

# BRIDGING THE DIGITAL DIVIDE IN QUALITATIVE RESEARCH IN EMERGING MARKETS

## SMART QUAL USING SMART AND NON-SMART PHONES IN DEVELOPING MARKETS

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### INTRODUCTION

Mobile enables insights into the “moment of truth” like never before. Despite mobile outnumbering online 3:1 and mobile being the irrefutable future of digital, the global market research industry lags as mobile is yet to become a mainstay data collection methodology.

One key reason for this is an industry bias towards Smartphone-based research studies. In developing markets Smartphones coverage is between 30% - 55%; while in developing markets Smartphones coverage ranges between 1% - 10% of handsets – due to a combination of pricing and network infrastructure constraints. Contrary to this industry trend in China, MobileMeasure partnered with TNS to run mobile qualitative and quantitative projects in both urban and rural towns using non-smart phones for instant multimedia insight capture. The effectiveness and efficiency of this technique is ground breaking.

Globally portable, this solution opens new opportunities in capturing consumers at the “moment of truth” including in hard to reach rural and emerging markets. Drawing on both bespoke custom and syndicated research this paper reveals an innovative research technique which has the potential to revolutionise the speed and quality of both qualitative and quantitative insights delivery.

### MOBILE MEETS ONLINE

During the heady days of the internet bubble in early 2000s, the recognition of online as a potent game changing force was well recognized across the market research industry. The mass adoption of the mobile phone across both developed and rapid growth markets has had a far greater impact upon the way consumers live their lives than the Internet – because it has reached far in excess of a billion more people. Despite this the market research industry has been somewhat lax in driving the utilization of mobile as a valid and representative data collection tool.

Much of the focus of market research innovation still sits with online panels – even in rapid growth markets such as South East Asia, India and sub-Saharan Africa, the industry focus is on how to drive adoption of online research using “traditional” online panels. A case in point is the 2010 SAMRA conference which dedicated an entire session to a discussion on fast tracking fixed Internet panel research – a solution which will currently enable researchers to touch no more than 10% of the continent’s population. The same can be said for India which currently has a total internet penetration of somewhere between 7% and 8%. In China – the world’s largest Internet market – some 600+ million consumers are still without Internet access.

Compare this to mobile penetration where a recent study by “On Device Research” estimates that over half of Asian and African online users do not access the internet on a PC (see table 1) compared to the developed countries like UK and US which have only slightly more than a fifth of the users being mobile only.

One of the key challenges our global clients present us with on a daily basis is – can you provide me with a cost effective, valid and representative research solution in the lower tier cities, towns and rural areas of rapid growth and emerging markets?. Mobile is the only viable solution to this challenge.

These factors alone provide compelling evidence that the Asia Pacific and global market research industries must focus a greater investment emphasis on fast tracking mobile phones to be a viable and commonly accepted data collection medium. In a global context this is far more important to our industry than the online revolution was into the early 2000s.

**TABLE 1, THE MOBILE ONLY REVOLUTION:  
THE PERCENTAGE OF MOBILE INTERNET BROWSERS WHO NEVER OR INFREQUENTLY USE THE DESKTOP  
INTERNET \***

Continent	Country	% of Mobile Only
Asia	India, China, Indonesia, Thailand	➤ 43%
Africa	South Africa, Egypt, Ghana, Nigeria, Kenya	➤ 56%
N. America & EU	US, UK	➤ 22%
Eurasia	Russia	19%
North America	US	22%
Europe	UK	25%
Asia	China	30%
Asia	Thailand	32%
Asia	Indonesia	44%
Africa	Nigeria	50%
Africa	Kenya	54%
Africa	Ghana	55%
Africa	South Africa	57%
Asia	India	59%
Africa	Egypt	70%

Data gathered from July to November 2010 - N= 15,204

\* Infrequent mobile internet browsers use it once a month or less

Source: On Device Research

Building on this argument and moving forward, mobile will become the main segue into the Internet for the majority of the world's population. The signs are already there – low cost yet solid quality Smart phones out of China utilizing Google's extremely intuitive Android operating system flooding into rapid growth and emerging markets and driving up Internet usage.

However, this is not only an emerging markets argument. Think about markets such as Australia, Korea, Hong Kong, Japan and Singapore – in these markets over recent years there has been a significant shift from fixed internet consumption to mobile internet usage.

As such, the question has to be asked – how valid and representative are those techniques and panels developed in the early 2000s? Shouldn't we be investing more in mobile research to balance the equation and provide our clients with a more representative and valid view of consumer behaviour?

This paper focuses on but one mobile solution, in doing so demonstrates the power of mobile phone based methodologies and will hopefully motivate the industry to fast track mobile based investments and innovation.

### MOBILE EARLY DAYS AND EVOLUTION IN MARKET RESEARCH

Mobile as a data collection tool in market research has been a consideration for over a decade now, beginning with SMS based studies and then followed by PDAs (handheld devices). Having had mixed results with both widespread and limited adoption for very different reasons, SMS based studies were time consuming and often tedious for respondents with high drop-out / low completion rates. The advantage of SMS, however, was that it was a universal protocol accessible by one and all; but came with the caveats of limited characters and lack of multi-media content.

PDAs, on the other hand, were more dynamic and allowed rich multimedia content loaded onto the handheld with data screening and the possibility of data checks and quality assurance built into the collection programs. Subsequent PDA models started being built for a wider market research role with cameras and barcode scanners fitted for enhanced diagnostics. Its march into mainstream market research unfortunately was halted due to the requirement of agencies having to invest in the hardware for their field force and the added issues of obsolescence of the devices with each passing year, quarter, month ... so if SMS could scale but was not rich enough for data, PDAs were rich enough but couldn't scale economically for the industry as a whole.

Despite the rapid strides of mobiles universally across geographies and demographics the actual adoption of mobile in market research has been very slow for a number of reasons:

- Limited mobile hardware capability (this has however changed considerably with the gap between feature phones and Smart phones being bridged);
- High cost of data services like GPRS;
- Perceived lack of utility for text heavy use due to small screen size;
- Fragmented environment with multiple mobile operating systems and platforms lacking common standards hindering development and deployment of tools across handsets. Further each continent and country seems to have its own preferences and handset manufacturing brands, hampering using similar strategies across markets.

Of the four factors listed above, the first three are problems of the past as those scenarios are slowly evaporating with feature phones' (non-smart) ability to offer basic functions of mobile application hosting, camera, colour screens and GPRS as a standard; to name some of the key requirements to making mobiles more appealing to market research as an added tool to its arsenal. The fourth on the list – fragmented environment – is here to stay and will continue to be around as long as such a huge market is up for grabs for innovators and new development. The space is largely unexplored to its full potential with mobile internet, mobile HDTV and other similar services neither universally available nor commercially affordable.

### **MOBILE MARKET RESEARCH TODAY – WHY SMART PHONES ARE NOT THE WAY (JUST YET)**

In the last six to twelve months within the market research global community, mobile market research has received its disproportionate share of airplay given the minuscule amount of research work actually getting done using mobiles.

If we set aside the legacy automated mobile collection devices (like the Palm Pilot, HP's iPaq amongst others) which are still going strong in many markets across the world collecting both ad-hoc, tracking data and retail data, data driven purely from consumer owned handsets is currently a slow but growing trend.

The slow growth hasn't come to a gallop mainly due to the belief that the most capable phones which are ideal both as a data insight collection tool and phones with a UI (User Interface) that is highly intuitive and easy to use are perceived to be restrictive to Smart phones. These considerations put the Smart phones at the forefront of the mobile market research movement, ignoring the majority of handsets in the market.

The Smart only approach is highly detrimental to the growth potential of mobile market research which seeks consumers of all hues – Smart phone owning and non-smart phone. In 2010 CISCO Systems, considered the gatekeeper of data networks (both online and mobile), undertook a global study on mobile data traffic with projections up to 2014. The results are well in line with other similar industry studies. On mobile Smart phones it not surprisingly predicts that in North America and Western Europe, 2010 penetration levels of 33% and 28% will rise to 54% and 49% by 2014. At the same time the total smart phone global penetration will rise from 10% in 2010 to 17% in 2014. (See table 2.)

This is largely because developed markets where Smart phones made the most inroads are not adding too many new subscribers, while in developing markets where mobiles, Smart or otherwise, are yet to fully penetrate into the markets the growth of affordable feature rich phones are staggering. According to ITU (International Telecom Union) in 2000, developing markets had half a billion mobile subscribers while the developed world had around half that figure. Fast forward to 2010 while developed markets have grown three times to be at 1.5 billion; the developing markets have grown 15 times to a jaw dropping 3.8 billion and continue to grow! Of these the developing markets of China and India together stand at 1.62 billion and still growing. Similarly we see amazing growth of smart phones across the globe but when it comes to sheer numbers, non-smart phones still dominate albeit gradually losing some market share to smart phones.

Gartner's September 2010 release had an interesting observation: "*Single-source platforms, such as Apple's iOS and Research In Motion's OS, will increase in unit terms, but their growth rate will be below market average and not enough to sustain share increase.*" The release also said "*by 2014, open-source platforms will continue to dominate more than 60 percent of the market for smartphones.*" This is effectively saying the open source Smart phones like Android will win the wars.

The bottom line is that smart phones are not going to dominate the globe anytime soon. And if we are to take mobile phones as serious tools in market research we need to include non-smart phones as part of mainstream MR.

**TABLE 2, PERCENTAGE OF INSTALL BASE OF SMARTPHONES OVER ALL MOBILE HANDSETS**

Region or Country	2009	2010	2011	2012	2013	2014
<b>Asia Pacific</b>						
China	10%	11%	13%	15%	18%	21%
India	4%	5%	6%	8%	10%	12%
Korea	14%	15%	17%	21%	25%	30%
<b>Rest of Asia Pacific</b>	<b>8%</b>	<b>8%</b>	<b>9%</b>	<b>10%</b>	<b>11%</b>	<b>12%</b>
<b>Total Asia Pacific</b>	<b>8%</b>	<b>9%</b>	<b>10%</b>	<b>12%</b>	<b>14%</b>	<b>16%</b>
<b>Central and Eastern Europe (CEE)</b>						
Rest of CEE	5%	7%	9%	11%	13%	16%
Russia	6%	7%	9%	11%	15%	17%
<b>Total CEE</b>	<b>6%</b>	<b>7%</b>	<b>9%</b>	<b>11%</b>	<b>14%</b>	<b>16%</b>
<b>Latin America</b>						
<b>Brazil</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>
Mexico	3%	4%	5%	7%	10%	12%
Rest of Latin America	1%	1%	1%	1%	2%	2%
<b>Total Latin America</b>	<b>1%</b>	<b>1%</b>	<b>2%</b>	<b>2%</b>	<b>3%</b>	<b>3%</b>
<b>Middle East and Africa</b>						
Rest of MEA	3%	3%	4%	5%	6%	7%
South Africa	1%	2%	2%	3%	4%	4%
<b>Total MEA</b>	<b>3%</b>	<b>3%</b>	<b>4%</b>	<b>5%</b>	<b>6%</b>	<b>7%</b>
<b>North America</b>						
Canada	30%	31%	34%	40%	47%	50%
United States	32%	33%	37%	44%	51%	55%
<b>Total North America</b>	<b>32%</b>	<b>33%</b>	<b>37%</b>	<b>44%</b>	<b>51%</b>	<b>54%</b>
<b>Western Europe</b>						
France	16%	18%	21%	27%	29%	33%
Germany	17%	19%	22%	25%	29%	33%
Italy	36%	40%	47%	54%	63%	67%
Rest of Western Europe	31%	36%	41%	49%	58%	64%
United Kingdom	17%	18%	20%	23%	29%	32%
<b>Total Western Europe</b>	<b>25%</b>	<b>28%</b>	<b>32%</b>	<b>37%</b>	<b>44%</b>	<b>49%</b>
<b>Global</b>	<b>9%</b>	<b>10%</b>	<b>11%</b>	<b>13%</b>	<b>15%</b>	<b>17%</b>

Source: Cisco VNI Mobile, Informa Media and Telecoms, In-Stat, Gartner, 2009, 2010

### CHALLENGES IN ASIA AND THE DEVELOPING WORLD

The key stumbling blocks for mobile MR to penetrate in developing markets are sometimes historic, perceived and often real. Some of the key barriers and their impact are listed below.

- *Screen size:* for a long time screen size was used as the core reason for MR not to adopt mobile phones until the Smart phones entered the market and greatly increased usage by consumers for non-core phone uses like games, reading the news and downloading other utility and fun applications. Today both smart and non-smart phones have large screens and users enjoy similar user experiences with rich content availability.
- High cost: mobile phones with advanced features were a luxury most could not afford in the developing world. In recent years, coupled with tumbling hand set prices, call and data rates to consumers have led to a huge growth in volume for manufacturers who have spurred each other to offer a lot of once considered premium features as a standard. Standardization of features like camera, GPRS, colour screens and similar features coupled with dropping prices is blurring the lines between smart and non-smart phones.
- Geographical scale: Due to the large size and population of many developing countries, the roll out of networks into rural and remote regions has been slow, having been focused on urban settings. However with growth saturating in the main urban centres the networks often forced by governments are now aggressively entering rural markets to gain market shares.
- Poor internet penetration: Most rural / remote regions in the developing world still lack basic Internet infrastructure and access. Increasingly mobile networks are penetrating deep into these formerly inaccessible regions including difficult and complex countries. With dropping data rates mobile internet has begun to rapidly penetrate all geographies. In rural China one in four users are introduced to the internet for the first time via their mobile phone.

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According to the China Internet Network Information Center (CNNIC), as of December 2010 China had 303 million mobile internet users.

### MOVING AHEAD

App driven solutions for non-smart and multi mobile OS deployments / platforms - To ensure mobile market research reaches the most people it is essential to take on a non-smart phone approach. Additionally with the penetrations between phone operating systems (OSs) also constantly shifting it's highly desirable to have solutions which cover multiple OSs to have the opportunity to reach the most people and markets.

Universal protocol options integration – There are many universal protocols like SMS and WAP which can reach almost all phones but have not been able to take advantage of their universal reach. This is due to some inherent weaknesses of each. For instance SMS is limited to text and further only a limited number of characters. WAP doesn't render well across handset screens given the number of screens they can be viewed on. Integrating these universal protocols within solutions ensures that we get the best out of them when required. For instance we can use a WAP site to help users download an app questionnaire and can use SMS to send alerts and reminders when a respondent has not sent in responses to a survey they are participating in.

Hybrid Multi OS solutions, which tap universal protocols like SMS and WAP in addition to offering rich media interactive experiences, are the best way forward.

This is the background against which we conducted our case study in China.

### CASE STUDY

In China, TNS and MobileMeasure successfully run qualitative and quantitative projects in both urban and rural settings using non smart Java enabled phones.

The TNS research team used MobileMeasure's TPV platform. This *T*ext, *P*hoto and *V*ideo blogging application provides a low cost, fun and easy to use mechanism for researchers to leverage mobile phones and get closer to consumers' lives. This enables researchers to effectively bring qualitative and quantitative research to life without actually having to absorb substantial additional travel and moderation costs – particularly when researching in multiple remote locations.

The beauty of TPV is it works on both Smart and non smart (java enabled phones) – facilitating a far more representative sample and rising to the challenge of conducting cost effective qualitative and quantitative enhancement research in lower tier cities and towns and remote and out of the way areas- effectively overcoming one of the key challenges global clients throw at research companies operating in rapid growth and emerging markets.

Through its partnership with MobileMeasure, TNS was able to have research participants use their non smart (Java enabled phones) to blog text and upload photos and videos real time - capturing real time in the moment behaviour instantly. Specially trained moderators were provided with a live data online dashboard to monitor the study in real time.

The TNS moderators, often located remotely in other parts of the country (highlighting cost effectiveness), could monitor the live feeds coming in. Additionally they could comment, communicate and elicit responses from the group or individual respondent's real time or in a pre-planned manner – all done real time and remote, freeing the moderator from being physically present. The app was also supported with SMS to drive compliance. This was done in the form of SMS reminders and SMS congratulatory messages sent for exceptional insights.

As such the utilization of TPV by TNS also added a low cost longitudinal element to the study – thereby not only enhancing the "real life" and "moment of truth" value of the research but also facilitating far greater depth in response and actionable insights.

The studies, focused on snacking behaviour, helped the researchers get into the impulse and planned snacking consumption cycle of participants real time without having to be physically present.

One of the key unique take outs was that often snacking is triggered by non-snacking related cues that a respondent sees and which had not been previously captured. Of course the real time impact was also very valuable as a lot of the inputs didn't get lost in the consumption and recall time gap. Thereby, the study provided unforeseen insight into potential marketing communications strategies – an added benefit of what was predominantly a study focused at NPD.

The depth of data delivered was astounding and provides proof of concept – that consumers (even in rapid growth and emerging markets) are extremely comfortable utilizing their mobile devices to capture information and provide commentary (even in a 2G environment). In fact as TNS' quantitative syndicated data demonstrates – this is merely an extension of how consumers are utilizing their mobile devices on a day to day basis.

On average TNS recorded 20-25 text blogs per week, 18-25 photos per week and 3-5 videos per week per participant – highlighting the validity and robustness of this technique and above all its natural fit with consumer's day to day lives.

As a further point of validation, blogging behaviour differed slightly between the rural and urban in terms of volume with the Urban participants blogging on average 20% more than their Rural counterparts. This isn't surprising as typically urban consumers are more sophisticated mobile phone users than their rural counterparts – often driven by more advanced devices and a higher device budget.

From a market research industry perspective, the TNS MobileMeasure partnership has revealed and confirmed the following:

1. Utilising mobile for uninhibited observation by enabling participants to contribute to the topic 24/7 adds a tremendous depth of insight at very low marginal cost.
2. The application's ability to operate on non smart phones ensures it is relevant for the entire mobile phone user base, thereby overcoming geographic limitations and facilitating inclusion of many who are typically left out of observational research because the cost of reaching them is prohibitive, and thereby capturing greater diversity of views.
3. Uncover the true "emotions" at the very moment - Go where consumers are, capture slice in time real life – without needing to carry a substantial project cost.
4. Video and photo outputs to enrich research findings and deliver more actionable insights.
5. High response rates and participation levels because above all this application fits closely with consumer everyday behaviour and links directly to an activity they often undertake for social reasons on a day to day basis – aka capturing and commenting upon images, video via their mobile device.

## CONCLUSION

The MobileMeasure TNS partnership has successfully demonstrated the ability and benefits of mobile as a research tool, particularly when the research application works effectively on non smart phone devices.

The beauty of mobile as a research tool is that consumers enjoy utilizing it! There is an unparalleled fit between the research design and their everyday behaviour ... as such response is high in terms of both frequency and depth.

From a global perspective, particularly in the rapid growth markets of Asia Pacific, mobile has a key role to play in enhancing market research and ensuring our industry delivers greater depth of insights and client value.

The question therefore needs to be asked – why aren't we as an industry doing more about it? Consumers have gone mobile, has your market research?

## SOURCE

1. Gartner September 10, 2010
2. Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2009-2014. February 10, 2010
3. China Internet Network Information Center (CNNIC)
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