondents' individual screen sizes. This can only be accomplished if the data collection software is able to recognize the type of device being used and render the content appropriately, or if the phone's browser supports automatic resizing of images. Second, automatic device detection must also be used in order to serve up video content appropriately; older feature phones generally support different file types (3GP and 3G2) than newer smartphones (MPEG4, Flash, etc.), so presenting the correct video format can eliminate device bias by ensuring all respondents can view the media. When displaying videos to respondents, the media can either be embedded within the survey (supported by smartphones that support full HTML4 or above), presented as a link for download (support by all mobile devices), or presented as a link for streaming (supported by nearly all mobile devices). Streaming media is a superior method of delivering video to respondents over traditional downloading because it allows respondents to start watching the content much more quickly than traditional downloading, but the method is generally more complex and expensive to setup and launch. Services such as content delivery networks (CDNs) specialize in delivering streaming media to large audiences, and managing this process in-house requires configuration of a server that utilizes the Real Time Streaming Protocol (RTSP). This process allows respondents to view 3GP, MPEG, or Flash content on-the-fly. Regardless of the method used for serving videos, researchers should disclose to respondents how much data will be consumed in downloading or viewing the media.

Use of Open Ends. The use of open ends within mobile surveys is a greatly debated topic in the industry. Though some findings suggest that the amount of text entered as an open-ended response does not vary between computer respondents and mobile respondents, the responses may differ qualitatively. This is in part due to the fact that the demographic of those respondents using a mobile device is often skewed toward a younger generation, and social media and texting language are often used as abbreviations. While open ends can be successfully utilized in mobile surveys, it is best to consider their inclusion on a project-by-project basis. Smartphones with keyboards or large displays, tablets, and Netbooks enable relative ease for data entry because of their full alphanumeric key options, while feature phones have traditional phone-style keypads that make text inputs slower and more prone to typing errors. Additionally, feature phones may not allow respondents to see their typed answer in its entirety on the same screen.

Advanced Functionality. Flash-based question types will not render on the majority of mobile phones in use today. While Flash technology is available for many smartphones, the plugin is sometimes turned off or configured as “on-demand” by default (and forces respondents to click an option to show the flash content on a per-page basis). Further, the performance of Flash technology on mobile devices is still not as optimized as it is for desktop PCs and laptops. This may be a short-lived phenomenon, and HTML 5 (which is already supported on nearly all smartphones) is purported to outperform Flash.

Privacy Policies. Displaying privacy policy information and other lengthy text within a mobile survey can be difficult due to restricted screen sizes. Smartphone surveys can include the use of embedded links in the survey’s footer that open the privacy policy in a new window, but older feature phones may not support additional windows. Because of this, researchers may want to place a back button on the privacy policy so the respondent knows to return to the survey. Note that this does require navigating away from the survey and may increase dropout rates. Another option that can be utilized for all device types is to insert an initial question “Would you like to read our privacy policy?” and, if the respondent answers “yes,” display the policy based upon conditional logic, then allows the respondent to continue to the next page by clicking the next button. This approach obviously lengthens the survey but is one means to provide this critical information in a uniform fashion to all respondents.

Best practices for mobile survey design will continue to evolve over the next several years as mobile browsers advance and continue to narrow the capabilities gap with web browsers. Many of today’s limitations will fade over time, and therefore Kinesis will routinely update our survey design best practice recommendations to keep pace with emerging mobile technologies.

Mobile Survey Invitation Options

Another primary consideration for all mobile survey projects is the invitation delivery method. Email, SMS text and SMS short code are the most common options today and can be utilized by nearly all mobile devices, while other invitation options are available exclusively for smartphones, tablets and Netbooks. Deciding which invitation delivery method(s) to utilize is again dependent on the specific survey project’s needs. It should be noted that best practices have not yet been established around mobile invitation methods, yet it seems intuitive that:

- They should be as unobtrusive as possible;
- Where obtrusive, they should be scheduled at the respondent's convenience; and
- To the extent possible, they should be consistent with existing project invitation methods.

For surveys intended for panelists where contact information is available, email and SMS are the leading choices. Email is the predominantly used survey delivery option and will likely remain so, as email is very inexpensive when compared to SMS, and mobile email viewership continues to rise (up 81% in the previous six months according to a May 2011 study by ReturnPath³). Email is also a relatively unobtrusive method. SMS text is a highly immediate invitation method, yet its usage regulations vary by country and therefore must be carefully researched before being implemented in multinational projects. SMS is a more obtrusive method than email in that notifications appear directly on the mobile screen, and as such Kinesis believes that text messages should be scheduled in accordance with panelists' desires. Panelists should be afforded a mechanism for controlling this form of invitation because excessive use of SMS, particularly for reminders, has the potential to further alienate respondents. Where possible, separate opt-out mechanisms should be maintained by invitation mode in order to maximize panelist retention. Keep in mind that an SMS text message can only contain a limited amount of characters – which may not be sufficient to include survey information as well as required sender information and a method to unsubscribe. For these reasons, Kinesis recommends using email where possible, as it is well received by a majority of respondents, and it provides delivery continuity for multimode surveys.

When respondent contact information is not available, such as in general intercept research, SMS short codes are a viable option. Short codes are easily posted on various types of media; they currently are the most popular option for retrieving survey URLs at restaurants, retail shops and other locations. There are dedicated short codes which are used exclusively by one sender (and as such are expensive and can often take weeks to set up), and shared short codes that are more budget-friendly (but require the use of additional keywords to route messages to the intended recipients). There are also variations on SMS text messaging and short codes that are available only in certain geographic regions and/or with certain mobile carriers. In Europe and other places where GSM network standards are used, a technique called WAP Push is available and has proven to have higher completion rates than basic SMS. Additionally, new “Zero-rated,” “FTEU” (free to end user), or “Toll-free” SMS and short code services are emerging that allow the sender to bear the recipients' cost for delivery of the text message, but these may not be available across all of the major mobile service providers.

For smartphone devices, some new survey delivery options also exist. QR codes can be utilized in the same fashion as SMS short codes, and the main advantage offered by QR code invitations is that they are virtually free of cost for both the researcher and the recipients. Today implementation of QR code surveys requires that research participants have installed a QR code reader/scanner app on their smartphone, however in the not-too-distant future, QR interpretation will be a native function of mobile devices. As QR code knowledge and usage are both growing very quickly worldwide, this will likely be a very viable invitation option moving forward and it could very well supplant SMS short codes because of cost considerations.

³ ReturnPath blog “Marketers Need to Embrace Changing Email Habits” (<http://www.returnpath.net/blog/intheknow/2011/05/mobile-email-study-finds-81-growth-in-email-activity-on-mobile-ipad-tablet-viewership-increasing/>)

Geolocation is another invitation option that is exclusive to “smart” devices; using the device’s location detection technology, researchers can deliver surveys based on the targeted recipients’ physical location. Geolocation holds great promise for the industry - not just as an invitation option but also potentially as an added dimension of research data - but the technology is not yet ready to be used for most projects. It is generally not accurate enough to trigger an invitation at, as an example, a precise store shelf or display. Privacy regulations for geolocation are still evolving as well, and many respondents may dislike the intrusive nature of having their location tracked, despite an initial opt-in process. A further complication is that geolocation, particularly for tracking, causes an extreme battery drain on respondents’ devices because an application and the device’s GPS radio must constantly run in the background during day-to-day usage. It is generally viewed that the burden on the respondent is too great to “geotrack,” for most mobile projects; although, gaining opt-in for specific types of research may be permissible, especially where incentives compensate. Note that geofencing and other technologies such as Bluetooth offer additional mechanisms of providing geolocation.

For mobile panels where regular communication is necessary and expected, custom research apps with in-app messaging are a viable survey invitation option. Beyond the app’s development and maintenance costs, app messaging is typically free (besides extremely minor data consumption) and messages pop up on the device screen similarly to text messages. Yet, app messaging is only possible for panelists who have previously opted into a panel and downloaded the app to their device, so this option certainly has a limited audience.

Determining which of the above referenced mobile survey delivery options to use should be based not only on the specifics of each research project, but also on the device preferences of the targeted recipients. Some of the options are more versatile, some more direct, and some more targeted, and the pros and cons of each must be weighed prior to selection. Generally Kinesis recommends email invitation for panelists, and QR code or SMS short code invitations (or both in tandem to offer respondents greater flexibility) for general intercept.

Multimode Access Whenever Possible

Certainly there are survey projects that are suitable for access only via mobile devices, such as mobile ad testing, WAP site profiling and on-the-spot feedback, whereas other survey projects are too lengthy and/or complicated for mobile platforms. Some researchers may elect to begin development of mobile surveys for mobile-only types of projects while continuing to conduct all traditional online research surveys via computers. This approach is very limiting because it lacks flexibility for respondents; a majority of survey projects could be completed using either type of device. The reality is that respondents may be accessing any device at any time, and could even desire to save and resume from one device to the next. Where will they be when they have the time or inclination to complete a survey? It is impossible to know, and therefore the ideal method is not an *either/or* but a *both* solution. Researchers who embrace this fact and – to the greatest extent possible – design and deliver surveys in multimode will be the most successful moving into the next five years of market research and beyond.

The paramount consideration in all survey design should be the respondent experience. In the past respondents have been abused by the market research industry through a variety of poor survey implementation practices, and the result is a dwindling pool of respondents who are willing to take surveys. To reverse this trend, it is important to keep in mind that effective multimode surveys must in some cases support not two levels of programming and design (for web and mobile browsers), but three levels, since the browser capabilities of smartphones and feature phones are radically different.

Developing surveys for all three levels is not as difficult as it might initially sound. By utilizing a survey programming platform that can detect device type/capabilities, surveys can be rendered to respondents based upon the functional capabilities of each device, whether it is a feature phone, smartphone, tablet, laptop or desktop. For example, Kinesis Survey™ automatically restricts which elements can be included in a mobile survey, thereby making the creation of each survey easier to build for all devices. For a multimode survey, restricted elements are altered or deleted from the mobile version and replaced with a suitable alternative. HTML formatting can be stripped out, and certain images can be replaced with alternate tags should the mobile device of an individual respondent not support these elements of the survey. This type of functionality ensures that all respondents have a survey experience that is optimized based on the capabilities of their device of choice. The following table outlines the key capabilities and components that can be included for each of the common device types. This table serves only as a guide, however, and support will largely be dictated by the underlying data collection software solution in use. Many advanced question types can already be supported on most devices (so long as they do not utilize Flash).

| | Feature Phones | Keypad Smartphone | Touchscreen Smartphone | Tablet / iPad | Computer |
|--------------------------------------|----------------|-------------------|------------------------|---------------|----------|
| Basic Question Types | ✓ | ✓ | ✓ | ✓ | ✓ |
| Advanced Question Types | | ✓ | ✓ | ✓ | ✓ |
| Table Matrix & Slider Question Types | | | ✓ | ✓ | ✓ |
| Large Image Display | | | | ✓ | ✓ |
| Geolocation | | ✓ | ✓ | ✓ | ✓ |
| Custom App Interaction | | ✓ | ✓ | ✓ | ✓ |

As a best practice in *all surveys*, in cases where a survey does not fully support all three levels of browsers, Kinesis recommends informing respondents as to what types of devices are or are not supported on the initial survey screen. Messages such as the following examples should be provided to inform respondents that the device they are using may not be appropriate for the particular survey they are attempting to take:

- *This survey is estimated to be 10 minutes in length and contains tables and Flash content that may not render on your mobile device.*
- *This survey is optimized for desktop browsers only.*
- *This survey supports web browsers and most smartphones. Respondents with feature phones may not be able to complete it. It will accommodate tablet devices such as the iPad or Galaxy Tab.*

By offering respondents device flexibility whenever possible and adequately informing them when device limitations are present, researchers will empower respondents and eliminate significant potential frustration.

Mobile Implications for Panel Management

Mobile surveys certainly offer the market research industry access to an entirely new pool of potential respondents than was previously possible, but mobile technology also provides mechanisms to engage existing online panelists further when the platform is utilized correctly. Panel management tools are an important aspect of the mobile research expansion and therefore best practices in the management of mobile panelists must be addressed. All mobile web users increasingly expect that the websites they visit via their computers will also be highly functional when accessed via their mobile phones, and research panelists are no different. If surveys are to support mobile devices, then the mobile respondents need to have an end-to-end experience (which includes all landing pages) that is also mobile-enabled. In the near future, this will also need to include mobile payments for incentives.

Researchers who deliver mobile surveys to panelists should use mobile-enabled panelist tools and community websites as well. Due to technology and device size limitations, it is unrealistic to expect that all online portal functionality can be easily replicated in the mobile environment, but functionality that is most commonly utilized in these environments (such as registration with double opt-in, lost password retrieval, and the ability to check and redeem incentives) should be made accessible. As an industry, researchers need to ask ourselves the following question: Does it really make sense to have panels and communities that support only certain types of browsers? Across the computing landscape, virtually all applications are increasingly designed to support users regardless of the device that they choose to utilize.

Conclusion

Mobile technology is changing the landscape of marketing and consumerism - and by extension, market research. Researchers must adapt their survey and panel strategies to capitalize on the opportunities of the mobile platform. Surveys need to be shorter and more succinct to adequately render on mobile devices, and engage a public whose attention span is shrinking. Surveys tools and panels must be multimode-enabled to the greatest extent possible – desktop, laptop, mobile phone, tablet, etc. – since respondents have so many web access options to choose from, and researchers cannot control that choice.

With all of the mobile devices and technologies available today, and others that will be developed for tomorrow, the potential of mobile and multimode market research is vast. By utilizing the recommendations provided here for mobile research implementation, market research companies can be empowered to move successfully into this new research frontier. The benefits and opportunities of mobile will drive researchers forward to develop industry-wide mobile and multimode best practices, and ultimately reinvent the field of market research for the next generation.