

Overview of Mobile Market Research

INTRODUCTION

Mobile market research (sometimes abbreviated to MMR) is a topic that had been forecast as the next big thing in market research for more than ten years. By 2014, there was widespread agreement that it was finally coming of age and was already having a major impact on many aspects of market research, from quantitative to qualitative, and from local to global. In the future, most market researchers are likely to come into contact with mobile market research in their everyday work and therefore a good understanding of the opportunities, characteristics, limitations, and challenges of this mode is essential. Similarly, buyers and users of market research need to be aware of the implications of some or all of their research being collected via mobile devices.

WHAT DOES MOBILE MARKET RESEARCH MEAN?

Mobile market research refers to participants taking part in market research via mobile devices and market research about the use of mobile devices.

Until recently the term 'mobile market research' was largely synonymous with research conducted by or about mobile phones. However, since the arrival of additional mobile devices, such as tablets and phablets, the term 'mobile market research' has become broader.

More specifically, mobile market research typically refers to the following:

1. Quantitative research where the participants complete surveys on their mobile device.
2. Mixed-mode quantitative studies, where some participants complete surveys via a PC while others use a mobile device.
3. Quantitative research where participants allow applications on their mobile device to gather information about them or their environment, referred to as passive data collection.

4OVERVIEW OF MOBILE MARKET RESEARCH

4. Qualitative research, where the mobile device either facilitates communication (e.g. taking part in an online focus group from a tablet), or facilitates data collection (e.g. collecting photos and recordings), or a combination of the two.
5. Research communities where the mobile device is a key method of communication or participation.
6. Face-to-face research where the interviewers are using mobile devices to collect data, sometimes referred to as mCAPI (CAPI utilizing a mobile device).

Using participants' mobile phones to take part in CATI interviews is not always classed as mobile market research, but that might change in the future and a chapter on mCAPI (CAPI with mobile phones) is included in this book.

STANDARDIZED SOLUTIONS FOR MOBILE MARKET RESEARCH

When mobile market research first appeared on the scene, market researchers planning to use it often had to be very tech savvy and prepared to help develop or test solutions. However, for most people those days are gone.

Most mobile research is conducted via the international survey platforms such as Confront, through the mobile services of access panels such as Research Now, or through a specialist provider such as Revelation, MobileMeasure, or Locately: note – there are large and growing numbers in each of these categories. For most researchers it is not necessary to develop their own software solutions. In the more developed research markets, researchers will tend to use a conventional sample source such as an access panel, customer list, or community.

WHY THE INTEREST IN MOBILE?

There are four key drivers of the widespread interest in mobile market research:

1. The growing ubiquity of mobile devices.
2. People having their phones with them all the time, facilitating 'in the moment' research.
3. Growth in more powerful mobile devices, especially smartphones and tablets.
4. Passive data collection, recording information about participants without their having to actively enter information.

1. THE UBIQUITY OF MOBILE PHONES

Data about the penetration of mobile phones, smartphones, and tablets changes all the time, but in order to emphasize the scale of the mobile phenomenon, consider the following data from the ITU's Measuring the Information Society (ITU 2013) report:

- *6.8 billion mobile phones estimated to be in use, compared with the global population of about 7.2 billion.*
- *By the end of 2012, over 50% of the world's population were living in areas with at least 3G coverage.*
- *By the end of 2013 there were almost 2 billion mobile broadband subscriptions – with Ericsson forecasting that by the end of 2018 this figure would be 6.5 billion.*

The world is quickly moving to a point where every economically active adult who wants a mobile phone will have one. The trend is very much towards devices with internet access, further widening the potential for mobile research. However, it should be noted that 6.8 billion devices does not mean that 6.8 billion people have a mobile device, as many people have more than one mobile device.

2. 'IN THE MOMENT'

There is a widespread belief in marketing and market research that interviews conducted 'in the moment', for example, when someone is making a purchase, finishing a meal, or staying at a hotel, will reveal more than a survey conducted at a later date. Traditional research has relied on participants recalling details of interactions with products, services, and advertising, days or even weeks after the event. 'In the moment' approaches capture the information while it is still fresh in people's minds.

Most users of mobile phones have them with them all the time, for example Pew estimated that in 2012, 44% of Americans slept next to their phones (Pew Research Center 2012). This 'always available' characteristic of mobile devices finally allows researchers to conduct studies much closer to the 'moment of truth', that is, closer to when a product or service is being experienced.

3. PUTTING THE 'SMART' IN MOBILE MARKET RESEARCH

Early forms of mobile market research relied on SMS, WAP, or downloaded software (such as apps written in languages such as Java) to conduct research. These options were technically limiting (especially in the case of SMS) and sometimes required a high degree of cooperation from the participant.

By contrast, the larger, touchscreens of smartphones and the growing popularity of tablets has greatly increased the range of research that can be conducted via mobile market research. Similarly, the growth of higher speed internet connections, including 3G, 4G, and Wi-Fi, has enabled mobile devices to be used in a growing number of ways.

Similarly, the standardization of the processes for writing apps, and downloading them from app stores, has opened up a wide range of alternatives for market research.

4. PASSIVE DATA COLLECTION

Mobile devices, especially smartphones and tablets, can collect a wide variety of information as the research participant goes about their normal, everyday life. In most cases, this is based on the research participant downloading an app onto their device. For example, a location tracking app could use a phone's GPS receiver to create a record of the participant's journeys to and from work.

Passive data is very attractive to marketers and market researchers because it can collect a large amount of detailed data about what people do, without burdening participants with research tasks, and without introducing the biases implicit in asking research participants to decide what to report or capture.

A BRIEF HISTORY OF MOBILE MARKET RESEARCH

Table 1.1 provides a timeline giving a brief history of mobile market research.

Table 1.1 A brief history of mobile market research

| Date | Description |
|-------|---|
| 1990s | <p>The first serious attempts to use mobile phones for market research appeared in the 1990s, most of which used SMS. Questions were sent to participants via text messaging and the participants answered via text, typically by entering a single digit, such as 1 for Agree strongly, 2 for Agree, etc. These surveys needed to be very short. Only a small percentage of market research projects were conducted using this method because of the requirement for surveys to be very short and because the interface was considered so limited.</p> <p>This method is still in use today, in cases where it meets specific research needs, for example reaching a broad range of mobile phones in developing economies.</p> <p>One early innovation with the SMS method was to utilize its 'in the moment' potential. For example, some businesses put up signs inviting users/visitors to text their satisfaction score to a central location.</p> |

(continued)

Table 1.1 *(Continued)*

| Date | Description |
|-------------|---|
| 2000 | <p>As phones became 'smarter', acquiring larger screens and some form of internet access (e.g. WAP) researchers began to use these phones for longer and/or more complex surveys. By 2001, researchers were reporting success in Japan by capitalizing on DoCoMo's early lead in advanced services for mobile phones, sending longer surveys and incentivizing participants via telephone credits (Cattell 2001).</p> <p>However, mobile market research remained a small percentage of all market research. Studies such as the Confrimit Annual Market Research Survey regularly reported mobile as being less than 1% of all data collected.</p> <p>With the growth in the ownership of more advanced phones, market researchers explored two routes to conduct mobile market research. Some researchers preferred to design software that could be downloaded onto participants' mobile devices, while others thought it best to ask participants to connect to the internet via the browser on their device. This dichotomy exists today and is explored in more detail later in this book.</p> |
| 2005 | <p>As BlackBerry phones and internet-enabled PDAs became more common, researchers started reporting that a small percentage of participants were completing online surveys, intended for PCs, on their mobile devices. At that time this 'unintentional' or 'accidental' mobile market research (unintentional on the part of the researcher) accounted for a very small proportion of online surveys. In the years since, as phones became smarter/larger and tablets emerged, the proportion of unintentional mobile surveys has grown substantially. It is now often reported as being in the range of 20–30% of all online surveys.</p> <p>The qualitative uses of mobile devices expanded with a range of new and interesting approaches being developed, including mobile diaries and mobile ethnography. Researchers began using participants' phones to collect data about their everyday lives – for example by collecting images and recordings. Researchers also began using participants' mobile devices to connect the participants with blogs, bulletin boards, discussions, and communities.</p> |
| 2007 | <p>With the launch of the iPhone, mobile market research moved into a higher gear as qualitative researchers sought to use the iPhone's extra features and more participants in surveys tried to complete online surveys via their device of choice.</p> <p>In 2008, the appearance of Android phones from companies such as HTC and Samsung helped ensure that the new generation of smartphones established a critical mass.</p> |
| 2010 | <p>The release of the iPad led to a major growth in the penetration of tablets (especially Apple and Android-based devices). Tablets provided market researchers with still more features to use and a larger canvas on which to work.</p> <p>Mobile phones had become common across both the developed and developing world, and researchers were putting them to ever greater use in both developed and developing markets.</p> <p>In developing markets mobile market research tends to focus on feature phones rather than smartphones, and online surveys are often not an option. One of the trends in the developing markets is for research to move from face-to-face to mobile, often as mCAPI. Passive data collection, i.e. data collected from a mobile device without the traditional asking of questions and submitting of responses, starts to grow, especially in media and outside conventional market research.</p> |

THE INTERNATIONAL DIMENSION

Different countries present different opportunities and challenges for market researchers utilizing mobile market research. This is also the case for other research modes, such as online. In the more developed markets (i.e. richer, more technically developed, and with a more developed market research infrastructure) the default mobile market research options tend to be smartphones and, increasingly, tablets, with an assumption that the devices will be able to reliably connect to the internet.

In the less developed markets (where there tend to be lower incomes per head, technology is less widely distributed and owned, and there is a less developed market research infrastructure) the default mobile market research option tends to be the feature phone. This is accompanied by the assumption that the internet may not be available reliably and/or continuously. This has led to many researchers continuing to utilize technologies such as SMS in these markets. For example, in 2011 Bain reported in Research-Live that Jana (previously TxtEagle) had secured arrangements with 220 mobile operators in 80 countries to collect data via SMS and to use airtime as the incentive.

However, researchers should note that these definitions imply there are developed and less developed countries, and in many cases countries do not fit neatly into this simple division. Some technically advanced countries have relatively weak market research infrastructures and some less developed countries have well established market research infrastructures. Researchers should also note that contexts differ depending on local factors. For example, Australia has a much higher level of internet and smartphone usage, per head of population, than China. However, Shanghai has a population about the size of Australia (a little over 20 million) and has a similar level of smartphone and internet usage. For some target groups, smartphones are an appropriate technology, even in developing markets.

Researchers should note that the prevalence of feature phones in Africa does not mean that every aspect of mobile usage is more primitive than in, say, Western Europe. For example, mobile banking and mobile payments are far more developed in many African countries than they are in Europe.

When planning an international mobile project it is essential to get an up-to-date assessment of the current situation in each market, and this is covered more fully in the chapter that focuses on international research. Key issues that researchers need to focus on include: the quality, speed, and reliability of mobile internet access; the penetration of smartphones versus feature phones (and perhaps tablets); the type of data contracts that are common; and the sort of sample services that are available.

MOBILE QUANTITATIVE RESEARCH

Mobile quantitative research can be divided into two broad categories: surveys and passive data collection. Examples of passive data collection include browsing statistics, systems usage, and a variety of measures specific to mobile devices, such as geographic position.

In terms of surveys, mobile market research can be further divided into:

- *Unintentional mobile*
- *Mobile only surveys*
- *mCAPI*
- *Mixed-mode studies.*

UNINTENTIONAL MOBILE

Most market researchers who conduct online surveys are already using mobile market research, even if they have not decided to, and even if they are not aware of it. Any online survey, even if not designed for a mobile device, runs the risk of being completed on a mobile device by some participants – unless specific measures have been taken to avoid it. This form of mobile market research is referred to as unintentional (or sometimes as accidental) mobile market research, and the prevalence of unintentional mobile market research was one of the reasons why by 2014 it was safe to say that mobile market research had 'arrived'.

Reliable and consistent figures about the prevalence of unintentional mobile market research are hard to obtain. However, the consensus seems to be that in 2014 researchers should expect about 20–30% of online surveys to be completed from a mobile device.

MOBILE ONLY SURVEYS

A mobile only survey is one where the expectation is that all of the participants will complete the survey using a mobile device. This is a broad category and includes:

- *Surveys conducted via the internet using a browser on the mobile device*
- *Surveys conducted via an app downloaded to the mobile device*
- *Surveys conducted via SMS or similar protocols.*

Designing mobile surveys requires an understanding of the implications of using different screen formats and different versions of questions.

mCAPI

CAPI refers to Computer Aided Personal Interviews: interviews that are conducted face-to-face with an interviewer and a computer. Mobile versions (often called mCAPI), for example utilizing mobile phones or tablets, offer a new approach to this 30-year-old method. One of the benefits of using mobile devices for this new form of CAPI is that the device can often be configured to automatically send the results back to a server, for example via Wi-Fi or 3G/4G, either during or after data collection.

mCAPI allows multimedia to be integrated into the face-to-face interviewing process, for example by playing videos or recording video interviews with participants.

MIXED-MODE STUDIES

The terms 'mixed-mode', 'multi-modal', and 'hybrid' refer to studies where more than one mode of data collection is used. In the case of quantitative mobile market research, mixed-mode usually refers to an online survey in which some participants complete it using a PC, some using a tablet, and some via a mobile phone. However, the terms can refer to studies where participants enter some of their data through one channel, and other data through another.

The trend in market research is to move towards a platform agnostic approach, i.e. one where research participants are given as much choice as possible about the sort of device they use when taking part in research activities, for example using a phone, tablet or PC. This means choosing software systems that enable the researcher to design research that works – and produces comparable results – with participants using a wide variety of devices, including PCs, phones, and tablets.

Mixed-mode studies raise two issues: (a) how to ensure that the survey works on multiple platforms and (b) whether and how the data can be combined.

MOBILE QUALITATIVE RESEARCH

Mobile qualitative research is comprised of research that is purely mobile and research that is mixed-mode. The mixed-mode category consists of studies where some of the participants are using mobile devices and others are using other options, and studies where mobile is used for a particular stage of the study and another mode used at another stage (such as PC or face-to-face).

Mobile devices have made major inroads into the collection of personal and ethnographic information from participants in qualitative research projects. This type of mobile qualitative project involves research conducted by the participants, as opposed to research conducted by and in the presence of the market researcher. Enlisting participants as collaborators in the research process is a practice referred sometimes to as WE-research.

The use of mobile devices can be as simple as asking participants to upload images or join an online discussion. Or, at the more complex end of the spectrum, the research may take place over an extended period of time, with the participants collecting a wide range of diary or ethnographic data, and/or personal reflections, utilizing a variety of software packages.

MOBILE DEVICES AND COMMUNITIES

Research communities are (according to the 2013 and 2014 GRIT reports) the fastest growing major new approach to market research (Greenbook 2013b; Greenbook 2014). Research communities are usually private, branded, online communities, often using both qualitative and quantitative approaches. Mobile devices are increasingly being used for research (both qualitative and quantitative) with communities and for the management of the community. Management aspects of communities include: registering and logging in, sending messages to members, newsletters, portal access, and in some cases, incentives. Increasingly, the providers of platforms for research communities are ensuring that they accommodate mobile devices, typically by adopting a device agnostic approach.

The use of mobile devices in research communities is covered later in the book, in a chapter on Panels, Lists, and Communities.

THE MOBILE ECOSYSTEM

The term 'mobile market research' tends to be used to describe research conducted using mobile devices. However, it can also be used to describe research into the mobile ecosystem. The mobile ecosystem encompasses every aspect of mobile devices and uses, for example: the way mobile services are provided, the mobile devices themselves, mobile advertising, mobile shopping, mobile gaming, and mobile social media.

Research into the mobile ecosystem often employs approaches that utilize mobile devices, for example passive data collection, mobile diaries, and mobile surveys. However, it can also use more traditional approaches, including focus groups, usability labs, and conventional tracking surveys.

The mobile ecosystem has produced the tools that are used in mobile market research, and the new techniques being developed in fields like mobile gaming, mobile advertising, mobile marketing, and mobile navigation will in time work their way through to the world of mobile market research. The mobile ecosystem is also challenging law-makers and regulators, both because of the speed of its development and because of its potential to collect vast amounts of sensitive information, and this issue will also have an impact on market researchers.

THE CHALLENGES OF MOBILE MARKET RESEARCH

Given that the arrival of mobile market research has been predicted and evangelized for several years, and given the importance of mobile phones to modern life, it is perhaps surprising that it has taken until now for mobile market research to take off.

This section looks at some of the factors that have delayed the adoption of mobile market research and some that may present challenges in the future.

SHORTER SURVEYS

There is a widespread belief that surveys on mobile phones need to be shorter than those being conducted via CATI, face-to-face, or PC. This is felt to be because:

- *People using their mobile devices are potentially going about their daily lives; an interruption of 20, 30, or 40 minutes is too long.*
- *The devices, phones in particular, are not suitable for extended exercises like a long survey, although the amount of time people can spend game playing with mobile devices might suggest otherwise.*
- *People's phone signal and/or connection may not last for the full length of a long questionnaire, when using the mobile web for surveys.*

However, it is worth remembering that when online surveys first appeared in the mid-1990s, it was widely assumed that online surveys needed to be shorter than 10 minutes. Since that time, participants have been trained or incentivized to do much longer surveys online, or at least a few of them have. Most researchers who have conducted research-on-research with longer surveys have found few differences between mobile and PC surveys. See the Research-on-Research chapter for more information.

Because most people believe that mobile questionnaires need to be short, many research buyers have been reluctant to move their major studies, which currently employ long questionnaires, to mobile. A number of strategies for tackling these issues,

such as breaking surveys into modules (e.g. chunking) are being explored, and these are also covered later in the book.

THE COST EFFICIENCY OF PC-BASED ONLINE SURVEYS

Online surveys, in which participants use a PC, have become highly optimized in terms of speed and cost, and tend to have an advantage over mobile surveys. At the moment, mobile studies typically cost the same as or more than those designed for completion on a PC, and the total time from design to data delivery tends to be similar (the design, sample selection, and checking of mobile surveys often take longer, but the fieldwork can be quicker).

Because mobile research tends to be a little more expensive and because, until recently, the sampling was a little more limited, it has often been relegated to situations where it was believed to provide 'better' data, such as that from 'in the moment' or ethnographic studies.

However, with the improvement in standardized platforms for mobile, and increased range of sampling offers, the price/efficiency barrier is being eroded.

LIMITATIONS OF THE DEVICES

Most of the concerns about the limitations of mobile devices relate to phones, not to tablets. Phones, before smartphones, were seen to have a large number of weaknesses, particularly in terms of completing surveys. However, even with the latest smartphones, the screens are small and it has taken a while for the organizations offering mobile market research to deal with most of the concerns, for example by creating smartphone friendly versions of the full range of their question types.

VARIABILITY OF MOBILE DEVICES

Mobile phones are much more variable in their characteristics than the sorts of PCs that online surveys are typically designed for. In terms of PCs, researchers will usually assume they need to cater for Windows and Mac operating systems, with a screen size of at least 800 by 600 pixels, and a relatively modern browser. With phones, there are more operating systems and more configurations than with PCs, and beyond the smartphones there are tablets, phablets, and feature phones. This complexity makes designing mobile research more complex and problematic.

However, the current growth and dominance of Google Android and Apple iOS is making life simpler for those market researchers who are not dealing with feature

phones, although the many variations of Android that are used by different manufacturers and devices mean that this is not quite as standardized as it might first appear.

ACHIEVING PARTICIPANT COOPERATION

Most developed research markets have an infrastructure of access panels, customer databases, and even online dynamic sampling services, such as river sampling, from which to source potential participants. This means that participant cooperation is at least predictable and organized.

Mobile market research is at an earlier stage of development, and while many researchers have found people willing to take part in surveys or qualitative research, there has been a less complete infrastructure to support mobile market research.

In around the year 2000, online market research grew because online sampling methods became widely available, and the sampling options grew because online research was growing. The same situation now appears to be well underway with mobile sampling options and mobile market research.

ETHICAL, REGULATORY, AND PRIVACY CONCERNS

Like all forms of research, mobile market research raises a number of ethical, regulatory, and privacy concerns. As with other modes, some of these concerns are general and some are specific. These issues are covered more fully later, but the key points are:

- *The safety of people taking part in surveys (we don't want people driving and filling in surveys at the same time).*
- *Defining and achieving informed consent.*
- *Avoiding annoying people: don't send unwanted or too many messages or send messages at the wrong time of day (very easy with global studies and/or global travel).*
- *Avoiding passing on costs to the participants, or using up a significant proportion of participants' monthly data contract.*
- *Ensuring participant privacy and anonymity.*
- *Ensuring that communications to and from participants are secure.*

THE FUTURE FOR MOBILE MARKET RESEARCH

It is clear that mobile market research has arrived. A large number of surveys are being conducted via mobile, some as mobile only, and many as part of mixed-mode online studies. Most of the major survey platforms have mobile options and there is a growing body of research-on-research (RoR) suggesting what works and what does not work in mobile market research.

Mobile market research is having a major impact on some forms of qualitative research and on research communities and is beginning to help create a range of new and innovative approaches, especially in the areas of ethnography, diaries, and data logging.

Passive data collection is already an important part of media consumption measurement and is a major business for some non-market research businesses. A number of industry forecasters expect it to be a major part of the market research mix in the near future.

Mobile market research is not an established method, yet, but it is one that most researchers will be dealing with as part of their regular, everyday work. Mobile market research is no longer a niche, it is a mainstream approach. Many researchers are forecasting that mobile will become the dominant mode of data collection over the next few years, while others forecast that online and mobile will merge to become a single, platform agnostic approach.