

# EMERGING MARKET INTERNET INSIGHTS

## COMBINING BIG DATA AND MOBILE MARKET RESEARCH

*Jeff Hamilton • Adam Berman*

### INTRODUCTION

How does mobile browsing in emerging market differ from developed markets and what are best practices tips and trick to conducting international mobile survey research?

Until recently, desktop and laptop computers were the primary means to collect online survey data. In 2011, the percentage of surveys being taken on mobile devices was less than 2%. As of the 1st quarter of 2014, researchers like CatalystMR who collect user-agent online survey data saw 25%-35% (some as high as 50%) of all their online surveys being taken on mobile devices compared to desktop computers. CatalystMR believes strongly that a mobile data collection strategy should be at the forefront of consideration when planning online research. Because the technology available for conducting surveys on these devices and the behavior of those using them is evolving, “Best Practices” is a constantly moving target.

The Xpress Browser supports the Internet browsing needs of tens of millions of Internet enabled mobile phones in over 200 countries, many of which are emerging mobile Internet markets. The browsing population for Xpress consumers consists of a wide range of users from hyper socials checking their Facebook accounts via mobile feature phones multiple times per hour to more casual users who carefully manage data costs through limited weekly browsing. User experiences are modelled over a multitude of browsing devices including small screen numeric keypads, QWERTY devices, and entry level smart phones with touch interfaces – all with Internet access.

Combining both Big Data from the terabytes of browsing logs and mobile market research via mobile feature phones, Xpress’s consumer analytics has assembled an unprecedented view of browsing behaviors in emerging markets. This market research provides both global brands and local brands the insights needed to best position with emerging market consumers. As market researchers seek to extend their consumer understanding of emerging markets, mobile survey methodologies based on feature phones will transition from adjunct solutions to cornerstones of consumer market research.

Because of the rapid proliferation of mobile across the globe and the need to optimize surveys for all devices including less expensive feature phones, this paper presents best practice insights and tips for effective mobile survey research including optimal survey length, how to handle long surveys across all platforms, customers vs. non-customers, screen presentation complexity, background survey logic complexity, invitation sources such as email, website, direct mail, multi-media advertising, SMS, and QR codes.

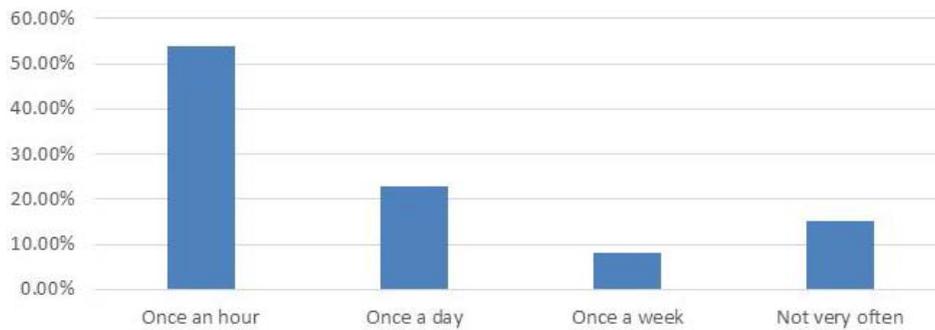
### RESEARCH DESCRIPTION

The Xpress Browser is preloaded on Nokia’s affordable phones which primarily target price ranges below \$100, have excellent battery life and connect at 2G and 3G wireless network speeds.

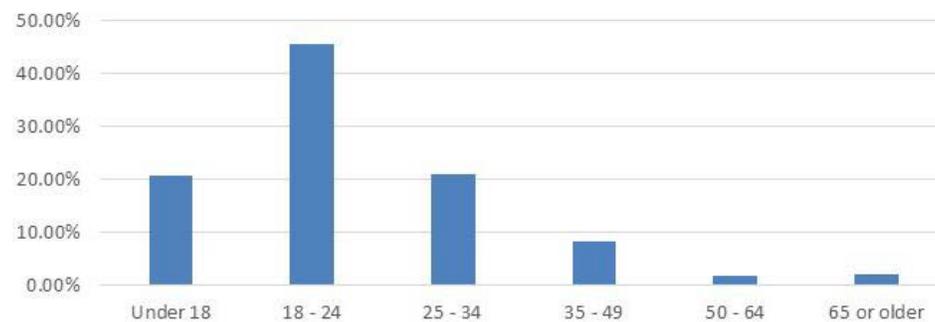
- Includes over 150 countries from which daily logs are captured and analyzed
- Data collected across a dozen different mobile form factors ranging from numeric keypad mobile phones to low end smart phones
- Multiple mobile surveys with more than 30,000 respondents participating
- Big Data Assets included mobile logging for more than tens of millions of consumers accessing the web on a monthly basis.

Mobile services surveys were launched in native languages in ten emerging markets. Over 10,000 consumers from India, Indonesia, Brazil, Nigeria, Pakistan, Egypt, South Africa, Mexico, Viet Nam and Russia responded to the Xpress survey to share how the Internet was influencing their lives. Consumers were presented a link through the mobile browser titled “Take a Survey” without any indication of the survey topic. Consumers self-identified themselves by frequency of Internet use, age, and employment status.

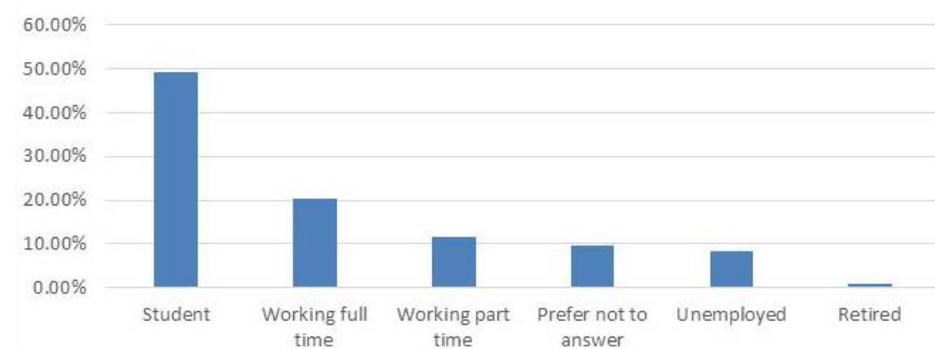
**FIGURE 1. FREQUENCY OF INTERNET ACCESS**



**FIGURE 2. AGE DEMOGRAPHIC**

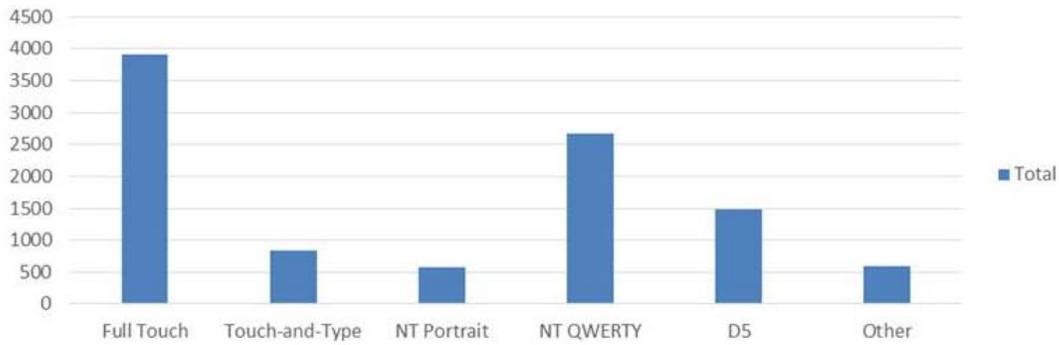


**FIGURE 3. EMPLOYMENT STATUS**



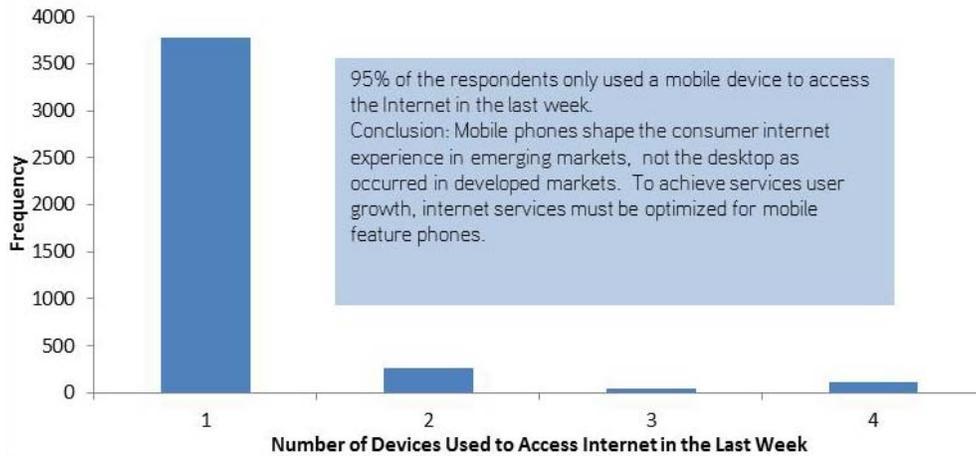
Respondents used a wide variety of mobile phones to take the survey, leveraging the researchers’ ability to design a survey that would successfully render across 15 different mobile phone models ranging from simple numeric keypad devices with relatively small screens like the Nokia 110 to QWERTY style keyboard phones to full touch devices like the Nokia Asha 501. The majority of devices were limited to 2G Internet connection without wifi.

FIGURE 4. SURVEY RESPONDENTS BY DEVICE TYPE



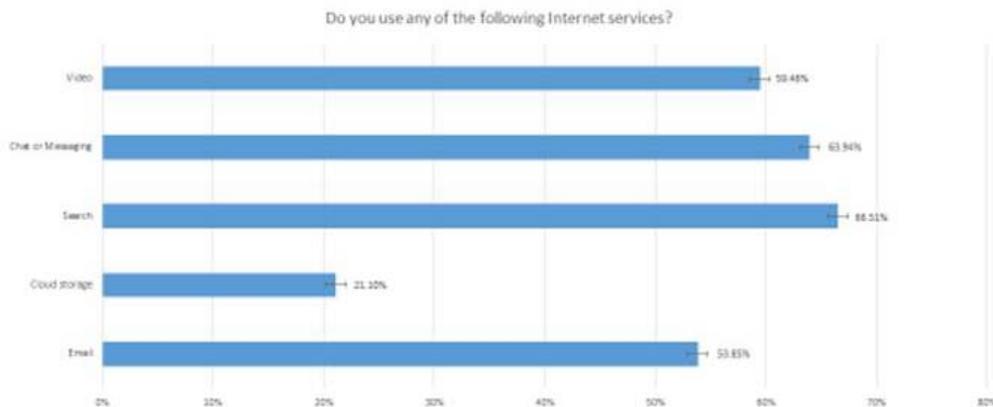
The results of the survey revealed a remarkably savvy group of consumers whose primary engagement with the Internet occurred through mobile devices. Unlike many developed markets where Internet engagement evolved from the PC, our emerging market respondents rarely used anything but their mobile as an access point to the Internet.

FIGURE 5. IN THE LAST WEEK, WHAT DEVICE DID YOU USE MOST OFTEN TO ACCESS THE INTERNET?



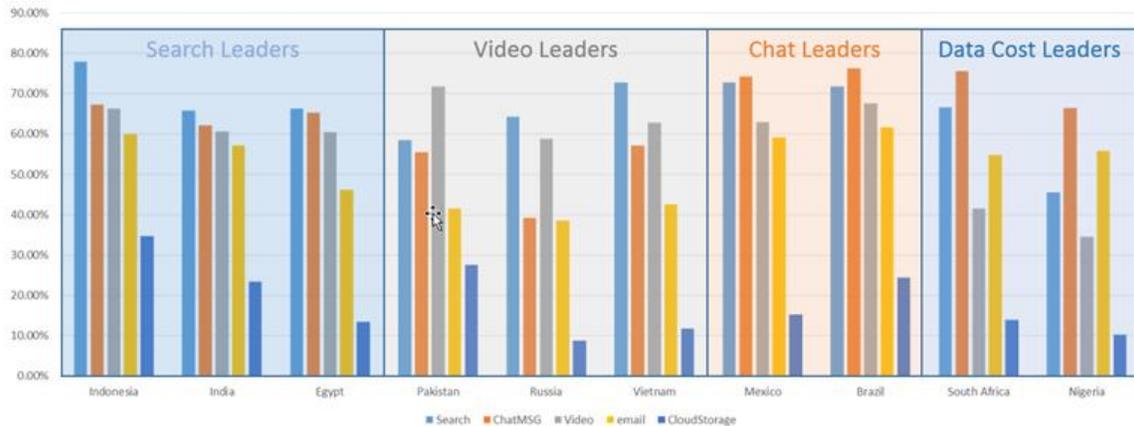
However lack of multiple devices especially PC did not deter consumers from engaging with the Internet through a full suite of Internet based services. Search and chat proved to be two of the most popular services enjoyed on Internet capable feature phones. Despite technical constraints (many of the devices are not capable of real time streaming protocol) and connections speeds often limited to 2G networks, consumers expressed a high affinity for video content through the mobile device, even on the phones with little memory to support anything but a small 3gp video file. The most undeveloped opportunity for increased consumer engagement is in cloud storage, with less than 22% of consumers engaging with a cloud storage service.

FIGURE 6. SERVICES USAGE



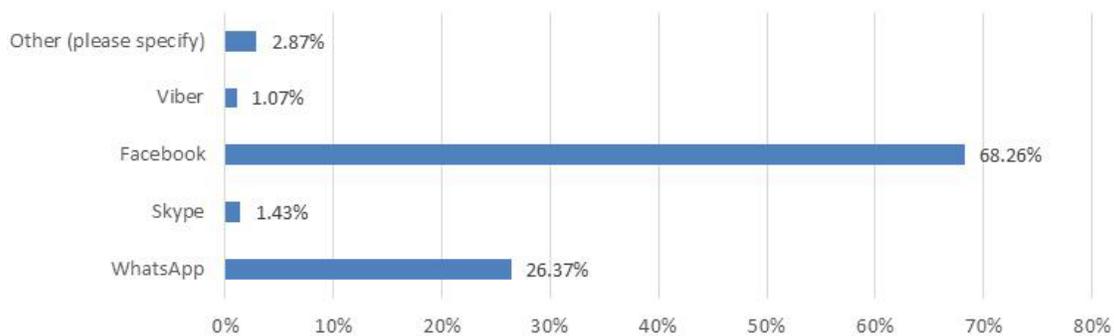
Operator plans and country culture play an important role in shaping consumer engagement with Internet services. Countries with the highest cost of data such as Nigeria and South Africa experienced the lowest participation in video services and were strong in low data applications like Internet based chat. The highest level of social interaction occurred in Mexico and Brazil where chat services ranked as the most frequently used Internet service. Pakistan, where data rates are relatively low, exhibits the highest affinity for Internet based video.

FIGURE 7. SERVICES WITHIN COUNTRIES



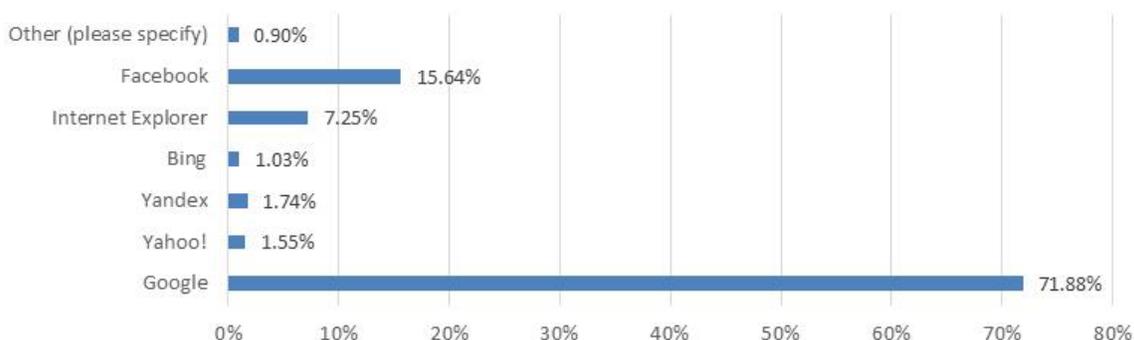
Facebook’s recent acquisition of WhatsApp along with an extensive reach into many emerging markets ensures that the social site will be a leading provider of chat and messaging.

FIGURE 8. WHICH CHAT OR MESSAGING SERVICE PROVIDER DO YOU USE MOST OFTEN ON YOUR MOBILE PHONE?



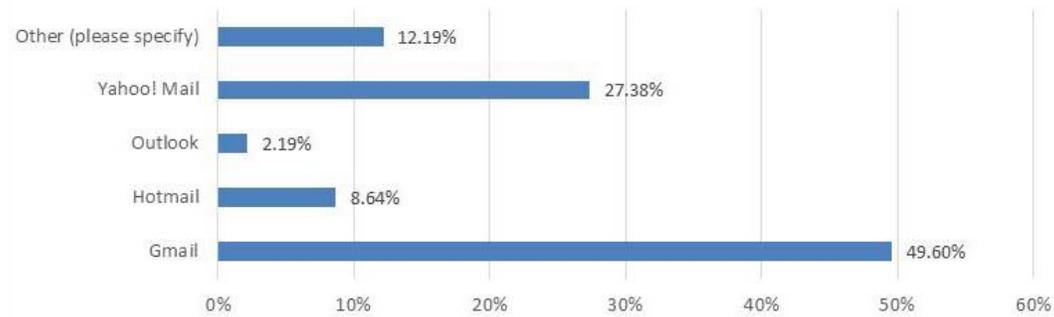
Facebook may be eyeballing more than just chat leadership. While Google has become synonymous with search in emerging markets, over 15% of survey respondents indicated that Facebook was the best search service for mobile phones.

FIGURE 9. WHICH OF THE FOLLOWING COMPANIES OFFERS THE BEST SEARCH FOR YOUR MOBILE PHONE?



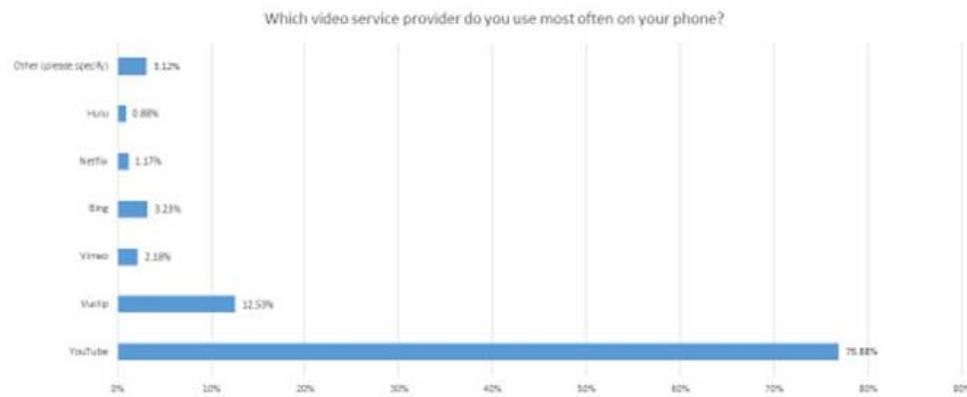
Although not nearly as prevalent an Internet service in emerging markets as it is in developed countries, email remains an important Internet service. Google holds a dominant position with Yahoo!, the only significant challenger for email service.

**FIGURE 10. WHICH EMAIL SERVICE PROVIDER DO YOU USE MOST OFTEN ON YOUR PHONE?**



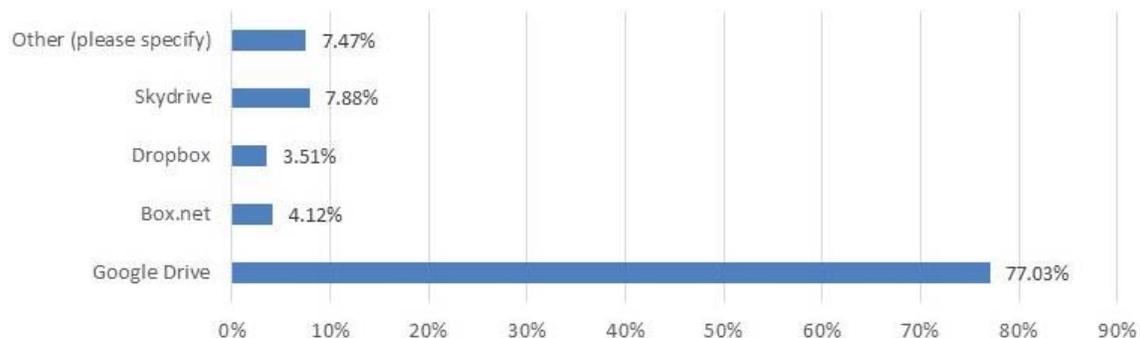
Google's clear lead in Internet services such as search and email extends to video as well. Despite many devices lacking the codec capable of decoding stream video, YouTube is a clear leader in providing video content. Xpress Browser worked with YouTube to define a modified video playback technology called download and play that provides consumers an opportunity to temporarily download some YouTube video content for viewing on the mobile feature phone.

**FIGURE 11. MOST PREFERRED MOBILE VIDEO SERVICE**



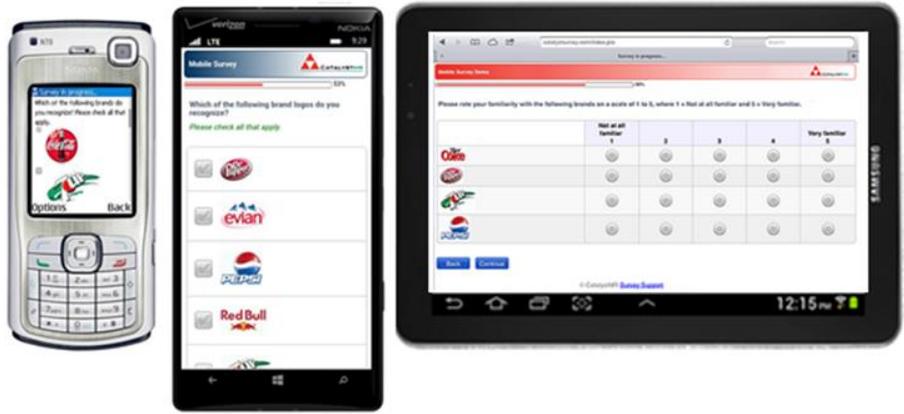
As mentioned earlier cloud storage remains a relatively undeveloped opportunity in the emerging markets. Again Google has obtained an enviable position with the more savvy Internet consumers using the Google drive to store content.

**FIGURE 12. WHICH CLOUD STORAGE SERVICE PROVIDER DO YOU USE MOST OFTEN ON YOUR MOBILE PHONE?**



For market researchers seeking to better understand consumer desires in emerging markets, few methodologies can produce the depth and reach of surveys conducted through mobile phones. Contrary to the experience in developed countries, mobile is the primary access point for the Internet and as such has shaped the emerging market consumers in a fundamentally different way. The highly engaged mobile Internet consumer in emerging markets remains a largely untapped opportunity that combines an intimate consumer connection available all hours of the day with a big data breadth of response that will fundamentally redefine market research in emerging markets.

FIGURE 13. MOBILE SURVEY INSIGHTS & BEST PRACTICES



VS.



FIGURE 14. SMARTPHONES VS. FULL FEATURE INTERNET ACCESSIBLE PHONES



For data collection within the U.S., consideration for feature phones (or non-smart web-enabled devices) is not crucial because of dropping market share and consumer behavior differences. In the U.S., consumers with non-smart Internet accessible phones tend not to surf the web or make purchases on their feature web enabled phones as compared to those with smartphones like the iPhone, Android or Microsoft supported phones. In regions of the world such as Asia Pacific and Latin America, phone usage including Internet surfing and online purchasing with feature phones now exceeds that of smartphones and tablets. In these regions and most parts of the world with the exception of Europe and North America, *consumers surf the web on feature phones.*

Because international smartphone adoption over feature phones has not been as rapid in these parts of the world due to cultural and economic differences, surveys being conducted there should also be optimized for simpler full feature phones. For many countries, this means that surveys, especially customer and national rep surveys, need to be optimized for desktops, smartphones as well as less expensive feature phones.

However there is another fact to consider when optimizing your surveys for mobile vs. desktop. When research is conducted with non-panel respondents, 25%-35% of respondents take online surveys on their mobile device, while we only see 5%-15% of panel respondents taking online surveys on their mobile device. It is our opinion that for the time being, panel respondents are conditioned to take surveys on desktop computers if they own one or regularly access a desktop computer at an Internet café, library, school, etc. However, because of new recruiting methodologies, more survey software technology becoming platform agnostic and consumers' rapid adoption of mobile only Internet access, we feel that while slower to catch up, panelists will continue to migrate toward mobile as to access online survey.

### BEST PRACTICES IN MOBILE SURVEY RESEARCH

When conducting online surveys that are optimized for mobile, there many factors to consider, such as survey length, screen space, text length, question types, survey logic, invitations and recruiting sources. Each of these individual and combined should be considered while you consider project scope.

FIGURE 15. WHEN TO SCALE DOWN THE QUESTIONS ASKED IN MOBILE VS. DESKTOP



If your survey length is in excess of 15 minutes, consideration should be given to limit the number of questions asked on mobile devices. To avoid respondent fatigue and higher than usual dropout rates on mobile devices, CatalystMR suggests asking only the core questions of mobile respondents (again, this can be done through survey logic which looks at the respondent's user agent data). It is wise to consider, for example, if you have a battery of questions asking respondents to rate their satisfaction on 15 items, consider asking only 10 of the most important items of mobile respondents. Or, perhaps rotate blocks of attributes so that all attributes are rated by a subset of respondents. This way all attributes are rated while cutting down the average length of interview.

### SURVEY DESIGN: QUESTION TYPES, SETUP, AND LOGIC

1. *Scale questions* should be limited to 5 points or 7 points at most. Ten point scale questions take up too much screen real estate and therefore require scrolling left/right or pinching a mobile screen's viewable area so small that the screen presentation causes the question to be difficult to work with. With that said, if you have established a 10 point scale as a scale norm previously, not to worry. Ten point scales do fit to screen ultimately; the scale presentation is just smaller if the respondent pinches the screen to see the entire scale question.
2. *More on scale questions.* Try to limit the amount of text on each attribute. Overly wordy attribute text takes up more valuable screen real estate and increases the need for scrolling.

FIGURE 16.



3. *Ranking questions* are fully functional on smartphones and tablet devices, however on feature phones, ranking questions require a different programming setup. Once again, just keep in mind that overly wordy text or too many items to rank can make the page too complex visually for smaller screen sizes. On smartphones, always consider that longer questions will require vertical scrolling which makes those questions more difficult to navigate.
4. Other question types including *numeric*, *radio* (single response), *checkbox* (multiple response), *text*, and *pull-down* work perfectly on smartphones and tablets.
5. To minimize scrolling, the best practice is to program one question per screen, except in rare cases where wording and a short response list allow for two questions.
6. *Survey logic.* Any survey logic available in an online survey is similarly available in a mobile survey whether the logic is complex skip or rotate patterns; quota or segmentation algorithms; data piping or rich content presentation, etc.
7. *One survey engine - Platform Agnostic:* For desktop, smartphone and feature phone optimized survey use only one survey software engine. One survey should be able to run with a single data set on all platforms. Not only does this centralize data collection thus reducing costs and errors, it also enables you to track user agent data such as device type to drive survey logic with a single survey optimized for all devices, the survey logic can be driven by the device accessing the survey.

### DEVICE INFORMATION

Many data points are captured automatically from the user's devices. We report this data back to our client in a digestible and easily understood format.

FIGURE 17.



Here is the information we collect from device capture recording:

1. Device type – desktop, mobile (smartphone/tablet v. feature phone)
2. Device make – Nokia, Apple, Motorola, Samsung, RIM, LG, etc.
3. Device model – iPhone, , Blackberry, and other models – though currently in about 3%-4% of the cases, devices don't pass this information along
4. Browser – Chrome, Internet Explorer, Safari, Opera, Blackberry Browser, etc.
5. Browser Version

### SURVEY INVITATIONS AND INTRODUCTIONS (INCLUDING POP-UP INVITATIONS)

Special thought needs to be paid to the survey invitation text and introduction. Consider the following to improve the traffic to your survey:

1. Make the invitation engaging. Keep in mind where the respondent will be when they receive the invitation – are they sent an invite via email or is the invitation presented to them on-screen while viewing a webpage? Will they be invited via store signage, a receipt, a postcard, a proprietary mobile app, or short code text messaging? For pop-up invitations coming from a website, tie the look and feel of that site into the invite (use similar colors, font, etc.) so it feels like a part of the site they're visiting. Branding is effective in increasing response rates with brands that are trusted. In the end try to reinforce the brand when possible.

FIGURE 18.

**Your Opinion Counts!** 

Dear Marie,

We are looking for your opinions. Don't miss out on being rewarded for sharing your opinions. Complete the survey today!

**Survey Number:** 164450

**Reward for Survey Completion:** 30 MarketPoints

**Survey Length:** 5-8 minutes

**Survey Requirements:** In order to view the survey, you need to access it using a Chrome browser. If you don't have the Chrome browser, please download it and access the survey.

To access the survey, simply click on the button below or cut and paste the entire URL into your browser.

[CLICK HERE - To begin the survey](#)

<http://catalystsurvey.com/html/pro?id=1018&identifier=testtestest>

Should you have any technical questions about this survey, please contact [surveysupport@catalystmr.com](mailto:surveysupport@catalystmr.com).

To view our Privacy Policy, please click here: <http://www.catalystmr.com/privacy>

Best regards,

The Survey Team

2. Graphically rich emails are not considered spam anymore. There was a time when we recommended to our clients that we send text based email so that the invitation doesn't appear as spam to the prospective respondent or to email spam filters. Since spam fatigue has largely disappeared due to spam filtering technology, participation rates increase with graphically rich branded email invitations.
3. Keep the invitation text short, clear and "sales-ish". The invitation will only have the viewer's attention for a few seconds, so make the words you use count. Be sure to convey the sense that customer/site visitor opinion's matter and that the feedback customers/viewers provide can influence the development of new and existing products and services. Be informative and honest about the survey length and let the respondents know about any incentives being offered, if applicable. If it's a 10 minute survey and the invitation tries to draw respondents in by stating a 5 minute survey length, respondents are more likely to dropout or give more negative responses because they will feel misled.
4. If the survey invitation is directed at a specific audience, let the respondent know this. This can convey the idea that the respondent has a special opportunity to give feedback.

## OTHER INFORMATION/CONSIDERATIONS

FIGURE 19.



1. Media campaign generated traffic: Are you or your client doing a media campaign to drive traffic to you or your client's site? Pre and post surveys are a great way to measure media/ad campaign effectiveness. If there's a media campaign running or upcoming, help establish a baseline prior to its launch. Then run the survey again to measure increased traffic, satisfaction, purchases, etc. depending on what the research is designed to measure.
2. Text-back messaging: Text invites can be especially effective for invitations where you're looking to draw in a large audience at an event (sporting event, conference, etc.) or store location, point-of-purchase, etc.
3. QR codes: Generating custom QR codes that link to a mobile survey help drive traffic and require little effort of the respondent. QR codes can carry data within them that can aid the research, drive survey logic, and customize the survey experience. For example, QR codes can contain data like a store number and purchase information to track where respondents are coming from. QR codes can also reinforce your client's brand by putting a logo or other image within the QR code itself (see figure 20).

FIGURE 20.



## KNOW YOUR SITE STATS BEFORE CONDUCTING WEBSITE INTERCEPT SURVEYS

FIGURE 21.



*Website pop-up invitations: Utilize site-wide pop-up survey invitation code across a given website. Pop-up invitations have proven to be very effective in generating traffic for website evaluation surveys, panel recruitments, etc.*

Understanding the research objective is critical to guiding your mobile survey data collection. Here are some things to understand:

1. What are the site traffic statistics?
2. What does the traffic to the site look like? How many visits to the site per month? What percentage is new? How much time do visitors spend on the site and on what specific pages? What pages are the most visited?
3. How many unique visitors per month vs. return visitors?
4. What reason(s) do visitors have for visiting the mobile site? Are they looking for general or specific information, to make a purchase, or because they're excited about a new product offering?

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**CONCLUSION**

As mobile continues its rapid growth, CatalystMR will continue to provide insights into new mobile survey capabilities and best practices. Remember that while most of the market research industry has made a tremendous switch from telephone interviewing to online surveys, most market researchers aren't considering the rapid adoption of mobile by respondents, the various mobile platforms used to take surveys, and mobile's effect on research data quality. If you aren't considering the fact that much of the world's population doesn't regularly access the Internet via a desktop computer, it's time to start.

**THE AUTHORS**

Jeff Hamilton is Head of Consumer Insights, Xpress Browser Service, Microsoft, United States.

Adam Berman is President, CatalystMR, United States.