Over the past several years, one of the most important trends in market research has been the increasing use of mobile devices to access the internet. Researchers have a history of familiarity with designing online surveys to display on PC devices. But now online surveys must accommodate smaller screens and touch devices such as tablets and smartphones. We have to work harder and think differently for this set of users. We must consider things such as reducing the length of the survey and designing them to be effective on a screen size that is less than a quarter the size of a PC screen...all, of course, without compromising the integrity of the resulting data. Not only that, these mobile survey designs must be compatible and render properly on iPhone, Nexus, Samsung, iPad, you name it.

We started these discussions about mobile participation in online surveys with a series of papers starting in 2012. Even three years ago, the mobile landscape was very different than it is today. Android-based devices have caught up to iPhones in usage and popularity; tablet devices have become even more commonplace; HTML5 supplanted Adobe Flash—just to name a few of the shifts in the mobile marketplace.

With these core changes it is good time to again review the landscape: to look back at what happened in 2014 and anticipate future trends surrounding mobile participation in online surveys. Our sample and data source remains the same as our previous studies. Prior to the FocusVision acquisition in January 2015, Decipher fielded more than 74 million surveys starts in 2014. Utilizing thousands of independent surveys, a giant chunk of the global survey-taking population was tapped. Studies ranged from the very short to the very long and complex. A few clients have started optimizing a portion of their studies for mobile devices. But the vast majority still do not. For this paper, we aggregate data across all client projects and also extract examples from individual studies to illustrate key points. While our data is representative specifically of past Decipher survey software clients and studies in 2014, we are confident that the data points are directional trends reflecting the industry as a whole.
Mobile penetration in online surveys

When it comes to questions about mobile users and online surveys, foremost is “how big is this audience?” Figure 1 (chart below) and Figure 2 show which devices respondents are using to access our surveys and how we define them.

<table>
<thead>
<tr>
<th>Device</th>
<th>Description</th>
<th>Screen Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop</td>
<td>Standard desktop computer (e.g. PC, Mac, laptop)</td>
<td></td>
</tr>
<tr>
<td>Tablet</td>
<td>Modern tablet devices like the iPad and Samsung Galaxy Tab.</td>
<td>~7-10&quot;</td>
</tr>
<tr>
<td>Smartphone</td>
<td>Newer devices like the iPhone, iPod Touch, Android, webOS and new Blackberries.</td>
<td>~3-6&quot;</td>
</tr>
<tr>
<td>Featurephone</td>
<td>Older devices that have HTML-capable browsers and a screen width &gt;= 240px</td>
<td>~2-4&quot;</td>
</tr>
</tbody>
</table>

Figure 1

Mobile growth in online surveys simply mirrors the industry’s overall growth in mobile access to the internet. The latest figures from StatCounter show the growth of smartphone usage accelerating into 2014 (Figure 3). Not surprisingly, industry analysts expect smartphone usage to continue increasing over the next several years. Handset manufacturer Ericsson believes global smartphone subscriptions will achieve a compound annual growth rate of 15 percent through 2020. They believe decreasing costs of handsets and data plans, improved usability, and expanded network coverage are making global technology accessible to an increasing number of consumers worldwide.

As we look to 2015 and beyond, then, we can expect mobile access to online surveys to continue to increase over the long term.

Client and panel supplied samples

The extent of mobile penetration in online surveys will vary depending on the sample frame. For example, Pew Research finds smartphone users skew younger and more affluent.

Among the online survey respondent population, we’ve found that client-supplied (e.g., a list of customers) and panel sample is another important distinction. Generally, panel-supplied sample has a lower incidence of mobile survey takers. Panel members often sign up to join panels using a PC device. We suspect that they are more likely to check email and get the survey invite while using a PC. As panel members expect to receive surveys, they are prepared to take them on the device with the best viewing and user experience. Our latest figures (Figure 4, next page) show this pattern of behavior has not really changed. Panel members are still slow to adopt mobile survey access.
On the other hand, contacts on a list that is client supplied are often everyday consumers that will view a survey invite as another email marketing solicitation. According to Litmus, roughly half of all emails are opened by a mobile device\(^4\). Mobile penetration in client list studies more closely reflects the population at large. Access to these studies are increasingly coming from smartphone users—22 percent for 2014. With those high numbers, the researcher sampling a list of customers would be hard pressed to build an online survey that did not have a smartphone design strategy.

**By Country**

Mobile penetration rates also differ by country. Figure 5 below shows smartphone and tablet device usage in online surveys by the countries in which the Decipher platform most often fielded surveys. The United Kingdom, United States and Canada see the highest proportion of survey access via mobile devices. Asian countries tend to see less. These regional differences here mostly reflect the actual device penetration for each country (Figure 6). For example, United Kingdom smartphone usage is high, so smartphone access to online surveys is going to be high there as well. There are a couple of discrepancies, such as China and Mexico.
Survey completion rates by device
Traditionally we have found that smartphone users almost always abandon surveys at a greater rate than devices with larger screens. Whereas desktop and tablet users show roughly about the same participation rates. We know that, on average, it takes a little bit longer to complete the same survey on a smartphone than a PC or tablet. So one factor affecting participation rates is the extra time spent navigating content on the smartphone. Additional steps are often required to view (e.g. scrolling, pinch / zoom) items that have been resized or repositioned for the smaller screen. Often, surveys are not fully optimized for mobile, leaving the respondent with a poor user experience. Two common problems are that text is too small or cluttered and input areas are not large enough to select with precision. These things increase the respondent’s burden and encourage him or her to quit a survey.

We are delighted to see that over the years, however, completion rates for smartphone users have improved. While smartphone users still see lower completion rates than desktop and tablet users, that gap has steadily narrowed (Figures 7 and 8). More clients are diligently adopting mobile strategies and mobile friendly surveys. The Decipher survey platform has also increasingly incorporated responsive designs and provided mobile friendly question types. The Decipher device identification engine can identify the device used to access a survey, and survey text and question formats are adjusted in a way that provides the optimal user experience.

Optimizing surveys for mobile devices
What is a mobile optimized survey design?
The Decipher survey technology has continually advocated survey designs that are:

- **Readable**: Are all questions and answer options easy to read and understand? Verify text size is readable, ensure no labels are cut off.
- **Usable**: Do buttons and input forms work properly and can be used without zooming? Verify content works in vertical or horizontal orientation.
- **Performance**: Does it feel sluggish, or do pages and content load without delay?

**Figures 7 & 8**
Completion rates by device. Data aggregates studies from the Decipher survey platform’s highest volume accounts. Base size: 3M+ per year (desktop); 200K+ per year (tablet); 500+ per year (smartphone).
Decipher

These are device agnostic guidelines. But the history of online research has been mostly PC-centric. Only recently have researchers learned to apply these guidelines to smaller screen and touch devices like the tablet and smartphone. Figure 9, for example, shows a typical example of a gender question. That works fine for the PC, but when scaled down to fit the smartphone, the question becomes more problematic (Figure 10). The text is now smaller to read and the size of the radio button has shrunk. The input area is no longer large enough for touch tapping. Without a mobile friendly survey design, the overall result leaves the smartphone user with a poor experience.

Turning our example into a mobile friendly design can be achieved with two simple enhancements:

1. Enlarge the text so that it can be easily read.
2. Enlarge the input areas so that a mobile user has enough room to touch tap in the space provided.

There are multiple ways to achieve this. For example, take the same gender question and use button boxes instead of radio buttons. Or we can still use radio buttons, but resize them to make them more user friendly (Figure 11). The entire row is selectable, not just the radio button. Both these options pass our threshold of an easy-to-read, easy-to-use touch input design.

Our previous white paper provides further details for mobile optimization techniques and strategies we have used with clients. These have demonstrated that mobile-optimized designs improve survey participation without sacrificing data quality.

Figure 9: Desktop View

Figure 10: Mobile View

Figure 11: Mobile Optimized
Phablets, mini tablets and more

Phablets and mini tablets have become an emerging mobile device category since their introduction in 2012. Apple’s iPad 2 features a 9.4 inch screen size. Their iPad mini includes a 7.9 inch display. The International Data Corporation (IDC) suggests a definition for “phablets”—smartphone devices with a display size between 5 to 7 inches—and expects this category of device to have had a worldwide market share of nearly 10 percent of all connected devices\(^5\). Essentially, the mobile device market is now seeing a range of screen sizes. Tablets are getting smaller and smartphones are getting larger.

How are these trends impacting online survey research? We investigated one client survey to get some idea of the size of the online survey population for various mobile screen sizes. The study in question was a mobile optimized VOC tracking study. The sample used came from a client-supplied list of customers for a global e-commerce firm. Through 2014, more than 350,000 respondents clicked through the survey which consisted of roughly five questions. Figure 12 shows online survey starts broken out by screen size. Phablets and mini tablets represented a small portion of this study.

Participation rates for the various screen sizes are shown in Figure 13. There is a clear relationship between screen size and participation rates. The larger the screen, the better the participation rates. Desktop users show similar participation rates as regular size tablet users, but when screen size decreases, so does survey participation. Smaller screen users are not as engaged. There could be profile differences between users of the various screen sizes or perhaps the mobile optimized survey needed further refinement. Whatever the case, time will tell how popular this new category of mobile devices will become for consumers.

The good news is that nearly all mobile optimized surveys are designed with the smaller size smartphone screens (4 inches or less) in mind. A user-friendly survey on these devices can usually scale seamlessly to mobile screens that are larger since by then only but the most essential content has been stripped and the designer has already figured out how the survey can best be navigated on a screen with even less real estate. We expect the researcher who is already familiar with four-inch screens will have no problem adjusting to five- or seven-inch screen sizes, if these devices gain traction.
While further investigation on the various mobile screen sizes are warranted, for now, we are still awaiting evidence that “phablets” or “mini tablets” represent a significant and unique profile of users. The Decipher survey software platform’s device engine generally classifies “phablets” as “smartphones” and mini tablets as “tablets” and there is currently no reason to change this classification.

The mobile landscape continues to grow and evolve. And it has been exciting and encouraging to watch as online researchers have been diligently studying and working to accommodate this population of users. Panel members are still predominantly desktop oriented although there is a steady, gradual shift to smartphone devices. Studies employing a customer contact list continue to see a large and growing influx of mobile users. Mobile friendly surveys for these types of sample are a must. Participation rates are steadily improving as researchers learn to design and execute device agnostic surveys. That is, deploy user-friendly surveys for whatever device is used to access it. We have every reason to be hopeful and encouraged that market researchers are able to respond and adapt to whatever changes technology will bring in the future.

5. IDC, September 2014: http://www.idc.com/getdoc.jsp?containerId=prUS25077914