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Research Article structure
These guidelines are for regular research article submissions. Authors who want to use a different structure are advised to contact the editor before submission. Innovation is encouraged so long as there is a clear benefit to the readers of the article.

Subdivision - numbered sections
Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to “the text”. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Introduction
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

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A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for the research. Empirical studies should conclude this section with hypotheses or research questions. Non-empirical papers are encouraged to expand this section to give adequate background and treatment of the issues.

Material and methods
Where the work is an empirical study, provide sufficient detail to allow another researcher to reproduce the study. Methods already published should be indicated by a reference. Only relevant modifications should be described.

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Results should be clear and concise. Discussion should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

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The main conclusions of the study should be presented in a short Conclusions section. Implications for further research, limitations and implications of the research for industry practice must be given.

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Appendices are not encouraged.

Table and Figure Titles
These should appear above the Table or Figure in bold and be numbered consecutively. Supply titles separately, not embedded in the figure or table. Titles should be brief (preferably under 10 words)

Math formulae
Present formulae using the Word equation editor. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

1 These guidelines have been extensively adapted from the submission guidelines for the Australasian Journal of Marketing, see http://www.elsevier.com/wps/find/journaldescription.authors/717558/authorinstructions and Public Opinion Quarterly, see http://www.oxfordjournals.org/our_journals/poq/for_authors/general.html
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A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

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Immediately after the abstract, provide a maximum of 6 keywords, using UK English spelling and avoiding general and plural terms and multiple concepts (avoid, for example, “and”, “of”). These keywords will be used for indexing purposes.

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Collate acknowledgements in a separate section at the end of the article after the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

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The default is single spaced, A4 format with 2.54cm margins on each side. The use of colour is acceptable for graphics and figures, but should otherwise be used sparingly. Its use is intended to make each article easier to follow rather than to cater to aesthetics or fashion. It is anticipated that case studies will include colour photographs and by arrangement, videos.

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The use of a copy editor to check the text for completeness and readability is advised.

If you have further queries, please contact the editor prior to submission.
What's in a name?

The word Australasian in the name of our journal reflects the fact that it is the official journal of both the Australian and New Zealand market research societies. But now this sector of the market research profession rightly sees itself as part of a world market. It now participates in important regional groupings particularly the Asia Pacific Research Committee (APRC) which covers China, Japan, Singapore, Malaysia, Korea, Thailand, Taiwan, New Zealand and Australia. This is part of a larger grouping, the Global Research Business Network covering 35 national associations. The journal wants to include a wider range of suitable articles, such as the fascinating paper by Greenland and Kwansah-Aidoo in this issue on market research in Sub-Saharan Africa. From this perspective the word Australasian represents too narrow a focus. It is hoped by dropping that word, other market research associations would adopt the journal as their official outlet. We would then seek to add members from these markets to the editorial board. For academics, who are our major contributors, journals with regional titles are a devalued commodity. Adding "International" or worse "Global" do not necessarily help either.

Professor John Rossiter, a member of our editorial board has suggested the name Market & Social Research. This is simple and focuses on our main area of interest. As the body who funds the journal, the AMSRS Board will be asked to approve this change. Those who wish to express an opinion are invited to contact either myself dbednall@deakin.edu.au or AMSRS.

David Bednall
Editor
December 2012
The challenges of market research in emerging markets: A practitioner perspective from Sub-Saharan Africa

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ABSTRACT

This paper makes a contribution to the limited body of academic literature on market research in emerging markets, more specifically the less developed countries of Sub-Saharan Africa (SSA). It should not only assist academics interested in emerging market research challenges, but also practitioners keen to pursue one of the last remaining emerging market frontiers. The research provides a checklist to help ensure research projects are designed to overcome the many challenges encountered. The study may also facilitate the training of research executives, as well as educating clients, by helping them to more fully appreciate the complexities of SSA.

While there is an expanding body of literature on international marketing research, very little looks specifically at SSA. Furthermore, few studies examine the subject from the perspective of the market research industry practitioner. This paper does that, by exploring the challenges of conducting market research with SSA consumers from the practitioner standpoint.

The study adopts a qualitative approach to investigate the experiences of 49 professionals working in the SSA market research industry. The research identifies a complex array of challenges facing those researching African consumers, which relate to the region’s unique micro and macro environmental conditions. The challenges are categorised in terms of political and economic, legislative, environmental, socio-cultural and infrastructure, as well as significant client and research resourcing issues. These are summarised in a conceptual framework that presents a holistic picture of the situation and provides a checklist of the factors that need to be considered during the research process. Overcoming the challenges invariably has significant impact upon research methodology design, project management processes, as well as associated project costs and duration. These issues indicate that companies seeking research suppliers in SSA need to reconceptualise the nature of the client–agency relationship.

INTRODUCTION

The purpose of this research is to identify the array of challenges that market researchers encounter in the less developed countries of Sub-Saharan Africa (SSA) and to consider how organisations might best approach research in this increasingly significant emerging market. In doing so it is anticipated that the paper will stimulate further debate and research on the unique market research challenges posed by SSA and indeed other emerging markets.

The 1990s expansion into developing markets resulted in progressively more international marketing research being conducted (Young and Javalgi, 2007). However, emerging market consumer research is frequently more complicated than that in developed countries (Craig and Douglas, 2005). This situation is exacerbated by the fact that there are far fewer available studies on emerging market consumer research for organisations to use to guide research in these environments (Aaker et al., 2007, Combe et al., 2009: Doole and Lowe, 2004). While the challenges of marketing research in developing countries have been discussed (e.g., Burgess and Steenkamp, 2006; Malhotra, 2010; Young and Javalgi, 2007) overall there is a dearth of published articles relating to consumer research in Africa (Bick et al., 2010; Greenland et al., 2006). This situation poses problems for organisations seeking to capitalise on this fastest growing region (International Monetary Fund - IMF, 2011; United Nations – UN, 2004). This paper’s aim is to help redress this imbalance in the literature.

While a significant amount of commercial research has been conducted in SSA, it rarely makes its way into the public arena due to client confidentiality. The SSA market research practitioners are therefore a logical focus for this study since they are most familiar

1 In this paper we use Sub-Saharan Africa (SSA) in reference to the collective group of countries South of the Sahara desert, but excluding South Africa because the South African situation is markedly different from the rest of SSA.
with the challenges that must be overcome in order to achieve successful research project outcomes. Initially this paper examines the rise of emerging markets and the growing interest in Africa and SSA in particular. The SSA market research industry is then discussed, followed by the qualitative research rationale, methodology and results.

**Emerging Africa and its market research industry**

Developing economies offer the greatest potential for sustainable business growth (Baack and Boggs, 2008; Lyons, 2008). Craig and Douglas (2001, p. 82) observe that “as growth in (developed) markets slows, future market potential lies in emerging market economies”. As an illustration, leading multinationals such as Unilever now generate more than half their sales from emerging markets (Bleby, 2010). Even in times of economic uncertainty the capability of developing economies to drive future growth remains (Rao, 2010). Indeed, record levels of consumer confidence have been reported for the Asia Pacific and Middle East/Africa (Nielsen, 2011).

SSA comprises the continent south of the Sahara and includes 48 countries (The World Bank 2012). The IMF (2011) in its World Economic Outlook report indicates that SSA economies have resumed fast and sustainable growth after the global financial crisis. In terms of GDP the IMF predicts growth of between five and six percent for the SSA region as a whole. Indeed it “is now second only to developing Asia in its rate of expansion” (IMF, 2011, p. 97). As Wallace (2011: np.) observes “the world has started to notice Africa’s huge economic growth potential”. Africa’s economic growth is fueled by a rapidly rising population. The United Nations (2004) reports that countries with the fastest growth rates are predominantly SSA and the region’s population will double from one billion in 2009 to two billion by 2050. This growth is also characterised by a rapidly expanding middle class, with total African consumer spending projected to reach US$1.4 trillion by 2020, representing an almost 60% increase over a ten year period (McKinsey, 2010). It is therefore not surprising that SSA is receiving increasing multinational investment (Bleby, 2010). As Cropley and Hirschlerv, citing Francis Beddington of Inspario Asset Management rightly point out, “Not investing in Africa is like missing out on Japan and Germany in the 1950s, Southeast Asia in the 1980s and emerging markets in the 1990s” (2011: np).

After a decade of China and Asia being the primary drivers of emerging market expansion (Sheth, 2008) the multinationals’ gaze is shifting to Africa (Cropley and Hirschlerv, 2011; McKinsey, 2010; Wallace, 2011). The organisations best able to capitalise on Africa’s market opportunities will be those that understand African consumers better than their competitors and competitive edge will be afforded to those most able to conduct effective marketing research.

SSA has an established market research industry that includes the leading global agencies, as well as numerous smaller local research suppliers. Industry watchdogs such as Africa’s Marketing and Social Research Association (MSRA, established 1996) and the Southern African Marketing Research Association (SAMRA, established 1963) promote industry standards in the region, as well as training and conferences (MSRA, 2012; SAMRA, 2012). While there are more than 50 countries in Africa and approximately 15 percent of the world’s population, Africa and the Middle East combined currently account for only two percent of the global market research industry revenue (European Society of Marketing and Opinion Research – ESOMAR, 2011). However, research agencies in SSA anticipate double-digit growth over the next few years due to increasing international client investment predominantly from the telecommunication and fast moving consumer goods sectors (Somers, 2010).

Given the size of research revenues generated in Africa it is uneconomical for global agencies to support full research service operations in all SSA countries. A comparatively small number of senior industry practitioners therefore coordinate projects across a large number of African markets. Smaller data capture oriented research offices are supported by full service research hubs, which typically operate out of Kenya for East and Central Africa, Nigeria for West Africa, and South Africa for the Southern states (e.g., see ESOMAR, 2011b; Marketing World, 2011; TNS, 2011; Synovate, 2011). These research hubs are then controlled by larger regional headquarters across a large number of African markets. Smaller data capture oriented research offices are supported by full service research hubs, which typically operate out of Kenya for East and Central Africa, Nigeria for West Africa, and South Africa for the Southern states (e.g., see ESOMAR, 2011b; Marketing World, 2011; TNS, 2011; Synovate, 2011). These research hubs are then controlled by larger global regional head offices. For example, Nielsen’s Africa operations fall under the jurisdiction of their Asia Pacific regional headquarters based in Singapore (Verrinder, 2009).

It is therefore a small number of senior industry practitioners that have the most extensive knowledge of the market research challenges posed by this significant emerging region and it is this group of individuals that was the focus of this research. Given the marked contrast between South Africa
and the wider SSA region, not just in terms of economic development and infrastructure, but also the nature of market research, in which it bears more resemblance to other developed markets than SSA, this research focuses specifically upon the research challenges of the less developed countries of SSA.

**METHOD**

**Objectives**

The key objectives of the research was to identify the challenges that senior market research industry practitioners face while operating in the less developed SSA countries and to consider the implications of these challenges for managing the research process.

**Sample**

Africa’s Marketing and Social Research Association (MSRA) supported the study by facilitating the data collection process and securing participation of market research industry practitioners. While MSRA is located in East Africa its members work across the entire SSA region. Respondent commitment and cooperation was obtained by emphasising the research initiative’s goal of benefiting market research industry as a whole by improving understanding of the challenges facing researchers in the less developed SSA markets. Key findings have subsequently been shared with participating organisations via a presentation to MSRA.

Across four separate research phases a total of 49 SSA industry practitioners participated in the study. All were employed by key industry players operating in the region including TNS-Research International, Nielsen, Millward Brown, Synovate Global, IPSOS, RMS, Strategic Business Options, and Consumer Insight. All respondents were actively involved in the design and/or implementation of market research projects.

While phase three of the data collection included client service executives and data collection managers, the other research phases focused exclusively on the most senior level research agency staff. These are the Managing Directors, Area Managers, and CEOs that make up the MSRA’s Executive Board drawn from its corporate members. All these more senior level participants were experienced in running multi-country studies/projects covering the entire SSA region, and capable of providing detailed insights into research experiences encompassing Southern, East, Central and West Africa.

**Qualitative approach**

Given the exploratory nature of the study and lack of related academic research in this region, a four stage qualitative approach was adopted for data elicitation. Qualitative research is appropriate for smaller target populations and is particularly suited to researching management since it allows “exploration of the rich social context of the marketing profession largely ignored by quantitative marketing researchers” (Melaia, Abratt and Bick, 2008, p. 236). While qualitative studies are sometimes criticised in relation to subjectivity and scientific rigor (Richardson, 1999) an interpretivist research paradigm is ideal for investigating a complex subject such as practitioners’ views on SSA’s research challenges and as Goulding (2005) indicates is useful for building models based upon actual experiences.

Four phases of qualitative data collection were conducted. The qualitative data provided at each stage were analysed using content analysis and sorting the various perspectives into different themes or categories (Akerlind, 2005). Throughout the results discussion section we use verbatim quotes to further illustrate key themes that emerged during the interview phases in accordance with Patton’s suggestion that “sufficient description and direct quotations should be included to allow the reader to enter into the situation and thoughts of the people represented in the report” (1990, p. 400). An iterative qualitative research process was followed whereby themes and concepts identified during one stage were presented at the next. By using output from one phase as input to the next, an understanding of this complex research topic was built up incrementally (see, for e.g., Denzin and Lincoln, 2005; Flick, 2002; Taylor and Bogdan, 1998). A fundamental strength of this approach is the deeper understanding of the issues involved that is generated through increasing familiarity with the topic, which improves over time and through the iterative process.

**Phase 1 - Preliminary survey of research agency senior executives**

Each year the MSRA administers a self-completion survey to its small number of corporate members to generate African data for ESOMAR’s annual Global Market Research Industry report (ESOMAR, 2011). During an MSRA corporate member monthly meeting the nine CEOs and regional managers representing the corporate members were informed that additional open ended questions would be included and encouraged to provide as much
detail as possible when completing these particular questions, in order to generate sufficient initial insights into the SSA market research challenges. The additional questions were:

- What do you see as the main challenges facing market research in the East Africa region?
- And what do you see as the main challenges facing market researchers in the wider SSA region, excluding South Africa?²
- What do you see as the main things that have restricted market research industry growth this year?

From responses to these questions the key challenges for market research in Africa were identified (see Table 1 and Table 2).

In the previous year the agencies responding to the survey had conducted research in a total of 35 African countries. The respondents were therefore able to provide insights to the broader SSA research challenges (see Table 2). The challenges identified for

| Table 1: Main market research challenges facing practitioners in the East Africa region |
| (presented in order of frequency of mention) |
| 1. Lack of experienced and qualified market research staff |
| 2. Lack of client knowledge and understanding about market research in Africa |
| 3. Associated time spent on educating clients about research in Africa |
| 4. Businesses and SME’s (small and medium enterprises) unwilling to provide information to research companies that is readily available in developed markets |
| 5. Increasing operational costs (inflation combined with rising demand for goods, services and utilities) |
| 6. Increasingly price conscious clients with restricted budgets |
| 7. Increased cost of living and increasing field costs |
| 8. Poor governance / corruption affecting the economy and business stability |
| 9. Political instability |
| 10. Lack of development in Africa specific research techniques / lack of innovativeness |
| 11. Keeping pace / up to date with a fast changing society (creating difficulties with sampling and tracking studies) |
| 12. Competition in the market research sector / new companies entering the market |
| 13. Research companies poaching each-others employees |
| 14. Client companies poaching research agency employees |
| 15. Staff trustworthiness |

Single mentions only for:
- Corruption – clients expecting payment in return for contracts
- Failure to understand and comprehend clients demands and needs
- Small ‘briefcase’ researchers – individuals who charge unrealistically low prices and give the industry a bad name

² South Africa was excluded since the market research methods typically used often bear more resemblance to developed markets than the rest of SSA.
East Africa were echoed for the wider SSA. However, as might be expected for the broader SSA context, there were extra concerns expressed in relation to social stability, travel, varying attitudes toward research, difficulties managing local research supplier relationships, as well as vagaries regarding legislation across the region particularly in relation to taxation, work and research permits.

Despite the downturn in the global economy all the agencies were very optimistic about the future outlook of Africa’s market research industry. Many of the factors considered as restricting market research industry growth were exactly the same as those challenges already presented in Table 1 and Table 2. For example, the availability of research executives again came out as the number one impediment. However, increasing operational costs and in particular rising prices for fuel, electricity and food, as well as infrastructure limitations were more obvious concerns for the future. The global financial crisis was also mentioned.

**Phase 2 - Follow up in-depth interviews discussing the key challenges identified in phase one**

In the second phase of the research, the findings from phase one as detailed in Table 1 and Table 2, were

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**Table 2: Main market research challenges facing practitioners in the wider SSA region**

<table>
<thead>
<tr>
<th>(presented in order of frequency of mention)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.  Political and social instability in Africa / war and conflicts</td>
</tr>
<tr>
<td>2.  Distrust and hostility against foreigners and agency staff in some countries</td>
</tr>
<tr>
<td>3.  High traveling costs</td>
</tr>
<tr>
<td>4.  No direct flights and long travel times to many SSA countries</td>
</tr>
<tr>
<td>5.  Obtaining research licenses and permits</td>
</tr>
<tr>
<td>6.  Staff entry visas and work permits</td>
</tr>
<tr>
<td>7.  Lack of experienced / qualified / trustworthy market research staff</td>
</tr>
<tr>
<td>8.  Clients’ limited / minimal research budgets effect ability to perform effective research</td>
</tr>
<tr>
<td>9.  Lack of familiarity with market research in some countries</td>
</tr>
<tr>
<td>10. Research viewed suspiciously by authorities and consumers in some markets</td>
</tr>
<tr>
<td>11. Most countries are under researched, very limited available information</td>
</tr>
<tr>
<td>12. Unprofessional local research suppliers / subcontracted data collection agencies</td>
</tr>
<tr>
<td>13. Difficulties developing stable / committed relationships with local suppliers / subcontractors</td>
</tr>
<tr>
<td>14. Taxes are high and vary between markets</td>
</tr>
<tr>
<td>15. Tax laws vary significantly between markets</td>
</tr>
<tr>
<td>16. Double taxation / vague and ambiguous withholding tax legislation for international projects</td>
</tr>
<tr>
<td>17. Corruption in society</td>
</tr>
</tbody>
</table>

Single mentions only for:
- High and increasing cost of living / inflation
- Corruption – clients expecting payment in return for contracts
- Language barrier that leads to multiple translations - sometimes meaning is lost
- Poor infrastructure
presented to the MSRA Executive Board members at one of their monthly meetings attended by the same nine respondents who completed the initial survey. Discussions were audio recorded and then transcribed. The phase 1 findings were also shared and discussed via email with three other senior agency staff working in West Africa and another based in South Africa. Respondents were invited to provide greater insights into and reflect upon the challenges that they felt were particularly problematic, as well as identify any other unlisted challenges. Respondents were also encouraged to relate their personal experiences in relation to specific projects they had managed or been involved with. After this data collection phase we were able to identify recurrent themes and begin clustering related areas. An initial summary of the research challenges was generated for evaluation during the third phase of the research (see Figure 1).

Figure 1: Preliminary conceptual model of Africa’s market research challenges

(Based on basic content analysis of initial exploratory findings)

Phase 3 – Initial conceptual model presentation and development at a practitioner workshop

Eliciting opinion on models for the purpose of cross checking interpretation is a valid step in qualitative research that has been employed by other qualitative researchers (e.g., see Goulding, 2005).

To test out the conceptual model with a wider practitioner audience the preliminary version was presented at a workshop held during the MSRA’s annual conference event. Market research practitioners from the same MSRA corporate member companies involved with the earlier research phases participated. In addition to the more senior managers, participants included other research managers, account executives and field managers working in Africa’s research industry. Forty-five participants were divided up into smaller groups...
of six to eight individuals who sat around tables. Following an introduction to the research project the preliminary conceptual model was presented to the group overall. They were then encouraged to discuss and identify other challenges they had faced that were not yet present in the model.

The workshop session was facilitated by the Managing Director of IPSOS East Africa, a highly experienced discussion moderator. Discussions were video recorded, transcribed and then content analysed. On the basis of findings from phase three, the model was then revised and refined. One major alteration was that after the analysis at this phase, the research process component was placed at the core of the model. The workshop discussions had revealed that this particular component is affected and influenced by all the other research challenges.

Phase 4 – Conceptual model revamp and tweaking through email discussion with practitioners

In phase 4 of the research the revised conceptual model and a draft version of the results discussion section presented in this paper was sent via email to the 13 respondents who had participated in phase two. Respondents were again asked to reflect upon the revised model and to corroborate, or otherwise challenge its validity. Once again suggestions for any further research challenges not adequately covered were encouraged. While several further minor suggestions were offered and these were incorporated into the final version (see Figure 2), overall the respondents confirmed that the final conceptual model adequately depicted the key challenges facing market researcher practitioners in Africa. As Goulding (2005) indicates when no additional information is forthcoming it is an appropriate point at which to stop further sampling.

**Figure 2:** Practitioner perspectives on Sub-Saharan Africa’s market research challenges and their implications for the research process

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**POLITICAL & ECONOMIC**
- Political & social instability
- Government & institutional corruption
- Currency & exchange rate fluctuation
- High inflation
- Rapid urban development / expansion
- Slum clearing & bull dozing informal markets - rapidly changing social fabric
- Informal cross border movements

**SOCIOCULTURAL**
- Hard to reach groups
  - Top-end - too much security
  - Bottom end - no security
- Huge rich – poor divide
- Multiple tribal groups & tribal conflict
- Multiple local languages
- Some languages more verbose than English
- Lower education / literacy rates amongst general population
- Some markets & segments view research suspiciously
- Some markets not open about income
- Spouses don’t know each others salary

**CLIENT RELATED**
- Ignorance of Africa market research reality
- Request inappropriate / standardised / Western research approaches
- Wrong consumers targeted - Western segmentation systems not transferable
- Misjudged, limited & restricted research budgets
- Clients require consultants not mere data collectors
- Communication email and phone - face to face limited compounding chances of misunderstanding
- Local clients may not be research savvy

**IMPLICATIONS FOR THE RESEARCH PROCESS**
- Research process complex, time consuming & costly
- Greater potential for things to go wrong
- Less predictable project schedules & budgets
- Greater chance of reliability issues
- Innovative / customised approaches required since standardised & traditional approaches not transferable
- Less reliance on exploratory qualitative research phases to inform research design for standardised projects
- Limited telephone & online survey options
- Face to face interviewing the norm in most markets
- Field team harder to control / manage & irregularities common
- Project briefing & communication more difficult & costly
- Field teams must have appropriate tribal mixes
- Questionnaires must be translated in several languages
- Meaning lost in translation & longer questionnaires result
- High & increasing travel times & costs
- High & increasing operational costs, e.g., computers, vehicles, security, electricity, generator during blackouts
- High population variability necessitates larger samples
- Project scope & sample size restricted by limited client budget
- Greater sample bias potential from hard to reach groups
- Difficulties in obtaining truly random samples
- Difficult to maintain representative retail audit and consumer panels
- Greater agency exec time spent bringing international clients up to speed with Africa research challenges
- Difficulty maintaining client service and research executive teams
- Higher agency research executive costs

**LEGISLATIVE**
- Research permit needed in most markets
- Visa requirements / restrictions
- Work permits for international staff
- Complex / ambiguous tax laws
- High tax / duty - cars, computers, etc.
- Can’t enforce local research supplier contractual obligations

**ENVIRONMENTAL**
- Vastness of Africa & some countries
- Environmental extremes & variation in seasonal climatic conditions
- Disease & life expectancy

**INFRASTRUCTURE**
- Limited basic utilities, worse in rural areas
- High price / low availability of technology
- Poor & costly telecommunications
- Low internet / social media penetration
- Poor road networks – congestion in cities, inaccessible rural areas
- Power cuts
- Crime / security & safety issues
- Inability to do money transfers to fund data collection (especially international)
- Infrastructure pressure worsening in rapidly expanding urban areas

**RESEARCH RESOURCES**
- Small pool of Africa experienced market research executives
- High agency staff turnover - clients & competition poach agency executive staff
- Poor secondary data resources
- Fewer syndicated studies / panels
- Limited research facilities - focus group rooms, transcription & data entry services
- Unprofessional / unscrupulous local suppliers
RESULTS AND DISCUSSION

The conceptual model presented in Figure 2 is a significant output of this study and fulfills the key project objectives by summarising the main challenges facing senior market research industry practitioners operating in SSA, as well as the implications of these for managing the research process. It is anticipated that this framework will stimulate further debate on the unique market research challenges posed by SSA and indeed other emerging markets.

The key challenges facing SSA’s research practitioners fall into the broad themes of political and economic, legislative, socio-cultural, environmental, infrastructure, client related and research resources. While presented under separate category headings many of the issues are closely interrelated.

Greater discussion of each component now follows. Given space limitations it is not possible to provide verbatim comments to illustrate all the challenges identified. However, a selection of respondent comments from the various phases of the research is provided. These verbatim quotes further illustrate the key themes identified and are in line with similar responses from other participants.

Implications for research process

The research process is at the heart of the model since all of the challenges significantly impact on how research is actually carried out, as well as the reliability of results. A recurrent practitioner comment was that market research in SSA is fundamentally different to other parts of the world, not least because over 90 percent of consumer survey research is conducted face-to-face using pen and paper (Somers, 2010). One obstacle that agencies frequently have to manage in relation to international clients is that experienced researchers from developed countries are usually more familiar with online and computer assisted telephone interviewing. They frequently ask for inappropriate approaches to be used.

“International clients and indeed parts of our own organisation often come with a clear idea how they want it done. You can’t just duplicate a project that’s worked elsewhere and they just don’t grasp the implications of this.” (Phase 2)

In many instances standardised research approaches are requested, but won’t work and need adapting to the local market.

“Clients say it is crucial for the project specs to remain standard across markets … Tailoring to specific markets removes our economies of scale.” (Phase 4)

As illustration, consumer goods surveys in Africa require the inclusion of a different set of retail channels. Small informal stores and street vendors or hawkers account for the highest proportion of sales in most SSA markets.

Client surprise at the financial cost of conducting research in SSA was another recurring theme. While labour costs are indeed lower in much of SSA (with the exception of more senior executives, especially expatriates), conducting face-to-face interviews is still generally more expensive than online or telephone interviewing, which are the dominant modes of data collection in the West. Also the pitfalls associated with face-to-face interviewing need to be more closely guarded against in Africa. While field teams always require close supervision this is not always easy in the challenging SSA environment:

“Given the field problems it is more important to have checks for internal consistency within the questionnaire … Repeat questions so that data can be further cleaned at the processing stage.” (Phase 3)

Significant data collection cost variation between different SSA countries is also something clients find hard to understand and causes difficulties when negotiating multi-country research project contracts. As one manager explained:

“The same project can cost four times as much as Kenya in certain markets, Angola is a good example.” (Phase 2)

The numerous challenges also mean that there is greater risk of projects going over budget due to unforeseen circumstances. While certain aspects can be planned for, others can be totally unpredictable. Bringing clients up to speed with the SSA market research realities is yet another cost burden:
“It’s an education process and you have to invest that time in walking them through the research process. They really need consultants more than researchers.” (Phase 4)

The unexpectedly high costs associated with market research in SSA, in conjunction with the recent period of global economic uncertainty, have resulted in project design having to be compromised further in terms of scale in order to meet fixed or reduced research budgets.

**Political and economic**

Many SSA countries experience ongoing political and economic instability.

“As you know if you are working in a dozen African countries, invariably there’ll be trouble of some sort or another in at least a couple of them.” (Phase 2)

Senior staff of the larger agencies had all coordinated multi-country studies in SSA, where data collection occurs simultaneously across numerous markets. With these all had experienced disruption from instability and conflict, which often resulted in delays, having to amend the geographical areas sampled, project postponement, or even cancellation.

“This time last year we had a member of our staff stuck in Chad, dodging bullets ... an attempted coup while she was there, she really didn’t know what to do. It’s not unusual, there are many outbreaks of violence in Africa and it’s something we deal with.” (Phase 3)

SSA experiences some of the world’s highest inflation rates and substantial currency fluctuations are also commonplace. As one respondent put it:

“This year inflation is running in the twenties, last year it was single digits ... you can’t anticipate it.” (Phase 2)

These factors created problems for the senior research agency staff in terms of budgeting and accurately predicting project costs, particularly in the pricing of multi-country projects:

“Setting fees and contracts in dollars (US) protects you to a degree against currency fluctuations but there’s always hidden costs.” (Phase 2)

**Environmental**

Seasonality and climatic extremes, in conjunction with limited infrastructure were also cited as challenges that can make conducting research unfeasible at certain times of the year:

“If the client delays five months ... It starts to rain and you’re stuck, you can’t get there.” (Phase 3)

The vastness of the African continent and the challenging terrain of some of the countries also presented particular problems not only with travel time, but also in terms of methodology. With face-to-face interviewing, obtaining cost effective, geographically representative samples is particularly challenging in some of the larger countries and particularly when challenging weather conditions set in.

Related to the environmental conditions, disease prevalence also creates challenges for agencies in terms of project management, staff well-being and maintaining a stable work force. This quote from one of the participants illustrates this point:

“HIV, AIDS, malaria ... Tuberculosis and typhoid and measles, these are very important issues for us to address as market researchers ... Bear in mind that what that means is the future pool of qualified, skilled, educated researchers is also being affected.” (Phase 3)

**Legislative**

The variation and inconsistencies in legislation are also an important factor that creates many problems for the research agencies working in SSA.

“Across markets there is often ‘grey’ legislation. For SSA currently we have incomplete knowledge of such legislation, which adds risk to such projects.” (Phase 4)

Many SSA countries require government permits for market research. Some such as Rwanda require individual permits for each and every research project, as well as copies of the research instrument prior to granting approval. This situation not only adds to project lead times, but also creates confidentiality concerns for clients.

Given the hub and spoke nature of the market research industry structure in SSA, projects frequently
require agency staff to travel from the central research offices to brief and train local teams. Visa applications can also add to project length and in certain situations the wrong visa may lead to further delays, infringement upon local labour laws, and even incarceration of staff.

The senior executives interviewed all expressed consternation at the complicated and ambiguous taxation laws that are prevalent in many SSA countries. This was particularly in relation to withholding tax payments for multi-country studies. In some cases tax must be paid twice, both in the country where an agency is based as well as in the country where the research is actually conducted. Difficulties were also encountered when bringing research materials across borders:

“Questionnaires, once they are completed are dutiable when crossing the border from Tanzania to Kenya for example. It’s not easy. And Government corruption … I’m not going to dwell on that.” (Phase 2)

Africa performs poorly in global corruption rankings (Transparency International, 2011) and when the potential for corruption is factored in, these legislative bottlenecks become even more challenging and expensive to deal with.

“In Nigeria for instance, the question will always come – What’s in it for me?” (Phase 3)

**Socio-cultural**

African countries have some of the world’s biggest rich-poor divides. This has implications in terms of variable education and literacy rates, which further explain why face-to-face interviewing is the preferred method of data collection. The practitioners also discussed a range of hard to reach consumer groups. To access the more affluent strata of society, interviewers have to overcome high levels of security involving gated communities, secured compounds and security guards. Regardless of social standing many potential respondents are also wary of letting strangers into their homes to conduct interviews. In poorer suburbs and shanty towns, which typically house the highest proportions of the urban population, lack of security and lawlessness become a key concern with regard to interviewer safety. In these locations interviewing will cease well before nightfall and acquiring support from local community members may be necessary. Combined with very significant urban road congestion interviewer output can therefore be severely hampered, increasing project duration and costs.

In addition, a multiplicity of languages adds to the difficulties of conducting research. SSA countries typically have numerous tribes and languages. Kenya for example has over 40, while Ghana has anywhere between 44 and 52, depending on who is doing the classification.

“Frequently a questionnaire is translated several times for one market. Similarly any open ended (responses to open ended questions) must be translated back from the local language … costs must be built in for this.” (Phase 3)

Despite the range of languages in each country, questionnaires are rarely translated into more than a few languages, illustrating the ongoing challenge of losing meaning:

“You don’t want the interviewers trying to do their interpretation of what the questions mean … then the result you get back isn’t really what you intended in the first place.” (Phase 3)

Some African languages are also very verbose. Swahili for instance, spoken in several East African markets, results in a translated questionnaire that is significantly longer than its English version. This is an important consideration in research design as survey reliability is adversely affected by interview length.

Another frequently mentioned cultural theme was that some communities view research suspiciously:

“There are some areas even in Kenya, now after the troubles (2009 tribal / election related violence) we have to be careful what people we send there (match interviewers to specific tribes).” (Phase 3)

For the sake of safety and to enhance response rates interviewers must be from the same social/tribal group. While many agencies aim to maintain a good mix of interviewers, this is not always so easy to implement since nepotism is endemic in some parts of Africa.

Another cultural challenge relates to spouses frequently not knowing how much each other earns. This poses problems for consumer research since household income is frequently a key indicator in segmentation models, which is used in respondent selection for quota sampling.
Infrastructure

Accessibility challenges have already been alluded to in relation to legislative, environmental and socio-cultural dimensions; this issue is also significant in relation to infrastructure. Many SSA markets, especially those areas outside the capital cities have poor infrastructure. Obtaining geographically representative samples can be severely hampered by poor road networks, the lack of direct flights between key cities and the vast distances involved.

Infrastructure limitations also affect the ability of research agencies to operate due to power cuts and increasing utility prices. Poor telecommunications, low internet penetration and varying levels of media use restrict the use of different data capture methods, as well as the ability to communicate with field teams. Again this challenge helps to understand why face-to-face interviewing is the norm for most SSA consumer surveys.

“We are now experimenting doing fieldwork using basic phones. Limited data network coverage has been a great hindrance to innovation outside pen and paper (data collection).” (Phase 4)

Safety and security are also key concerns in certain areas:

“You know even in terms of sending interviewers out with laptops, mobile phones, recorders ... You have to be aware of what you are exposing them to” (Phase 3)

While most services and facilities can be sourced in most SSA countries they frequently come at a premium price. For example, computers, technology, finance and business services are all frequently much more expensive in SSA compared to developed markets.

“High cost of reliable courier, e.g. DHL. Cheaper alternatives not reliable.” (Phase 2)

Client challenges

While the practitioners mentioned local clients as not being research savvy, they also emphasised the difficulties associated with international clients who may be research experts in their own regions but incorrectly assume that the same principles and knowledge apply in emerging markets.

“Many times they are not familiar with local issues. A lot of people (clients) have never heard of a research permit, particularly foreign clients. What’s a research permit?” (Phase 2)

International clients commonly ask agencies for inappropriate, standardised research approaches to be used. Furthermore, familiarity with one African market does not equate to understanding the wider SSA regional challenges and the huge differences that exist between the markets. This issue was seen as being particularly pertinent if the client’s Africa research experience is restricted to South Africa, which in terms of infrastructure and research methodologies has more in common with western developed countries than with the rest of the SSA region.

Other evidence of international clients’ limited understanding of research in SSA relates to requests for inappropriate samples and targets. For example, in terms of the widely used socioeconomic classification index, which classifies respondents’ social status on the basis of occupation, a lower middle class C1 emerging market consumer is completely different in terms of spending power compared to a C1 from a more developed market. Similarly lack of appreciation of the difficulties and costs associated with obtaining representative samples in some SSA markets was another area of concern.

Research resources

One of the toughest challenges facing practitioners is the severe shortage of qualified researchers with SSA experience. This is evidenced by a high executive turnover rate, with these staff frequently being poached by clients, as well as competitor agencies. The economic principle of supply and demand dictates that the salaries for senior research executives in SSA are high and this is also reflected in higher research costs.

Many SSA countries have few if any research suppliers. Nevertheless data collection is required. In some markets such as Angola high priced research monopolies operate, with research costing many times the amount of an identical project in other African markets. Another common problem was with unscrupulous local suppliers quoting one price for field services during the proposal stage, but then raising their fees once a project is commissioned.
“Ethiopia is a problematic research market. Locals often try and change prices at the last minute, or try and approach the client directly.” (Phase 2)

Given the lack of alternative suppliers, as well as ineffective contractual legislation, the market research agencies have no choice but to meet the additional expense, or cancel the project. Others expressed concerns regarding intellectual property with local suppliers sometimes resorting to unethical business practices such as selling confidential data, reports and questionnaire to other organisations:

“It is very difficult to deal with local suppliers who sometimes sell our confidential data...” (Phase 4)

Many SSA markets also have limited reliable secondary data sources. Inaccuracies in census data in particular create problems in relation to obtaining representative samples.

“Quality of demographic data varies enormously. This can create sampling problems and sometimes weighting data to be representative is impossible.” (Phase 2)

Other research resources such as focus group facilities, consumer panels and data processing services taken for granted in many developed countries, are also limited or unavailable across much of SSA.

CONCLUSION

SSA offers huge potential to organisations that understand its consumers. However, as revealed in this paper SSA market research practitioners face numerous challenges that significantly impact upon the research process. There is therefore considerable risk of decisions being made upon the basis of unreliable market research findings.

While the practitioner sample used in this research is relatively small, it focuses on the limited pool of industry experts who are best able to comment on the research challenges posed by the less developed countries of SSA. The conceptual model presents a holistic picture of the challenges of conducting market research in the region and provides a checklist of the factors that need to be considered during the research process. These have been categorised in terms of political and economic, legislative, environmental, socio-cultural and infrastructure, as well as significant client and research resourcing issues. Overcoming these challenges invariably has significant impact upon research methodology design, project management processes, as well as associated project costs and duration.

International companies considering investment in SSA need to realise that the implications of conducting market research in the region go well beyond mere adaptation of research methodology. Transferring approaches from more developed markets and even from other emerging markets is likely to create further problems. Given these complexities, companies seeking research suppliers should not be looking for mere data collection services. They must identify potential research partners that have wide experience across the emerging markets that make up the SSA region and fully appreciate the array of challenges involved. Research clients need to understand that, in SSA, the client-agency relationship has to go well beyond that which is typical in established developed markets. In SSA, the agency ought to take on more of an advisory role and the relationship should facilitate the enculturation of the incoming partner to help them adapt to this most complex of research environments.

Increasing interest in the region will result in more research resources being invested in SSA. With growing recognition of the innovative approaches that practitioners use to overcome the challenges involved, the research techniques evolving in SSA may well begin to inform research practice in other parts of the world. It is our hope that this conceptual model and discussion of practitioner perspectives on the SSA market research challenges and their implications for the research process will stimulate further debate on the unique market research challenges posed by SSA and indeed other emerging markets. Future research might also further develop the conceptual model of emerging market research challenges into a more robust and tested framework.
REFERENCES


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Response mode, response duration and survey bias: results from the 2010 Australian National Infant Feeding Survey.

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Australian Institute of Health and Welfare, Canberra

ABSTRACT
Sample surveys are important tools for government agencies to collect data for various purposes—from baseline data to program evaluation. However, since sample surveys only reach a fraction of the population to which the findings will be generalised, it is very important that the surveys are designed to minimise errors and maximise representativeness. Various measures have been implemented to obtain survey estimates that are unbiased and contain minimum survey error. Using data from the 2010 Australian National Infant Feeding Survey, this paper examines the importance of dual mode and follow-up reminder in a mail-out mail-in survey with an option of online completion. The data show that use of dual mode and follow-up allows different groups of respondents to take part in the survey.

INTRODUCTION
Sample surveys are widely used by government agencies to collect data for a variety of purposes. Since collecting data on the whole of the population is not feasible or practical, with careful design, sample surveys can provide quality data. A good sample is representative, meaning that the data obtained from the sample is representative of the population from which the sample is drawn. This means that each sample point represents the attributes of a known number of population elements.

However, even with carefully designed sample surveys, bias often occurs: a) when the respondents in the sample do not accurately represent the population, b) the sampling frame from which the sample is selected does not cover the whole population, or c) the questions are poorly worded for the respondents to provide meaningful responses, and so on. The errors in the survey can be grouped into two types—sampling and non-sampling errors.

Sampling errors occur because the survey only collects information from the people in the sample instead of the whole population. Non-sampling errors can be attributed to many sources including design of questions, respondents not providing correct information, data processing errors and recall errors.

There has been extensive study on how to minimise sampling and non-sampling errors in surveys. A very detailed description of total survey error is found in Biemer (2010). Biemer defines total survey error (TSE) as “the accumulation of all errors that may arise in the design, collection, processing, and analysis of survey data” (p. 817).

The purpose of this paper is to show whether respondent characteristics differ by survey mode and survey response duration in a dual mode survey. Studies by Brennan (2011) and Sharp, Moore and Anderson (2011) have shown that there were significantly different response distributions between web and mail responses, and that early responders to an online panel survey were different from those who responded later. Using data from the 2010 Australian National Infant Feeding Survey, this paper examines respondents’ characteristics and investigates whether survey mode and response duration bias exist. The survey was funded by the Australian Government Department of Health and Ageing.

METHOD
A sample of 52,008 infants aged 0–2 years was randomly selected from the Medicare Australia enrolment database. Primary (or the main) cardholders of these children were sent a primary approach letter
(PAL) to participate in the survey. In most cases primary cardholders were the parents of the children selected in the sample.

About a week after the mail-out of the PAL, respondents were sent a survey questionnaire along with a reply paid envelope. If respondents preferred to complete the survey using the online option, an unique user ID and password were also provided in the letter. Every respondent was sent a paper questionnaire; the online option was available for all the respondents if they preferred.

A Thankyou/Reminder card was sent to all respondents within one week of initial mail-out of the survey instrument irrespective of whether they had completed the survey.

The second mail-out of the questionnaire for non-responding mothers/carers was done after three weeks of mailing the Thankyou/Reminder card. There was a subset of the initial sample (about 5,000) to whom the follow-up questionnaires were not sent. This was done to assess response patterns in the absence of a second mail-out, with a view to informing a more efficient design for future surveys. The timeline and the contents of the mailed items are shown in table 1.

Table 1:
Survey contents and time of mail-out

<table>
<thead>
<tr>
<th>Date</th>
<th>Days from initial mail-out of survey form</th>
<th>Materials posted</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 October 2010</td>
<td>-8</td>
<td>First mail-out: primary approach letters were sent to all parents/carers inviting to participate in the survey.</td>
</tr>
<tr>
<td>4 November 2010</td>
<td>1</td>
<td>Second mail-out: first survey form mailed to the respondents. A Department of Health and Ageing supplied ball-pen was included as a survey incentive.</td>
</tr>
<tr>
<td>11 November 2010</td>
<td>7</td>
<td>Third mail-out: a thankyou/reminder letter sent to all respondents regardless of whether the survey had already been completed and returned.</td>
</tr>
<tr>
<td>6 December 2010</td>
<td>32</td>
<td>Fourth mail-out: follow-up survey form sent to the selected non-respondents. No incentive was sent. Around 5,000 selected non-respondents were excluded from this mail-out.</td>
</tr>
<tr>
<td>11 February 2011</td>
<td>92</td>
<td>Survey officially closed: responses received after this date were not processed.</td>
</tr>
</tbody>
</table>

Notes on sampling and mail-out:

1. The sampling frame was the Medicare enrolment data base.

2. In order to obtain more precise estimates of infant feeding practices, babies up to six months of age were oversampled.

3. If children (especially infants) had not been enrolled in the Medicare system, then these children were excluded from the sample. Since there is a lag in enrolling and appearing the children in the Medicare enrolment database, it is possible that a proportion of newly-born babies may have been excluded from the sample.

4. In addition, Medicare Australia applied an activity test to include infants and children in the sample. If there was no Medicare or immunisation activity on the selected Medicare card, the children listed in these cards were excluded from the sampling frame.

5. The mail-out was managed by Medicare Australia due to privacy reasons. Medicare Australia had a stringent quality control. Just before every mail-out, the sampled records were matched against
the Facts of Death file in order not to upset parents whose child had passed away. Further, there was a requirement that respondents who had already responded (either by completing the survey or by refusing to participate) had to be excluded in any subsequent mail-out. This activity took a few days to complete before all the items were posted.

6. Since this was the first time a large scale survey was mailed out with such a strict deadline and exclusion criteria, the agency which handled the printing and stuffing the envelope could not complete the whole task on the scheduled day. In some instances, the remaining postal items were mailed the next business day.

7. The daily recording of responses was also dependent upon the postal delivery of the completed forms. Some delays in deliveries resulted in few respondents receiving the survey form twice. In the event a respondent completed the survey twice, we discarded responses from the second survey form from further analysis. Around 100 respondents completed the forms twice because they received the second survey form, even though they had already completed and sent the survey form earlier.

8. Due to the survey method (mail-out mail in; self-completion in English language) and sampling frame, the survey may have excluded groups of respondents with poor English language or those respondents who had no Medicare or immunisation activity recorded against their Medicare card.

9. The survey used the normal Australia Post service for all mail-out. We acknowledge that due to a lag in postal delivery services, and the time overlap between selection of addresses for posting the survey materials and actual mail-out vis-a-vis survey responses received in that time, it is bit problematic to make exclusive grouping of response categories.

10. Since the survey collected information on infants'/children's feeding practices, not all the respondents were biological mother of the selected infant/child. Those who had the primary responsibility to care for the child completed the survey.

In the following analysis, respondents are grouped into three categories: those respondents who completed their survey online, those who returned their completed survey form before they were sent a follow-up questionnaire (on 6 December 2010), and those responses received after 8 December 2010. The last group of respondents also include those who responded late but did not get a second set of survey forms. The main purpose of this paper is to assess the characteristics of respondents by response duration and survey mode, rather than the effect of reminder on response rates. For detailed results on the effect of survey incentive and follow-up reminders, see an earlier paper (Adhikari 2012). Detailed sampling design, weighting methodologies and description of responding and non-responding mothers/carers are described in detail elsewhere (AIHW 2011).

RESULTS

The overall response rate for the survey was 56%. Of the total responses (n=28,759); six per cent were online, 86% were postal responses received on or before 8th December 2010, and 8% were received after 8th December 2010.

The socioeconomic characteristics of the respondents are shown in Table 2. In the first two columns, the profile of respondents who completed the survey using the online mode is shown. Column three and four show the profile of the early responders (responding on or before 8 December 2011). The chi-square statistics (and associated degrees of freedom and Fisher's exact p values) assessing the difference of attributes between the online and early responders are shown in column 6. The profiles of the late responders (responding after 8 December 2011) are shown in column 7 and 8, followed by associated chi-square statistics (comparing against the online responders) in column nine.

The survey data showed that online respondents were less likely to be younger mothers (mothers aged 24 or less) than were respondents who mailed the surveys late. However, the age structure of the mothers was not statistically different between online and early responders.

Similarly, mothers/carers completing their surveys online were more likely to have completed bachelor or higher degrees than the respondents overall. Distribution of household income across response categories was also found to be different; with online respondents reporting higher household income compared to other respondents.
Table 2: Characteristics of respondents by response mode and response duration, 2010

<table>
<thead>
<tr>
<th>Sociodemographic characteristics</th>
<th>Online</th>
<th>Early responders</th>
<th>χ² (df, p) between online and early responders</th>
<th>Late responders</th>
<th>χ² (df, p) between online and late responders</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>per cent</td>
<td>number</td>
<td>per cent</td>
<td>number</td>
<td>per cent</td>
</tr>
<tr>
<td>Mother/carer’s age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged 24 year or less</td>
<td>131</td>
<td>7.7</td>
<td>2,155</td>
<td>8.8</td>
<td>5.0 (3, 0.17)</td>
<td>244</td>
</tr>
<tr>
<td>25-29 years</td>
<td>425</td>
<td>24.9</td>
<td>5,906</td>
<td>24.0</td>
<td>532</td>
<td>24.8</td>
</tr>
<tr>
<td>30-34 years</td>
<td>541</td>
<td>37.8</td>
<td>8,851</td>
<td>36.0</td>
<td>721</td>
<td>33.6</td>
</tr>
<tr>
<td>35 years or higher</td>
<td>507</td>
<td>29.8</td>
<td>7,677</td>
<td>32.2</td>
<td>647</td>
<td>30.2</td>
</tr>
<tr>
<td>Party</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primiparous</td>
<td>742</td>
<td>45.9</td>
<td>10,197</td>
<td>42.5</td>
<td>602</td>
<td>41.5</td>
</tr>
<tr>
<td>Multiparous</td>
<td>865</td>
<td>54.1</td>
<td>13,624</td>
<td>57.5</td>
<td>1,207</td>
<td>58.5</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>926</td>
<td>54.3</td>
<td>10,166</td>
<td>41.0</td>
<td>128.7 (3, 0.00)</td>
<td>745</td>
</tr>
<tr>
<td>Diploma/certificate</td>
<td>523</td>
<td>30.5</td>
<td>8,984</td>
<td>36.2</td>
<td>815</td>
<td>37.6</td>
</tr>
<tr>
<td>Year 12 or equivalent</td>
<td>172</td>
<td>10.1</td>
<td>3,354</td>
<td>13.5</td>
<td>355</td>
<td>16.4</td>
</tr>
<tr>
<td>Year 11 or below</td>
<td>65</td>
<td>5.0</td>
<td>2,314</td>
<td>9.3</td>
<td>254</td>
<td>11.7</td>
</tr>
<tr>
<td>Smoking status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>77</td>
<td>4.7</td>
<td>1,640</td>
<td>6.8</td>
<td>143</td>
<td>8.4</td>
</tr>
<tr>
<td>Occasionally</td>
<td>40</td>
<td>2.5</td>
<td>779</td>
<td>3.2</td>
<td>73</td>
<td>3.8</td>
</tr>
<tr>
<td>Not at all</td>
<td>1,509</td>
<td>92.8</td>
<td>21,559</td>
<td>89.9</td>
<td>1,916</td>
<td>87.8</td>
</tr>
<tr>
<td>Gross household income (per year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$166,000 or more</td>
<td>233</td>
<td>13.9</td>
<td>2,643</td>
<td>11.1</td>
<td>35.8 (4, 0.00)</td>
<td>170</td>
</tr>
<tr>
<td>$86,000–$155,000</td>
<td>587</td>
<td>35.1</td>
<td>7,622</td>
<td>31.8</td>
<td>849</td>
<td>28.5</td>
</tr>
<tr>
<td>$52,000–$85,999</td>
<td>431</td>
<td>25.8</td>
<td>6,763</td>
<td>28.2</td>
<td>556</td>
<td>25.9</td>
</tr>
<tr>
<td>$26,000–$51,999</td>
<td>278</td>
<td>16.6</td>
<td>4,054</td>
<td>16.9</td>
<td>410</td>
<td>19.8</td>
</tr>
<tr>
<td>$25,999 or below</td>
<td>144</td>
<td>8.6</td>
<td>2,899</td>
<td>12.1</td>
<td>386</td>
<td>18.6</td>
</tr>
<tr>
<td>Mother/carer’s country of birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>1,135</td>
<td>65.5</td>
<td>18,450</td>
<td>74.3</td>
<td>62.6 (1, 0.00)</td>
<td>1,469</td>
</tr>
<tr>
<td>Overseas</td>
<td>596</td>
<td>34.5</td>
<td>6,405</td>
<td>25.7</td>
<td>703</td>
<td>32.4</td>
</tr>
<tr>
<td>Language spoken at home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>1,330</td>
<td>82.8</td>
<td>22,236</td>
<td>89.8</td>
<td>75.8 (1, 0.00)</td>
<td>1,804</td>
</tr>
<tr>
<td>Other</td>
<td>270</td>
<td>17.2</td>
<td>2,032</td>
<td>10.2</td>
<td>345</td>
<td>16.1</td>
</tr>
<tr>
<td>Mother/carer’s indigenous status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSI</td>
<td>n.p</td>
<td>n.p</td>
<td>353</td>
<td>1.4</td>
<td>n.a.</td>
<td>1.7</td>
</tr>
<tr>
<td>Non-ATSI</td>
<td>n.p</td>
<td>n.p</td>
<td>24,406</td>
<td>98.6</td>
<td>2,177</td>
<td>7.6</td>
</tr>
<tr>
<td>Total surveys completed</td>
<td>1,732</td>
<td>6.0</td>
<td>24,856</td>
<td>98.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
(a) A woman who has given birth to only one child.
(b) A woman who has given birth two or more times.
(c) Includes ‘Did not go to school’.

n.p Not publishable due to data quality issues.

n.a Not applicable.
The late responders were more likely to be daily smokers, lower educated, and come from low income households than those completing their surveys online, or returning their survey early. Online and late responders were more likely to have been born overseas, and to speak languages other than English at home compared to early responders.

The data showed that there were differences in socio demographic profiles among response categories, with certain social groups more likely to choose online option than mail option. Further, there were also differences in profile between mothers/carers who were early responders compared to those who responded late. Use of dual mode and follow-up mail has encouraged different groups of mothers/carers to take part in the survey.

Next we examine whether there are significant differences in infant feeding practices among these three response groups. The estimates of selected breastfeeding practices by response groups are shown in Table 2. The data show that mothers/carers from each of the three response groups tend to show slightly different infant feeding practices. In particular online respondents were more likely to have ever breastfed and had a longer average breastfeeding period than the other response groups. Even with a relatively small sample size for the online completion group (n=1,732), selected infant feeding practices were significantly different from other two groups.

**DISCUSSION**

The profile of respondents differed significantly among response groups; with online responders more likely to be highly educated and with higher household incomes. Late responders were more likely to be daily smokers; or come from a low income family. Further analysis showed that infant feeding practices have been found to be associated with response groups.

The results demonstrate the importance of offering dual mode and follow-up action in the survey. Using dual mode and follow-up action not only increases the response rates, it also reduces the bias in survey estimates by encouraging different profiles of mothers/carers to participate in the survey. In order to obtain unbiased survey estimates, follow-up reminders and multimode options are recommended.

Table 3:
Survey estimates and confidence intervals by response group, 2010

<table>
<thead>
<tr>
<th>Selected survey estimates</th>
<th>Online (n=1,732)</th>
<th>Mail response before follow-up survey form (n=24,885)</th>
<th>Mail response after follow-up survey form (n=2,172)</th>
<th>All (n=28,750)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Ever breastfeeding</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion ever breastfed (%)</td>
<td>96.6</td>
<td>95.8</td>
<td>94.5</td>
<td>95.8</td>
</tr>
<tr>
<td>95% confidence interval</td>
<td>95.76-97.47</td>
<td>95.00-96.01</td>
<td>95.56-95.49</td>
<td>95.56-96.02</td>
</tr>
<tr>
<td><em>Exclusive breastfeeding</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean exclusive breastfeeding period (month)</td>
<td>4.4</td>
<td>4.1</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>95% confidence interval</td>
<td>4.22-4.53</td>
<td>4.09-4.16</td>
<td>3.65-4.06</td>
<td>4.09-4.16</td>
</tr>
<tr>
<td><em>Introduction to non-human milk</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean age when non-human milk or formula introduced (month)</td>
<td>4.5</td>
<td>4.2</td>
<td>4.0</td>
<td>4.2</td>
</tr>
<tr>
<td>95% confidence interval</td>
<td>4.22-4.62</td>
<td>4.12-4.27</td>
<td>3.79-4.19</td>
<td>4.13-4.27</td>
</tr>
<tr>
<td><em>Introduction to soft, semi-solid food</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean age when soft, semi-solid or solid food introduced (month)</td>
<td>5.5</td>
<td>5.3</td>
<td>5.7</td>
<td>5.3</td>
</tr>
<tr>
<td>95% confidence interval</td>
<td>5.42-5.61</td>
<td>5.22-5.27</td>
<td>5.55-5.75</td>
<td>5.27-5.32</td>
</tr>
</tbody>
</table>

Note: (1) Due to ‘censoring’ we do not observe the entire duration of an event. The mean values are estimated using the ‘restricted mean’ method in State (2007). Standard univariate methods to estimate means and confidence intervals may not be appropriate for event history data that involve censoring.
Author's note
The views expressed in this paper are the author’s personal views and they do not necessarily reflect the views of the Australian Institute of Health and Welfare, or the Australian Government Department of Health and Ageing. The author acknowledges the advice of Mark Cooper-Stanbury in developing this paper. Sincere thanks to two anonymous reviewers whose comments were very helpful.

REFERENCE


StataCorp. 2007. Stata Statistical Software: Release 10. College Station, TX: StataCorp LP.
The who, when, where and how of Smartphone research.

Brian Fine† and Con Menictas††

ABSTRACT
Mobile personal devices such as Smartphones have enabled a new method of survey data collection. It would seem that the pervasiveness of mobile phone device technology offers improvements such as penetration for difficult population demographics such as age, and the speed by which data can be collected. However, there is much controversy surrounding the use of mobile device technology for the purposes of data collection regarding the population representativeness of the data and the length of surveys that can be administered. This paper examines the validity of mobile device research data by comparing data from the same instrument collected via online. Our results suggest that data collected via a mobile device are as valid and in some cases superior to online data.

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1 INTRODUCTION
Smartphones are experiencing rapid growth in our daily lives and the possibility of conducting mobile research has become a reality. A recent Google study (mobiThinking, 2012) shows the rise of smartphones is dramatically increasing the use of the internet in Australia. Mobile phone and smartphone usage is approaching PC usage in terms of time spent (PC Magazine, 2011; AIMIA, 2012; WARC 2012).

As a networked society continues to evolve, the media have become more social and mobile (APS, 2010). Smartphones are becoming the central platform for connectivity in our daily lives. The ability to offer interaction and engagement in an easy to use portable device, delivers a usable opportunity across the board for consumers; marketers; and researchers. Indeed, a recent study (MRMW, 2011) indicates that mobile surveys ranked second after social media analytics among emerging methods that will gain the most market share over the next year. The question is not why mobile marketing research might be important rather, how it can be used it effectively.

The purpose of this paper is to examine both the PC and Smartphone quantitative data collection platforms in parallel. It highlights the types of questions that are used in PC quantitative data collection and how many questions of these questions can be migrated from PC online to Smartphones.

Participation levels by demographics, in particular younger respondents, and the satisfaction scores of each platform, highlight the likely future of Smartphones as a viable mainstream research data collection methodology compared with what is in use today.

This paper presents findings of many key issues on which the marketing research literature is largely silent upon regarding Smartphones. Specifically, issues such as sampling; stratification; design; weighting; and when Smartphone data collection may be used as either a replacement survey methodology, or as a supplementary data collection method, are examined.
2 OBJECTIVES

This paper’s overall aim is to propose a viable alternative in quantitative data collection from the online platform to that of Smartphones for the marketing research industry. In so doing, it considers questions which are of relevance to the industry:

1. It is possible to migrate research to Smartphones from desktop online surveys?
2. Can research conducted via a Smartphone device or other mobile device such as a tablet, offer faster turnaround times that desktop online research?
3. Are drop-out rates inherently higher on Smartphones than on the PC?
4. Can Smartphone research attract difficult to reach younger age groups?
5. Will panel retention suffer from Smartphone research?
6. Can software adapted for both large and small screens allow for consistent results?
7. Can hybrid surveys be conducted without major need for platform calibration?

In order to investigate the potential viability of the migration, a dedicated study was commissioned for this paper across six countries (Table 1), to ensure the generalisability of the findings.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
<th>Count</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Australia (AUS)</td>
<td>1,514</td>
<td>15.8%</td>
</tr>
<tr>
<td>2</td>
<td>China (CHI)</td>
<td>1,269</td>
<td>13.3%</td>
</tr>
<tr>
<td>3</td>
<td>Korea (KOR)</td>
<td>1,523</td>
<td>15.9%</td>
</tr>
<tr>
<td>4</td>
<td>Japan (JAP)</td>
<td>1,167</td>
<td>12.2%</td>
</tr>
<tr>
<td>5</td>
<td>United Kingdom (UK)</td>
<td>2,391</td>
<td>25.0%</td>
</tr>
<tr>
<td>6</td>
<td>United States of America (USA)</td>
<td>1,695</td>
<td>17.7%</td>
</tr>
</tbody>
</table>

This paper focuses primarily on the Australian sample, using the global study as a backdrop where appropriate, and investigates the following issues:

1. The representativeness of the population of Smartphone data when compared to PC online data;
2. The need for weighting to increase representativeness; and
3. The pros and cons involved in the migration.
3 DESIGN

The study design constituted a 15 minute usage and attitude questionnaire, across the following modes:

1. Smartphone users who completed the study on their Smartphone (SMoSM);
2. Smartphone users who completed the study on their PC (SMoPC); and
3. General population who completed the study on their PC (PC).

The three modes were grouped into two platforms:

1. Smartphone users who completed the study on their Smartphone (SMoSM); and
2. Smartphone users who completed the study on their PC (SMoPC) and general population who completed the study on their PC known simply as PC (PC).

The three modes and two platforms were used to survey people across three categories, namely:

1. Mobile Phone Providers (MPP);
2. Financial Institutions (FI); and

In addition to the three categories, additional questions were asked of respondents designed to assess:

1. Possible weighting needs via demographics, type of phone, brand of phone, attitudes to technology; and
2. Overall experience via enjoyment, likelihood of completing similar survey.

Within the survey instrument, various types of questions were asked in order to assess the transferability to the Smartphone screen such as:

1. Single selection;
2. Multi-selection;
3. Drop down boxes;
4. Grids;
5. Open ended; and
6. Rating scales.

The three modes were also rotated at a granular level to test for sensitivity; wear-out; and order effects, in light of questionnaire length across question type as follows:

1. 5 minute duration;
2. 10 minute duration; and
3. 15 minute duration.
For those respondents who completed the survey on their Smartphone, the Confirmit survey software platform (Confirmit 2012, King, 2012) had optimised the layout of the survey, in order to accommodate the screen characteristics of the respondent’s device. Due to Confirmit automatically optimising the survey to fit into the screen of various Smartphones, participants are able to utilise their respective Smartphone features and interactive capabilities. Figures 2 and 3 are screen shots as examples of a demographic age question of the survey on a Smartphone compared to a PC.

4 DATA COLLECTION (THE SAMPLE)
The Australian component of the fieldwork commenced 9th September 2011 and concluded 23rd September 2011. A total of 7,800 panellists were invited to participate in the study. Smartphone respondents were sourced from the Quality Online Research’s (QOR) Smartphone panel. Invitations to participate in the study were sent out via SMS, to ensure respondents completed the survey on their Smartphone. The fielding of the survey did not pose any issues or challenges and incentives were comprised as above (Table 2):

As a follow up to the initial survey, 3,600 reminder emails were broadcasted to achieve quota fulfilment. The collected sample profile is illustrated in Table 3 for Smartphone owners who completed the survey on a Smartphone (SMoSM); Smartphone owners who completed the survey on a PC (SMoPC); and general population who completed the survey on a PC (PC). In the global sample, the sampling period across all six countries was conducted from 6th September 2011 through 18th November 2011, resulting in a multinational sample of 9,342 completed interviews. Further, on 1st June 2012, a second wave of Australian only interviews was sent out to further test the effects of wear-out and order effects again for Smartphone owners who completed the survey on a Smartphone (SMoSM); Smartphone owners who completed the survey on a PC (SMoPC); and general population who completed the survey on a PC (PC). This second wave of data collection tracked the time of day that the survey was undertaken with the sample profile illustrated in Table 4.
It was found that Smartphone respondents were much more likely to undertake the survey during the evening (Figure 4). It should be noted that as invitations to participate were sent out at 3:30pm and 8:30pm, this may indicate a more immediate response level on Smartphone than on PC.

4.1 The impact of age and gender
The impact of age and gender across platforms was found to be statistically significant. Age increased with PC; females were more associated with Smartphones ownership when compared to males (Figure 5).

Figure 5: Associations of age and gender across modes

We conducted correspondence analyses whereby we crossed age and mode and gender by mode, which indicated significant results as can be seen in Figures 6 and 7.

We therefore weighted our sample by age and gender and in doing so were able to use a simple but effective weighting approach so that we could make the sample representative of the population. We suggest therefore that weighting correction does not need to be complex when using Smartphone data.

As a result, weighting just by age and gender aligned the sample to the population, thus presenting an easy and straightforward weighting solution.

5 ISSUES
The three issues of primary interest to the marketing research industry regarding potential migration from PC to Smartphones for quantitative data collection were:

1. Whether there was an interaction of the platform and the questionnaire?
Figure 6: Bi-Plot for age across modes
(Pearson Chi2 = 354.57, Prob>Chi2 = 0.00)

Figure 7: CA Projection for gender across modes
(Pearson Chi2 = 27.18, Prob>Chi2 = 0.00)
2. Whether the length of the questionnaire was problematic when undertaking the survey on a Smartphone?
3. Whether the smaller screen on a Smartphone when compared to a PC was a concern?

6 FINDINGS

It was found that the length of the questionnaire across modes examined by enjoyment and likelihood of doing again; and wear-out at 5 minute intervals and optimal questionnaire length did not produce different results overall. Respondents were not adversely affected by undertaking the survey via a Smartphone when compared to undertaking the survey on a PC.

Upon examining the outputs of satisfaction; recommendation; and attitude questions by platform i.e., SMoSM vs PC, across the three categories that were tested i.e., MPP; FI; and MVI, the results were not statistically different. Irrespective of when the categories were presented i.e., in the first five minutes of the survey; or in the second five minute interval i.e., in the six to 10 minute interval; or in the third five minute interval i.e., in the 11 to 15 minutes of the survey, the results remained unaffected by mode. The reason we tested wear-out is because of the growing speculation that long surveys cannot be successfully executed on a Smartphone or other mobile devices. Our results indicate that such a speculation is unsupported and that long surveys can be executed on Smartphone or mobile devices, just as successfully as they are on a PC thus providing valid results.

Upon examining (i) the differences by brand of Smartphone; (ii) the order by which industries i.e., categories were presented; and (iii) and the types of questions used, differences were found to be minimal. Finally, as discussed earlier, the weighting necessary to align the different modes to the population was adequately addressed simply by weighting with age and gender.

The following shows the findings in more detail.

6.1 The length of questionnaire across modes

In order to understand the impact of length, we regressed the length of individual response time over the order of the categories i.e., MPP; FI; and MVI over mode. We found that only 2 out of the 9 cases were significant in the impact of length (Table 5).

<table>
<thead>
<tr>
<th>Order</th>
<th>Mode</th>
<th>F-Stat</th>
<th>df</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2.09</td>
<td>2</td>
<td>0.1283</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>1.03</td>
<td>2</td>
<td>0.3597</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>1.41</td>
<td>2</td>
<td>0.2448</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0.88</td>
<td>2</td>
<td>0.4160</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2.74</td>
<td>2</td>
<td>0.0681</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>3.14</td>
<td>2</td>
<td>0.0445</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>6.93</td>
<td>2</td>
<td>0.0015</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>1.54</td>
<td>2</td>
<td>0.2169</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>0.39</td>
<td>2</td>
<td>0.6796</td>
</tr>
</tbody>
</table>

As discussed earlier in Section 3, participants completing the survey on their Smartphone used the (Confirmit, 2012) survey design platform, with interface functions similar to a Smartphone application, thereby optimising the use of the small screen. This could have impacted enjoyability and likeliness to do it again, so presently these specific findings cannot be generalised to all types of Smartphone survey software given that Confirmit is the leading survey design platform in the market today, or in the case where no adaptation is made for the mobile screen.

To further aid the comparisons of PC to Smartphone, at the end of the survey, respondents were asked for any specific comments or feedback they would like to provide. Here many Smartphone respondents commented on the ease of filling out the survey, as they did when completing the survey on PC. A quantitative content analysis (Holsti, 1969) was conducted and represented via a wordcloud using the TM package (Feinerer, 2008; Feinerer et.al., 2008) via the R software platform (R Core Team, 2012) in Figure 6, showing that there were no material differences in respondent comments between the two platforms.

Our results examining the impact of the length of the questionnaire do not pose a problem for Smartphones when compared to PCs.

6.1.2 Wear out at 5 minute intervals and optimal questionnaire length

In order to examine wear out and questionnaire length, the three categories i.e., MPP; FI; and MVI, were also rotated, each reflecting approximately five minutes of the survey, to test the PC and Smartphone platforms more rigorously. 5 minutes length, 10 minutes length and 15 minutes length, were used to assess the optimal survey length for the Smartphone.
on Smartphone data collection method.

The overall drop-out levels of PC and Smartphone were favourably comparable (Tables 6 and 7; and Figure 9) in that there were no statistically significant differences between Online and Smartphone regarding drop-out rates.

Table 6: Dropout rates on Smartphone versus PC

<table>
<thead>
<tr>
<th>Summary Drop-outs at each level as % of Total Completes + Incompletes</th>
<th>Smartphone</th>
<th>PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start of survey</td>
<td>8%</td>
<td>19%</td>
</tr>
<tr>
<td>Demographics</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>First category</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Second category</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Third category</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Final section</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td>TOTAL DROP-OUTS</td>
<td>21%</td>
<td>22%</td>
</tr>
<tr>
<td>Total sample</td>
<td>157</td>
<td>664</td>
</tr>
</tbody>
</table>

Table 7: Chi2 table for Figure 7

<table>
<thead>
<tr>
<th>Drop Outs</th>
<th>Smartphones</th>
<th>PC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completes</td>
<td>124</td>
<td>518</td>
<td>642</td>
</tr>
<tr>
<td>Column %</td>
<td>78.98</td>
<td>77.08</td>
<td>77.44</td>
</tr>
<tr>
<td>Drop Outs</td>
<td>33</td>
<td>154</td>
<td>187</td>
</tr>
<tr>
<td>Column %</td>
<td>21.02</td>
<td>22.92</td>
<td>22.56</td>
</tr>
<tr>
<td>Total</td>
<td>157</td>
<td>672</td>
<td>829</td>
</tr>
<tr>
<td>Column %</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Pearson’s chi2(1) = 0.2623; p = 0.6090

We found that the highest percentage of drop-outs occurred at the beginning of the survey, particularly among PC respondents. Indeed, the data suggest that interest in participation altogether was higher for Smartphone respondents than for PC respondents, with only 8% dropping out at the first questions for Smartphone when compared to 19% for PC. This finding is consistent with the generally positive comments received among Smartphone respondents about participation in the survey, suggesting a desire among Smartphone users to complete a survey via a Smartphone device.
Following the 3rd category section, drop outs for Smartphone increased above the drop outs for Online, with 5% dropping out at the final section compared to 1% on the PC. This finding could have been in part due to the first question in the final section being a grid question, one of the two types of questions found to be more prone to generating drop outs on the Smartphone (discussed further in Section 6.6).

6.1.3 Conclusions
High enjoyability and likeliness to do again, combined with average drop-out rates, serve to dispel the industry myth that long surveys cannot be completed on a Smartphone. Whilst drop outs appear to increase with time on the Smartphone, as with Online, they do not materially impact overall expected drop out levels. It is reasonable to conclude from these results that a five minute survey is no more viable than a 15 minute survey on a Smartphone, and that the design of a questionnaire is the more important aspect when compared to the length of the survey regarding a survey instrument’s success in data collection.

6.2 Outputs of satisfaction and recommendation questions do not differ by platform across the three categories tested
We next compare respondents on satisfaction and recommendation questions across each of the three category i.e., (i) MPP; (ii) Ft; and (iii) MVI, to gauge for differences by platform i.e., PC compared to Smartphone.

6.2.1 Mobile phone providers regarding satisfaction and recommendation
We first compare the impact of data collection method on sat: “satisfaction with the brand “and recom: “likelihood to recommend the brand to family and friend” is for customers of Three; Optus; Telstra and Vodafone mobile phone services. In the following ANOVA results (Table 8):

1. The independent variable is the data collection mode i.e.,SMoSM; SMoPC; and PC; and
2. The dependent variables are sat: “satisfaction with the brand”; and recom: “likelihood to recommend the brand to family and friends”.

Figure 9: Drop out rates
The impact of data collection method for mobile phone providers on the satisfaction with the brand and the likelihood to recommend the brand to family and friends was found to be statistically insignificant, except for satisfaction and recommendation for Vodafone (Table 8).

6.2.2 Financial institutions regarding satisfaction and recommendation

We next compare the impact of data collection method on sat: “satisfaction with the brand” and recom: “likelihood to recommend the brand to family and friends” is for customers of the Bank of Australia and New Zealand (ANZ); the Commonwealth Bank of Australia (CBA); the National Australia Bank (NAB); and the Westpac Banking Corporation (WBC) financial institutions. In the following ANOVA results (Table 9):

1. The independent variable is the data collection mode i.e., SMoSM; SMoPC; and PC; and
2. The dependent variables are sat: “satisfaction with the brand”; and recom: “likelihood to recommend the brand to family and friends”.

The impact of data collection method for financial institution on the satisfaction with the brand and the likelihood to recommend the brand to family and friends is statistically insignificant, except for satisfaction for WBC (Table 9).

6.2.3 Motor vehicle insurance providers regarding satisfaction and recommendation

Finally, we compare the impact of data collection method on sat: “satisfaction with the brand” and recom: “likelihood to recommend the brand to family and friends” is for customers of the Australian Associated Motor Insurers Limited (AAMI, 2012); Allianz Australia Limited (Allianz Australia, 2012); the National Roads and Motorists’ Association (NRMA, 2012) and the Royal Automobile Club of Victoria (RACV) vehicle insurance providers. In the following ANOVA results (Table 10):

1. The independent variable is the data collection mode i.e., SMoSM; SMoPC; and PC; and
2. The dependent variables are sat: “satisfaction with the brand”; and recom: “likelihood to recommend the brand to family and friends”.

Table 8: ANOVA fit statistics for mobile phone providers

<table>
<thead>
<tr>
<th>Provider</th>
<th>Satisfaction</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>F-Statistic</td>
</tr>
<tr>
<td>Three</td>
<td>2</td>
<td>1.70</td>
</tr>
<tr>
<td>Optus</td>
<td>2</td>
<td>2.16</td>
</tr>
<tr>
<td>Telstra</td>
<td>2</td>
<td>0.59</td>
</tr>
<tr>
<td>Vodafone</td>
<td>2</td>
<td>4.59</td>
</tr>
</tbody>
</table>

Table 9: ANOVA fit statistics for financial institutions

<table>
<thead>
<tr>
<th>Provider</th>
<th>Satisfaction</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>F-Statistic</td>
</tr>
<tr>
<td>ANZ</td>
<td>2</td>
<td>1.61</td>
</tr>
<tr>
<td>CBA</td>
<td>2</td>
<td>0.45</td>
</tr>
<tr>
<td>NAB</td>
<td>2</td>
<td>1.01</td>
</tr>
<tr>
<td>WBC</td>
<td>2</td>
<td>3.29</td>
</tr>
</tbody>
</table>
The impact of data collection method for motor vehicle insurance provider on the satisfaction with the brand and the likelihood to recommend the brand to family and friends is statistically insignificant except for recommendation for RACV (Table 10).

6.2.4 Conclusion

Except for very few cases statistical difference, the bias resulting from the platform that is used i.e., PC or Smartphone is negligible. We found this also to be consistently the case for the global sample, with the possible exception of the Mobile Phone category in Korea and Japan. Further analysis of these differences may reveal more insights but presently is beyond the scope of this paper.

6.3 Outputs of importance questions, rating of adjectives and attitudes do not differ by platform across the three categories tested

To further examine any potential biases that may exist between conducting a survey on a PC or a Smartphone due to screen size, across (i) importance questions for MPP; (ii) rating of adjectives for Fi; and (iii) attitudes toward Technology generally for MVI. We presented a wide range of attitude questions in the survey, because both the marketing research industry and research buyers i.e., clients, need to know if there were differences in research outputs due to the platform used i.e., PC or Smartphone.

For the mobile phone category (MPP), we asked respondents the importance of the certain factors when choosing a mobile phone service provider, presented in the Logit Models output in Table 11. The dependent variable for Model 1 is a binary variable where one category is Smartphone users who completed the study on their Smartphone and the other category is Smartphone users who completed the survey on a PC, hence small screen versus big screen. The dependent variable for Model 2 is again a binary variable, where one category is Smartphone users who completed the study on their Smartphone and the other category is general population who completed the survey on a PC, hence Smartphone population versus online (or PC) population. The output for Tables 11 is for Smartphone users who completed the survey on their Smartphone for both Models 1 and 2 (the same dependent variable construction is repeated for Tables 12 and 13). The independent variables for both Model 1 and 2 are importance questions for MPP.

We note that the selection of phones and customer service significantly differed by mode and screen size (bolded output).

For the financial institutions category (Fi), we asked respondents how they would rate their main bank against the following adjectives (the independent variables for Models 1 and 2) presented in the Logit Model output in Table 12.

We note that across modes, none of the financial institution adjectives were significantly different across mode and screen size.

Toward the end of the survey we asked respondents to what extent they agree with each of the following conditions.
Table 11: Logit model for attitudes for mobile phone providers by mode (z-values in brackets)

<table>
<thead>
<tr>
<th>MNL Model Output</th>
<th>Small Screen v Big Screen</th>
<th>Smartphone Pop\textsuperscript{n} v Total Online Pop\textsuperscript{n}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories</td>
<td>SMoSM v SMoPC</td>
<td>SMoSM v PC</td>
</tr>
<tr>
<td>SMoSM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price / Package offered</td>
<td>-0.17</td>
<td>-0.24</td>
</tr>
<tr>
<td>t-value</td>
<td>(-0.99)</td>
<td>(-1.47)</td>
</tr>
<tr>
<td>Previous experience</td>
<td>0.11</td>
<td>0.13</td>
</tr>
<tr>
<td>t-value</td>
<td>(0.90)</td>
<td>(1.13)</td>
</tr>
<tr>
<td>Reputation</td>
<td>-0.03</td>
<td>-0.02</td>
</tr>
<tr>
<td>t-value</td>
<td>(-0.20)</td>
<td>(-0.16)</td>
</tr>
<tr>
<td>Recommended by friends</td>
<td>0.11</td>
<td>0.15</td>
</tr>
<tr>
<td>t-value</td>
<td>(0.90)</td>
<td>(1.41)</td>
</tr>
<tr>
<td>Selection of phones</td>
<td>0.24</td>
<td>0.29</td>
</tr>
<tr>
<td>t-value</td>
<td>(2.04)</td>
<td>(2.59)</td>
</tr>
<tr>
<td>Customer service</td>
<td>-0.34</td>
<td>-0.41</td>
</tr>
<tr>
<td>t-value</td>
<td>(-2.04)</td>
<td>(-2.66)</td>
</tr>
<tr>
<td>My employer prov’ the phone</td>
<td>-0.14</td>
<td>-0.12</td>
</tr>
<tr>
<td>t-value</td>
<td>(-1.2)</td>
<td>(-1.1)</td>
</tr>
<tr>
<td>_cons</td>
<td>0.98</td>
<td>0.91</td>
</tr>
<tr>
<td>t-value</td>
<td>(1.23)</td>
<td>(1.17)</td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>174</td>
<td>203</td>
</tr>
<tr>
<td>aic</td>
<td>245.9285</td>
<td>279.7385</td>
</tr>
<tr>
<td>bic</td>
<td>271.2009</td>
<td>306.2441</td>
</tr>
<tr>
<td>ll</td>
<td>-1.10E+02</td>
<td>-1.30E+02</td>
</tr>
</tbody>
</table>

statements related to technology (the independent variables for Models 1 and 2) for the motor vehicle insurance category (MVI) presented in the Logit Model output in Table 13.

We note that the majority of statements in Table 13 are not affected by mode and screen size.

6.3 Conclusion

The overwhelming majority of attitudes, adjectives and statements across modes and screen size are not statistically significantly different. We suggest therefore that moving from PC to Smartphones will not be problematic when representing population attitudes.

6.4 Differences in brands of Smartphone

One of the potential topics of difficulty in convincing the industry and clients about the viability of migrating from PC to Smartphone, would be potential differences due to the brand of Smartphone device being used by consumers to undergo the survey. Accordingly, we examined the need for weighting by brand of Smartphone; and the need for stratification of sample. Overall, whilst the brand composition differed by platform i.e., PC versus Smartphone, it was found that this did not significantly affect results. Looking specifically at the results by iPhone users versus users of other brands of Smartphones, we found no significant differences in results except for Citibank (Pr(Z > z = 0.0228)). Table 14 illustrates this for “Banks Personally Use”.
6.4 Conclusion
Do outputs differ by brand of Smartphone? We found that weighting by the brands of Smartphones did not have a material impact on the comparability of results across modes and platforms. Therefore we suggest that weighting by brand of Smartphone is not necessary, and if we were to weight by brand of Smartphone, it would not substantially improve the representativeness achieved through weighting by age and gender.

Similarly, we found that stratification of the sample by brand of Smartphone was not necessary for the purposes of a general population survey. However, in light of specific research objectives such as a study into mobile phone devices, weighting by brand of phone might be necessary.

6.5 The impact of the rotation within the questionnaire
Next, we tested whether respondents can successfully undergo a 15 minute survey on a Smartphone by rotating the order of the presentation of each category and comparing the results of the 1st; to the 2nd; and to the 3rd, time rotation. Essentially, we examined the potential impact of wear out on data collected via a Smartphone.

<table>
<thead>
<tr>
<th>MNL Model Output</th>
<th>Small Screen v Big Screen</th>
<th>Smartphone Pop(^n) v Total Online Pop(^n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-value</td>
<td>(0.90)</td>
<td>(0.27)</td>
</tr>
<tr>
<td>Efficient</td>
<td>-0.05</td>
<td>-0.04</td>
</tr>
<tr>
<td>t-value</td>
<td>(-0.6)</td>
<td>(-0.47)</td>
</tr>
<tr>
<td>Fair</td>
<td>-0.13</td>
<td>-0.10</td>
</tr>
<tr>
<td>t-value</td>
<td>(-1.58)</td>
<td>(-1.36)</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>t-value</td>
<td>(0.21)</td>
<td>(0.27)</td>
</tr>
<tr>
<td>Responsible</td>
<td>-0.13</td>
<td>-0.07</td>
</tr>
<tr>
<td>t-value</td>
<td>(-1.31)</td>
<td>(-0.85)</td>
</tr>
<tr>
<td>Ethical</td>
<td>0.06</td>
<td>-0.05</td>
</tr>
<tr>
<td>t-value</td>
<td>(0.72)</td>
<td>(-0.71)</td>
</tr>
<tr>
<td>Reliable</td>
<td>0.11</td>
<td>0.15</td>
</tr>
<tr>
<td>t-value</td>
<td>(1.21)</td>
<td>(1.74)</td>
</tr>
<tr>
<td>cons</td>
<td>0.30</td>
<td>-0.17</td>
</tr>
<tr>
<td>t-value</td>
<td>(0.9)</td>
<td>(-0.57)</td>
</tr>
</tbody>
</table>

| Statistics       |                           |                                               |
| N                | 564                       | 793                                           |
| aic              | 789.8063                  | 1.00E+03                                       |
| bic              | 824.4868                  | 1.10E+03                                       |
| N                | 564                       | 793                                           |
| aic              | 789.8063                  | 1.00E+03                                       |
| bic              | 824.4868                  | 1.10E+03                                       |
| ll               | -3.90E+02                 | -5.10E+02                                      |
Table 13: logit model for technology statements for the motor vehicle insurance category by mode (z-values in brackets)

<table>
<thead>
<tr>
<th>MNL Model Output</th>
<th>Small Screen v Big Screen</th>
<th>Smartphone Pop^v v Total Online Pop^v</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories</td>
<td>SMoSM v SMoPC</td>
<td>SMoSM v PC</td>
</tr>
<tr>
<td>I find it difficult to keep up with the volume of emails I receive</td>
<td>0.10</td>
<td>0.15</td>
</tr>
<tr>
<td>t-value</td>
<td>(1.29)</td>
<td>(2.10)</td>
</tr>
<tr>
<td>I don’t feel inclined to join Twitter or subscribe to blogs</td>
<td>-0.11</td>
<td>-0.15</td>
</tr>
<tr>
<td>t-value</td>
<td>(-1.23)</td>
<td>(-2.07)</td>
</tr>
<tr>
<td>I think that communicating online is the way of the future</td>
<td>0.18</td>
<td>0.12</td>
</tr>
<tr>
<td>t-value</td>
<td>(1.47)</td>
<td>(1.08)</td>
</tr>
<tr>
<td>The role of the internet is limited</td>
<td>-0.08</td>
<td>-0.07</td>
</tr>
<tr>
<td>t-value</td>
<td>(-0.78)</td>
<td>(-0.79)</td>
</tr>
<tr>
<td>Personal relationships are more important than having lots of connections on the internet</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>t-value</td>
<td>(1.00)</td>
<td>(1.83)</td>
</tr>
<tr>
<td>I’m concerned with privacy issues with regard to sites like Facebook or Twitter</td>
<td>-0.14</td>
<td>-0.22</td>
</tr>
<tr>
<td>t-value</td>
<td>(-1.53)</td>
<td>(-2.66)</td>
</tr>
<tr>
<td>I have a personal interest in IT</td>
<td>0.31</td>
<td>0.26</td>
</tr>
<tr>
<td>t-value</td>
<td>(3.59)</td>
<td>(3.33)</td>
</tr>
<tr>
<td>I like to move quickly with new technologies, even if it replaces what’s a perfectly unit</td>
<td>0.01</td>
<td>0.24</td>
</tr>
<tr>
<td>t-value</td>
<td>(0.15)</td>
<td>(2.58)</td>
</tr>
<tr>
<td>I’m happy to use SMS abbreviations in my texts and emails</td>
<td>-0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>t-value</td>
<td>(-0.14)</td>
<td>(0.2)</td>
</tr>
<tr>
<td>I tend to read documents on the computer or mobile screen rather than print them</td>
<td>0.17</td>
<td>0.14</td>
</tr>
<tr>
<td>t-value</td>
<td>(1.88)</td>
<td>(1.82)</td>
</tr>
<tr>
<td>The first place I go for information on products is blogs and networking sites</td>
<td>0.09</td>
<td>0.13</td>
</tr>
<tr>
<td>t-value</td>
<td>(1.04)</td>
<td>(1.7)</td>
</tr>
<tr>
<td>_cons</td>
<td>-2.16</td>
<td>-3.04</td>
</tr>
<tr>
<td>t-value</td>
<td>(-2.16)</td>
<td>(-3.41)</td>
</tr>
</tbody>
</table>

Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>aic</th>
<th>bic</th>
<th>ll</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>464</td>
<td>618.9533</td>
<td>668.6319</td>
<td>-3.00E+02</td>
</tr>
<tr>
<td></td>
<td>650</td>
<td>790.8695</td>
<td>844.5932</td>
<td>-3.80E+02</td>
</tr>
</tbody>
</table>
6.5 Conclusion

Does position rotation or length of interview impact the results? As can be seen from the result on Table 15 there is hardly any impact. The position rotation of the length of the interview (represented by category rotation) does not impact our results. The order by which categories are presented, or in fact modes, do not produce statistically significantly different results except for two cases for the means of satisfaction with brand of service provider and the recommendation of the service provider to friends (shaded grey with bold text). As the results in Table 15 are consistent across modes, the results add support for the migration of PC to Smartphones for survey data collection where appropriate.

7 CONCLUSION

The overall aim of this paper was to test whether moving from a PC to Smartphone data collection method would make a difference in survey response rates or nature of responses obtained.

We conducted our study across six countries (Table 15) to ensure for robustness of findings globally, even though our focus for this paper was on the Australian component of the global study. We find that we are able to generalise our findings consistently across the six countries in the study.

Presently, 62% of marketing research agencies are without a Smartphone strategy or policy. Of the remainder, only 15% of marketing research agencies designed their studies to be optimised for Smartphones. Inappropriately, 23% of marketing research agencies detect and or disallow Smartphone respondents to participate in their studies. To date, except for one agency, no other than AOR, 0% of marketing research agencies re-route Smartphone respondents to more appropriate studies that are optimised for Smartphone usage (Confirmit 2011).

In terms of Smartphone penetration, North America, Europe and Asia have an average of 7.3% of Smartphone usage for market research. This low global base and the findings we have discussed indicate an opportunity to migrate PC research to Smartphones for our industry.

In Section 2 earlier we proposed seven objectives and we conclude on these as follows:

1. Is it being possible to migrate research to Smartphones from Online panels?
   We find that results are the same as demonstrated across 3 categories; that there is no additional wear out after 15 minutes; and that the quality of data achieved is the same at 5, 10 and 15 minute intervals.

2. Can Smartphone on Smartphone research be more immediate?
   We find this to be true in that the time of day stamp more closely aligns with broadcast timing because accessibility is higher on Smartphones than on PC.

3. Are drop-out rates inherently higher on Smartphones than on the PC?
   We find that this is not the case i.e., the drop-out rates for PC and Smartphone are the same.

4. Can Smartphone research attract difficult to reach younger age groups?
   We find that this is the case. Smartphones can access this group far more easily and quickly.
Table 15: Satisfaction and likeliness to recommend means across (i) modes; (ii) time intervals; and (iii) categories. Note the bolded cells are statistically significantly different from the remaining two cells in the block of respective means i.e., Blocks 4 and 16.

<table>
<thead>
<tr>
<th>Question</th>
<th>Mode</th>
<th>Mobile Provider</th>
<th>Financial Institution</th>
<th>Motor Vehicle Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Sequence in Order of Presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td>Block 1</td>
<td>1.95</td>
<td>4.24</td>
<td>4.51</td>
</tr>
<tr>
<td>SMoSM</td>
<td>Block 4</td>
<td>4.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMoPC</td>
<td>Block 16</td>
<td>4.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC</td>
<td>Block 7</td>
<td>4.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Sequence in Order of Presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td>Block 2</td>
<td>1.96</td>
<td>4.03</td>
<td>3.83</td>
</tr>
<tr>
<td>SMoSM</td>
<td>Block 5</td>
<td>4.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMoPC</td>
<td>Block 8</td>
<td>4.08</td>
<td></td>
<td></td>
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5. Will panel retention suffer from Smartphone research?
   We conclude that this is not the case. We find that enjoyability is high and consistent across platforms and the intention to conduct similar surveys is high.

6. Can software adapted for both large and small screens allow for consistent results?
   We find that software platforms such as Confirmit which optimize the survey layout to fit the screen of Smartphones allow for an equally positive experience, and provide for consistent results.

7. Can hybrid surveys be conducted without major need for platform calibration? We find that this is indeed the case.
   As a result, we have support for our hypotheses that were stated earlier in Section 6:

H1: Surveys conducted on Smartphones produce the same results as those conducted on PCs.
   We found that overall that research outputs from PC and Smartphone are the same.

H2: Long surveys can be conducted successfully on Smartphones.
   We found that survey length is not an issue for Smartphones; and

H3: Surveys on a PC can be successfully scaled down to a Smartphone’s smaller screen size.
   We found that by using the appropriate software, in our case Confirmit, that scaling down does not alter research outputs.

The benefits of moving from PC to Smartphone include but are not limited to:

1. the accessing of younger and oftentimes hard to reach demographics;
2. the speed of survey results to both analyst and client;
3. real time results that are closer to real in situ behaviour, as suggested by our time of day comparisons;
4. the convenience for respondents to interact with the survey instrument;
5. the rising penetration of Smartphones which translates to rising data collection reach;
6. the Smartphone being a centralised communication and social medium of the future that spans telecommunications, email, internet, shopping and surveys; and
7. the cost effectiveness afforded by a fast and non-invasive immediately accessible medium.

We submit that this paper has demonstrated that in keeping with rapid advances in global technology, the marketing research industry can benefit by moving from PC to Smartphone by realising greater connectivity with the way consumers live their lives both locally and globally. The migration of PC to Smartphones can offer clients far greater insights by tapping into the technology that modern consumers use to communicate with each other.

We have demonstrated that our findings are consistent across mode, platform, order, category and countries. This paper has shown that the Smartphone platform is a viable and perhaps more compelling alternative for collecting quantitative marketing research data when compared to PC.

As a result of the work undertaken for this paper, future research will investigate the feasibility of conducting (i) qualitative research via the Smartphone platform; and (ii) simultaneous qualitative and quantitative research via the Smartphone platform.
REFERENCES


The current reliance on so-called ‘focus groups’ may have blinded us to the origins and purpose of qualitative research – and to the possibility that there is an inherent design flaw in the conventional focus-group approach. This paper argues that the very things drawing researchers to the dynamics of small-group interaction as a research tool should also make us cautious about doing anything likely to interfere with the natural operation of those dynamics.

The history of qualitative methodology in Australian market and social research has been characterised by slow and gradual acceptance, followed by its more recent ‘high fashion’ status. When, in the late 1950s, we first heard about the ‘depth research’ being conducted by the US’s Dr Ernest Dichter at his Institute for Motivational Research, most of us in the fledgling Australian market research industry were inclined to be sceptical or dismissive. It sounded unscientific and faddish: we were engaged with far less frivolous questions concerning random probability sampling (Ian McNair was introducing us to census collectors’ districts as sampling units), and the most furious debates were about the validity of telephone versus face-to-face interviews and the use of diaries versus 24-hour recall for radio and TV audience measurement.

This was, exclusively, a world of quantitative research. But it was about to change. By the early 1960s, the ABC’s audience research unit (led by Dr Peter Kenny), the research department of George Patterson Pty Limited (led by A.R. ‘Whit’ Whitman) and Mike Larbalestier’s Marplan (the in-house research operation of McCann Erickson) had all begun tentatively experimenting with qualitative techniques – ranging from projective tests to unstructured interviews and small-group discussions. My first personal experience of the new approach was a 1962 study of family TV viewing, based on direct, in-home observation of the dynamics of program choice and audience reactions.

What encouraged this push into the locally uncharted waters of qualitative, exploratory, diagnostic research? Two things: frustration at the inability of conventional questionnaire-based survey research to explore, with sufficient freedom and depth, the psychology of consumer motivations (where ‘consumer’ might mean voter, media user, or purchaser of goods and services); and a growing belief that the techniques and procedures of psychotherapy – including so-called ‘encounter groups’ – may have something to offer the public opinion researcher, especially in the light of Leon Festinger’s studies of small group dynamics (Festinger, 1950).
There was a sense of excitement and energy in the public opinion research industry at that time. The work of Joseph Klapper at America’s CBS network was challenging traditional views about the process and effects of mass communication (Klapper, 1960); Marshall McLuhan had burst onto the scene with his radical reappraisals of the cultural role of mass media (McLuhan, 1962). Fresh interest was being shown in the concept of attitudes and the relationship between attitude-change and behaviour-change: both Leon Festinger’s theory of cognitive dissonance (Festinger, 1957) and Martin Fishbein’s later work on prediction (Fishbein, 1967) were regarded as revolutionary. Later, some of this work would be challenged by Jozef Nuttin and his ‘response contagion’ theory of persuasion (Nuttin, 1974). All this stimulation encouraged practitioners in the field of attitude research to become more adventurous in their exploration of alternative methodologies.

Although there have been times during the past fifty years when qualitative research has been regarded by some clients (and even some practitioners) as a ‘quick and dirty’ form of quantitative research – a kind of mini-survey – or perhaps nothing more than a preliminary to ‘proper’ (i.e. quantitative) research, its origins were quite different. The early experimentation with qualitative methods in market and social research was driven by the conviction that this was a quite different form of research that would complement the value of traditional quantitative approaches.

That conviction relied partly on a perceived incompatibility between the formality, linearity and rationality of the questionnaire as a research instrument and the non-rationality of much of the material we were trying to uncover (aspirations, values, dreams, fears, as well as ‘attitudes’). This was an implicit acknowledgement that many of the things we need to know about human behaviour are simply not measurable: the challenge is to find research methods that are compatible with the phenomena we are trying to investigate and explain.

In the beginning, when we were describing the qualitative approach to sceptical clients, some of us employed a medical analogy: a doctor must weight and measure the patient; check the patient’s temperature and blood pressure, perhaps take blood and urine samples, etc. But no self-respecting medical practitioner would neglect to take a patient’s history – and not just the medical history, but the social and cultural history as well, in order to set the scientific diagnosis in the context of an understanding of the patient’s total situation at home, at work, and elsewhere.

Quantitative research, we said, is like the weighing and measuring; qualitative research is like the history-taking, and you can’t make sense of the patient without both sets of data – one precise and measurable; the other more exploratory, subjective and descriptive. They each help elucidate the other.

A. The case for qualitative research

It goes without saying that quantitative methods should always be used when the data we are collecting is, by its nature, measurable. For example, if we want to know how many people visit a particular place – or how often they go there, or how much money they spend per visit, or what they do while they are there – then a method which relies primarily on direct observation, or examination of records, will be most appropriate.

If we can’t directly observe – and therefore measure – what people are doing, we might have to rely on an indirect research method, such as a questionnaire-based survey, to get an approximate idea of their pattern of behaviour based on their own reports of what they did. Again, the information, though less reliable, will be quantifiable.

Similarly, if we want to examine the extent to which certain information is known within the community (for example, the name of Australia’s biggest trading partner, or the number of banks offering a particular service, or the policies of the major political parties on a particular issue), we can measure the extent of such knowledge by means of a structured questionnaire.

When we venture beyond the realm of quantifiable behaviour and ‘objective’ knowledge into the more complex and subtle question of why people behave as they do or how they feel about what they’re doing, or their responses to anything from a TV commercial to a course of study – the area of motivations, desires, attitudes, reactions, values, opinions and beliefs – the task is not so straightforward. Although a great deal of quantitative research is undertaken to ‘measure’ attitudes, it generally takes the same form as the surveys of more obviously quantifiable data: that is, asking people a series of questions designed to elicit the required information – as if this information is of
essentially the same kind as more rational or objective data. The temptation to try to measure everything is based on the widespread conviction in the scientific community that ‘if it exists, we can measure it’ and that if we can’t measure it, that just means we haven’t yet defined it carefully enough.

Serious difficulties arise for the social researcher in treating all data as ‘measurable’ and applying the same kind of questionnaire-based survey instrument to all our enquiries. For a start, every time you ask a question you are likely to receive an answer, and it is tempting to believe that the answer has told you what you wanted to know. But what if the answer is merely an artifact of the question? This is a classic example of every scientist’s nightmare: the dreaded ‘experiment effect’. Has my data been unduly influenced by the way I’ve conducted my experiment?

One of the main hazards of attitude research based on structured questionnaires, therefore, is that we can never be sure whether the answer (the ‘attitude’) only exists because the question was asked, or asked in a particular way: does that attitude or opinion exist independently of the question, or does it only exist in the form of an answer to that question?

Answers, in any form of research, are the ‘creatures’ of questions. If we were to ask a given set of questions in a different order, we would almost certainly obtain somewhat different responses. If we vary the wording of our questions, the answers are likely to vary. Researchers have always known it is not hard to determine the outcome of a survey by carefully controlling the way the questions are asked. So we keep ourselves awake at night (or should do) worrying about that most basic of survey researchers’ dilemmas: what is the ‘correct’ form of any set of questions designed to elicit data about the attitudes we want to investigate, and what is the ‘correct’ order in which those questions should be asked? We can experiment as much as we like with variations in question-wording and order, but we can never be sure we have eliminated the influence of the questions themselves – and the way they will be asked – on the answers we obtain.

This leads, logically, to the proposition that in research designed to explore attitudes, beliefs, feelings, half-formed thoughts, motivations, desires and dreams, we might do well to avoid asking questions altogether.

A further uncertainty plagues conventional questionnaire-based attitude research: when a set of structured questions is used to investigate attitudes, we can never be sure whether there are other attitudes that lie beyond the scope of the questions we happen to have asked, but which are nevertheless relevant (and possibly even central) to the investigation. What else do people feel about a particular subject? What else might we have failed to elicit because we didn’t ask enough questions, or the right questions, or because we fell for the idea that if you want to find something out, you have to ask questions?

‘Why?’ is the most hazardous of all questions. Merely posing a question beginning with ‘why’ assumes there’s a reason for the behaviour or the attitudes under investigation. The respondent will naturally be tempted to supply a reasonable-sounding explanation (which may be a mere rationalisation, or may even be pure fiction) in order to satisfy the apparently rational demands of the question: ‘Why did you marry that man?’ ‘Why did you stop going to church?’ ‘Why did you vote for that candidate/buy that car/choose to live in that house?’ Yet we do many things for no reason at all – at least, for no logical or easily-explained reason – or to satisfy such a complex amalgam of desires, some of them quite possibly in conflict with each other, that we would be hard-pressed to capture them in any brief answer to a ‘why?’ question.

As researchers, of course, we desperately want to know ‘Why?’ That urge is in our DNA. But experience suggests there are better ways of exploring the motivations for human behaviour than asking direct, head-on questions. (Observe how useless that approach turns out to be in the hands of many radio and TV journalists.)

Beneath all such considerations lies the deeper concern about whether some attitudes, beliefs, values and motivations are appropriate for measurement at all. Measurement is an inherently rational process, after all, but if many of the wellsprings of behaviour are not rational, then why try to measure them? Even if some apparently simple and straightforward attitudes are measurable (for example, by asking respondents to agree or disagree with a list of prepared statements), the explanation of why they are held, or how they have evolved, may not be.

When we set out to quantify the extent to which certain attitudes are held (or, more correctly, the
extent to which people give assent to statements designed to express those attitudes) we still face the difficulty of finding some way of accessing attitudes which avoids the trap of actually ‘creating’ those attitudes by planting them in our respondents’ minds. It can be done, but it is a complex process, generally relying on extensive exploratory (qualitative) research from which a number of different ways of expressing those attitudes may be constructed.

But the fundamental question remains: might there be some significant attitudes or beliefs which can certainly be discovered and examined, but which are simply incapable of rational measurement? Isn’t it possible that the rational instrument of a structured questionnaire is inherently inappropriate for investigating information which might be non-rational and highly emotional in character? Might it not be more appropriate to devise a research method which is itself non-rational, non-linear, unstructured and non-directive, in order to match more closely the nature of the material being investigated?

That is precisely the kind of concern that has led to the development of qualitative research in general, and non-directive methods in particular. Because qualitative research is primarily concerned with exploration, diagnosis and explanation, the question of measurement hardly arises. We can observe and explore the development of qualitative research in general, that has led to the establishment of focus groups. While the groups are artificially constructed for the purposes of research, the method is peculiarly exploratory social research that is designed to harness the established dynamics of natural group interaction. Because the participants are strangers to each other, and socio-economic backgrounds; some deliberately comprise people drawn from similar demographic and socio-economic backgrounds; some deliberately seek to ‘mix up’ the participants in terms of age, sex, etc, treating each group as a miniature cross-section in itself.

Unfortunately, in the drive for speed, efficiency and profit, ‘qualitative research’ has become almost synonymous with ‘focus groups’ among many contemporary marketing and political strategists and among many academic and commercial researchers as well. Focus groups typically comprise a collection of individuals who don’t know each other (indeed, must not know each other), assembled in a central location unfamiliar to them, and led by an active, interventionist moderator following a pre-determined ‘discussion guide’. Some focus groups comprise people drawn from similar demographic and socio-economic backgrounds; some deliberately seek to ‘mix up’ the participants in terms of age, sex, etc, treating each group as a miniature cross-section in itself.

Because the participants are strangers to each other, this method is obviously unsuitable for non-directive, exploratory social research that is designed to harness the established dynamics of natural group interaction. Because the groups are artificially constructed for the purposes of research, the method is peculiarly vulnerable to the ‘experiment effect’: strangers in a strange place may well say strange things! While its advocates argue that the focus group method is appropriate for particular purposes (‘horses for courses’), any philosophical defence of the method must first address the problem of the experiment.

Qualitative research takes many forms and embraces many methodologies: participant-observation (drawing on the traditional methods of anthropology and ethnography); so-called ‘projective tests’ such as word association tests, sentence completion tests, and variations on the Thematic Apperception Test using ambiguous pictures to be interpreted by the respondent; in-depth, unstructured interviews; two-person conversations in the presence of a facilitator; small-group discussions conducted in a variety of ways in a variety of locations, ranging from highly structured group interviews to loose, free-wheeling, non-directive discussions.
effect: what effects are likely to flow from the inherent design of this method?

We should also ask some rather uncomfortable questions about other possible reasons why focus groups have found such favour in the marketplace. Apart from the factors already mentioned – speed and efficiency – the use of central locations offers some practical advantages to the researcher and to the client not offered by other qualitative methods, including alternative group-based methods.

For the researcher, it’s obviously more pleasant and convenient to sit in a comfortable central location and let the respondents come to you. Many group moderators have baulked at the idea of driving on a dark rainy night into the depths of the outer metropolitan area, or setting aside the time to travel to regional areas. Running groups rather like a dental practice – let the respondents come to me, and I might even have a couple of ‘surgeries’ set up to facilitate quicker turnaround – is easier and, yes, more ‘efficient’, but what if the fundamental design of the research is thereby flawed?

For clients, the advantage of the central location is twofold. First, hidden behind a two-way mirror (a practice which itself raises ethical questions in my mind, unless the people involved are first introduced and identified to the members of the group), the client can directly observe the group session and draw his or her own conclusions from it (which raises the obvious question: why are you paying a researcher to do that for you?). There is some advantage to the client, obviously, in seeing first-hand how consumers react to a new product, say, or a political slogan, and hearing the language they use to express those reactions (though, again, isn’t it the job of the researcher to convey all that in a report?). Unfortunately, some clients in this situation, with food and drinks laid on, create something of a party atmosphere in which the focus group itself is treated rather like entertainment, thus placing even more pressure on an observed moderator to ‘perform’ for the client.

The second advantage for the client is that it’s possible to manipulate the session while it is in progress, by passing messages and even suggested probes to the moderator. (Outrageous? Yes, of course. But it happens.) Persuasive though such factors may seem under commercial pressure, none of them can be said to add to the integrity of the research design. On the contrary, each of them is likely to subtract from the project’s integrity by adding significant dimensions to the ‘experiment effect’.

Which brings us to the most obvious alternative to the currently fashionable ‘focus group’ approach: the unfocused (or non-directive) group discussion. Although this method has been in continuous use in Australian market and social research for fifty years, and was in fact the first qualitative method to undergo serious development here, it has fallen from favour somewhat in a research climate which favours quick turnover of projects, quick analysis, and quick reporting.

Perhaps it’s time to put the non-directive approach back on the list of possible methods to be considered for any type of qualitative research.

B. The ‘unfocused’ group discussion

The unfocused, non-directive group discussion technique (also known as the ‘affinity group’ method) was first used in the Australian research industry in the early 1960s. After experimenting with it at the ABC, I became one of a group of mainly Melbourne- and Sydney-based researchers involved in its rapid development for use in marketing and media research. During my eight years (1963-1971) at George Patterson/Consensus – where, incidentally, we misguidedly installed Australia’s first two-way mirror for observing group discussions – our research team was involved in a continuous program of experimenting, refining and adapting various forms of group-based research for use in advertisement testing, new product research and brand attitude research.

Following the establishment of Mackay Research in 1971, I continued to refine the non-directive method in marketing communication research, while also adapting it for use in employee attitude studies within organisations, including studies of morale, ‘communication climate’, and employee relations generally. During the 1970s and 1980s, many other Australian qualitative researchers also began experimenting with the application of group-based methods to broader studies of social, cultural and political attitudes. In 1979, I established The Mackay Report, a social research project which ran...
continuously for 25 years until it was acquired by Ipsos
Australia in 2003 and became known first as The
Ipsos Mackay Report and, later, as The Ipsos Report.
From the beginning, that project employed non-
directive group discussions as the central method,
usually supplemented by unstructured (‘in-depth’)
personal interviews.

The unfocused, exploratory, non-directive group
discussion method involves recruiting a naturally-
occurring ‘affinity’ group (typically 5-8 friends,
neighbours, work colleagues, etc) as a group, to meet
in the home of one of them, or a club, or a workplace,
or wherever the group would naturally congregate, to
engage in informal conversation about the topic of
the research.

Indeed, that description incorporates the three
essential criteria that must be met if the potential value
of the group method is to be fully realised:

- the groups should be natural (i.e., pre-exist-
ing) groups whose dynamics are therefore well established;
- the discussions should be conducted in the
‘natural habitat’ of the participants;
- the discussions should be allowed to proceed
freely and spontaneously, without any of the
biases or preconceptions of the researcher
being imposed on them – indeed, without any
participation by the researcher at all, beyond
an introduction and, where absolutely neces-
sary, an occasional prompt.

In the relaxed and permissive atmosphere of a group
of people who already know each other and are used
to talking to each other, such discussions typically
range widely over any aspects of the subject that
interest or concern the members of the group – there
is no ‘agenda’, no pre-determined ‘topic outline’ and
no direct questions are asked. The moderator’s role is
essentially passive – in a typical group discussion of
this type, the moderator will introduce the topic and
then say nothing at all – or very little – for the duration
of the discussion.

Some participants will talk a great deal; some will say
very little (or, occasionally, nothing). The discussion
will proceed rather like any natural conversation
between people who know each other. There will be
leaders and followers (indeed, this is one of very few
techniques that allow us to observe the phenomenon
of ‘opinion leadership’ in action); those who are
naturally dominant and those who are naturally
submissive; extraverts and introverts; agreements
and disagreements; side-tracking and wise-cracking.
A lot of time will appear to be ‘wasted’ – as it is in
natural conversations between friends: I think of this
as the grit or gravel we inevitably pick up when we are
panning for gold.

In the ebb and flow of natural conversation, evidence
of attitudes, values and beliefs will gradually emerge
(often involving ambiguities, inconsistencies and even
contradictions). It is the dynamics of non-directive
group interaction that generate the information we are
seeking. Apart from the natural curiosity that drives
any passionate researcher, the primary requirements
for the conduct of non-directive group discussions are
patience, the ability to remain silent for long periods,
and a commitment to attentive, non-judgmental
listening.

There are limitations to the value of this approach. It is
unsuitable for eliciting the kind of information people
might be reluctant to discuss in company – even
among their friends or workmates. It is obviously
incapable of reaching people who are socially isolated,
and, over the years, it has proved difficult to access
the extremes of wealth and poverty (so this tends to
be a broadly ‘middle-class’ method). Unstructured
personal interviews should therefore be part of the
standard repertoire of qualitative researchers, and
should ideally be incorporated into any group-based
project, to provide a check on – and potentially to
enrich and extend – the scope and depth of data
generated by group discussions.

C. The practicalities of conducting an ‘unfocused’
group discussion

Arriving and setting up
In conducting this kind of group discussion, the
emphasis should be on creating as natural a situation
as possible. The only ‘strange’ feature of the situation
is the researcher, so you should aim to be as
unobtrusive and inconspicuous as possible. (If you’re
arriving by car, park out of sight of the house: your car
may say too much about you.)

Discussions of this kind are typically (but not always)
conducted in the private home of one member
of the group. You will be a visitor to that home,
so consider the type of group you’ll be attending
– socio-economic status, age and gender – and dress appropriately. Preferably ‘dress down’ a little, so you don’t draw attention to yourself. Your aim is to melt into the background.

Greeting the host and meeting the participants should proceed as informally as possible. (First-names-only usually works best.) Avoid any social engagement with the group beyond what is polite. Arrange the seating to give yourself an unobtrusive vantage point. The ideal set-up is a circle you’re not part of. If the group is seated at a table, don’t sit at the table with them, but slightly away.

We are aiming for as naturalistic a situation as possible, so the obvious advantages of recording the discussion may be offset by the intrusiveness of an audio recorder. (For this type of research, don’t even consider video-recording!) Some researchers use audio recorders; some rely on their own notes – do what seems most natural or unobtrusive to you, but remember that fresh discussion often breaks out once you turn off the recorder, so be prepared to sit down again and listen some more, and even to take notes, after the official ‘end’.

Getting started
Once the group is settled and relaxed (there will usually be some catch-up conversation before you take charge of proceedings), explain the purpose of the research (academic, commercial, political, etc) and describe the way the discussion will work (casual, informal, free-flowing, ‘normal conversation’). Make it clear that we are interested in anything they’d like to say about the topic – anything that is interesting or important to them – so there will be no questions to answer and you will be playing no part in the conversation.

Depending on the purpose and scope of the project, two quite different ways of introducing the topic can work well: either the headline or the ramble. In a truly wide-ranging exploratory study – of an entire product category, for instance, or of the political scene in general, or of the experience of living through a particular phase of the life-cycle – the best introduction will usually be ‘the headline’: a very brief, bald statement of the kind of thing you’re trying to find out (e.g., ‘We’re interested in anything you might like to say about what it’s like to be the mother of a teenager at present’; or ‘… how you feel about any aspect of mobile phones’; or ‘… how you come to be doing the job you’re doing’; or ‘… anything you might like to say about your most recent visit to a department store’).

The alternative approach – ‘the ramble’ – is a more wide-ranging, ruminative kind of introduction that ranges over a number of different ways of interpreting the topic (e.g., for the mother of a teenager study: ‘You might like to say something about education, or sport, or the family, or money, or fashion, or sex, or technology … anything at all that might give us some idea of what it feels like to be the mother of a teenager at present and perhaps how you think that might be different from your own mother’s experience of you as a teenager’).

The advantage of the ‘headline’ approach (which, in the light of some recent exploratory research – see Acknowledgments – I’m inclined to prefer) is that it gives absolutely no direction to the discussion and couldn’t possibly be perceived as setting an agenda.

The advantage of the ‘ramble’ approach is that it gives the participants a few moments to start thinking themselves into the topic. (It’s important they should be given no prior warning of the topic, as that would allow them to prepare sensible-sounding ‘speeches’.) A somewhat rambling introduction may also have the desirable effect of making them eager to get started, though it does run the risk of shaping the conversation, at least at the beginning.

Either way, you should make it clear to the group that there is no agenda – no ‘boxes to tick’ – and that ‘anything goes’.

It’s a good idea to experiment with different approaches to the introduction. This is not quantitative research; there are no structured components that must be replicated from group to group, so there’s no reason not to vary the introduction from group to group. After all, we’re trying to maximise the richness and diversity of our data, not homogenise it.

In a typical, free-flowing group discussion of this kind, you will find that, beyond your introduction, you will have to say nothing else at all for the next hour or more.
Encouraging the natural flow of conversation

Silences are a natural part of any group discussion and they should be allowed to break naturally. It’s usually best to avoid eye contact with the group during a silence – just busy yourself with your notes or adjusting your pen or retying your shoe-laces. Occasionally, you might feel as if a silence has been prolonged to the point where the group has lost momentum and is appealing to you for help. In such cases, go back to something already said by a member of the group rather than introducing a new topic, as this may seem like a direction you want the group to take (and they might also then try to turn you into the leader of the group, looking to you for further suggestions.) If you are explicitly asked to repeat the opening introduction/brief, decline to do so, as this could be interpreted as the very type of ‘agenda-setting’ we want to avoid. Better to make some reassuring remark (‘You’re doing fine … just keep on the way you are’) or simply repeat the last thing said and invite further comment on that. (‘Would anyone like to say anything else about X?’)

Should you intervene if one speaker appears to have become dominant? It’s okay to tentatively test whether the group members themselves are comfortable, perhaps by asking if anyone else would like to comment on a point made by the dominant members, but you must also respect the legitimate phenomenon of ‘opinion leadership’. Indeed, one advantage of using authentic, naturally-occurring groups is that you may well be harnessing the established dominant and submissive relationships of the group: to upset these would be to risk an intervention that affects the natural dynamics of the group. We must accept that some members of some groups have very little to say, and we should never ask a particular individual to speak. Occasionally, one member of the group may remain silent throughout – if their colleagues don’t prompt them, neither should we.

Recognise the natural end as the moment to ‘wrap up’. Frequently-asked questions to be prepared for at that point: Are we typical? What sense could you possibly have made from all that? What will happen to your notes? Who wants this kind of information? Can we do this again sometime? Meet all this with polite banalities and pack up and leave as soon as you graciously can.

D. An eight-step process of qualitative analysis

The following steps describe only one of many ways to approach the analysis of qualitative data. I make no special claims for the particular method outlined below, except to say that it was refined over forty years by many practitioners (see Acknowledgments), and it guarantees that no data will escape the researcher’s attention.

However, there are many similarities between it and methods employed by other qualitative researchers – for example, the fourteen-step process described by Philip Burnard in ‘A method of analysing interview transcripts in qualitative research’ (Burnard, 1991).

The process of qualitative analysis is subjective and creative. We do not have the luxury of statistics that ‘tell their own story’: we are charged with the responsibility of collecting a veritable mountain of data and, though rigorous analysis and careful interpretation, drawing some conclusions that might shed some light on some aspect of human behaviour.

The following approach to the analysis and interpretation of qualitative data is designed to encourage you to make use of all the data you have collected and to maximise the potential for synthesising your data into a coherent whole (while acknowledging that this is not always possible – sometimes unincorporated fragments will remain unincorporated).

The process of analysis begins while the fieldwork is still in progress. As Burnard emphasises, the frequent writing of ‘memos to yourself’ based on reflections and observations during the fieldwork phase form an important part of the data-collection process.

I have deliberately given the following eight steps somewhat whimsical labels, in the hope of making them more descriptive and memorable.

1. The short story

It is crucial to the analysis process that you allow time as soon as possible after each group session to sift carefully through your notes, underlining quotes that seem particularly significant, and editing or cleaning up rough or incomplete sections of your notes while your memory is still fresh. (If you’ve recorded the discussion as well, you can incorporate these supplementary notes into the transcript.)
I suggest you write these post-group notes as a kind of short story about each group. Include a description of the room, the furnishings and the atmosphere, the group structure, dynamics and energy level (leaning forward/leaning back? engrossed or merely polite? lots of interruptions and cross-talk, or quiet and orderly?). Include in your ‘short story’ a note of what seemed to be the key points in the discussion – the three or four main themes that seemed most interesting and/or significant to participants. All this will serve as a valuable reminder later when you get to the interpretation phase and you’re trying to recall the tone and mood of each discussion.

The ‘short story’ is a way of formalising, from the very beginning of the process, the recording of what John Rossiter calls ‘Data 2’ – the researcher’s own impressions of what is being said and done by respondents, as opposed to ‘Data 1’ – the things actually being said and done by respondents (Rossiter, 2011).

2. The swim
Once the fieldwork is complete, make time to immerse yourself in your ocean of data and swim around in it. Sit down, without distraction, and read through all your transcripts, notes and ‘short stories’. Treat them like a novel; read straight through from start to finish. Don’t pause; don’t judge; just absorb. Wallow!

3. A Walk in the Park
We know creative insights come when we’re not focusing on the data, so don’t leave it to chance. Now is the time to take a complete break. Detach! Go for a walk ... take a hot shower ... potter about in the garden ... walk along a beach ... do something physical for several hours – preferably a whole day – during which you are half-consciously mulling over the data with which, by now, you are thoroughly familiar. This ‘time out’ is the phase of the process that everyone tries to resist, yet it is where the creative magic of analysis really begins because it encourages the process of half-conscious reflection so conducive to creativity (and qualitative analysis and interpretation is, at its heart, a creative process).

4. R&D (Rumination and Distillation)
Returning to your notes, allow your half-conscious ruminations to surface. What themes, highlights, patterns, ideas pop into your mind? What contradictions exist in the data? What questions puzzle you? What are you finding difficult to explain? Begin to theorise. Think of your data as chips in a mosaic ... can you see any patterns? Are there any patterns? (There may not be.) Are you getting any sense of a ‘big picture’ – a central unifying or overarching theme or themes? Or are you still seeing things only as fragments? If you feel lost or confused by the data, start the process again. Re-read all your notes in one sitting, and then create some more ‘time out’ before returning to the R&D phase.

Once you’ve begun to identify a pattern, a core idea, a series of themes or a set of tentative findings, write down everything you feel you now ‘know’. These are like thought-bubbles – distillations, cryptic messages to yourself. None of this needs to be carefully crafted prose; it is for no one’s eyes but your own. It need not be elaborated, explained or justified. You are simply jotting down things that are starting to become clear; half-formed impressions, possible themes, insights, suspicions, curious little nuggets of data you’ve stubbed your toe on. We are searching for patterns, ‘meanings’, implications, hypotheses, interpretations. This is a more-or-less random collection of impressions.

Now glance through your notes and ‘short stories’ again to see if there are any themes you may have identified early on, but have since overlooked and now need to re-visit.

5. Bricks and Mortar
(A practical tip: it’s easier and quicker to do steps 5, 6 and 7 with a pen and sheets of paper rather than attempting them on a computer screen.)

It’s time to try to impose some order on these impressions. Rearrange them. Group them. Start thinking of them as key points that might evolve into the chapters of your report. They were once isolated ‘bricks’ of data that you came across; can you see how they might now become ‘bricks in a wall’, held together by some unifying themes and interpretations?

Now is the time to decide how many different themes/ findings you are able to justify; how many insights you really have. Once you feel comfortable with your list of themes, write each theme as a headline at the top of its own blank sheet on paper, and ‘tag’ it – either with a number or letter, or a keyword that captures the essence of that theme.
Next, under each of these headlines, jot down your justification for including it in the report. Does it advance our understanding of human behaviour? What fresh insight does it bring to this issue? Why does it seem important? How did you come to this conclusion? This does not have to be in the form of report-style prose; it just needs to be an explanation, to your own satisfaction, of the point you are making – a bit of detail – a bit of argument – a bit of commentary that elucidates the headline finding and will also serve as supporting evidence when you come to the report-writing phase.

6. Dig and Delve
With your first ‘headline’ sheet beside you, go right through your notes and write the ‘tag’ for that headline in the margin beside all notes that refer to, illustrate, support or even contradict that theme. Then repeat the process for each of the other ‘headline’ sheets, tagging all references to that theme in your notes (again, I emphasise the difficulty of attempting this on a computer screen). Ten headlines? That means ten separate trips through your notes.

Though tedious, this repeated scanning of the notes – seeking and tagging everything that refers to each of your major themes – makes it hard to miss any significant data. Obviously, you will tag much more material than will ever find its way into the report, but this is an effective way of testing whether your notes and transcripts actually illustrate and support the tentative conclusions you have drawn. You are laying the template of your headline findings over the data.

7. Mind the gaps!
Having tagged your notes, take a final journey through the notes looking for any significant gaps – patches of data where you haven’t put any tags in the margin. At such places, ask yourself whether this material is simply padding – the grit you picked up when you were panning for gold – or are there perhaps some other useful points here which have been overlooked. Should you prepare a ‘miscellany’ section which contains a number of apparently disconnected points that don’t fit the main themes of your report but are still worth mentioning?

8. The wrap
Re-read your ‘short stories’ and notes one more time to verify that you still feel comfortable with your structure. Do you need to add, subtract, amalgamate, refine, re-phrase? Are there any ‘big-picture’ points or linkages you’ve previously overlooked? If not, then these are the themes and conclusions (now you can think of them as chapter headings) you bring to the report-writing process.

A note on Interpretation
Qualitative analysis and interpretation is a highly subjective, idiosyncratic process of creative synthesis which owes much to so-called ‘grounded theory’ – that is, building up a theory from the available data, rather than collecting data to confirm or reject a hypothesis (Glaser, Strauss, 1967). However, it’s not quite that straightforward: as Rossiter emphasises, we are never completely neutral or ‘atheoretical’ observers of the things our respondents do and say: we inevitably bring a theoretical framework of some kind – drawing primarily on our academic discipline – to the process of analysis and interpretation. Qualitative data analysis is therefore heavily dependent on the training and experience of the researcher. Qualification in a relevant social science (preferably psychology) plus, in Rossiter’s phrase, ‘knowledge of the subculture’ are pre-requisites (Rossiter, 2011).

To minimise the risk of subjective bias influencing the analysis and interpretation of our data, this kind of work is ideally done by a team of three or four researchers, all working independently on their data collection and analysis and coming together only when it’s time to pool their conclusions and agree on the possible interpretations of the data. Solo researchers need to be particularly alert to the hazards of selective perception and ‘data blindness’ and, as Burnard emphasises at his Stage Six, they should test their conclusions and interpretations by discussing them with independent colleagues (Burnard, 1991).

Your tentative conclusions should be tested and refined in the process of trying to create an overarching story (theory) that incorporates all your insights. Inconsistencies in the data, and even apparently contradictory conclusions, don’t have to be resolved; they may simply have to be accommodated rather like sub-plots of the story: ‘Some people are passionate about this, some are not.’ An accurate picture of human attitudes and behaviour will always contain paradoxes and contradictions. Learn to live with them: neat, simple, black-and-white, rational conclusions are unlikely to tell the whole story and should be regarded with suspicion.
In interpreting qualitative data and drawing conclusions, resist quantification by stealth. It’s tempting to talk about ‘most’ or even ‘many’ respondents, but we don’t have a statistically randomised sample that permits any such edging towards quantification. We can only say, ‘Some people felt this; some felt that …’ It is not the purpose of this kind of research to convince by the weight of numbers; this is about rumination, reflection, interpretation and insight.

The verbatim quotes can sometimes speak for themselves (and it is tedious and repetitive to say in the text of the report what has already been said by a quote), but we must go further than merely organising and reporting what our respondents said: we are trying to make sense of it all. We must harness our academic training and practical skills, of course, and we must remain faithful to the data we have collected, but we must also unleash our imaginations. In a sense, we are in the realm of ‘private opinion research’ rather than ‘public opinion research’: we are making sense of personal observations and chance remarks; revelations and introspections; silences and interactions; tension and laughter. Constantly ask yourself this: Am I interpreting the data as if they are symbols of some inner meaning – attitudes, values, dreams, aspirations, motivations?

A note on group sampling
It is actually easier to recruit groups for this type of research than for focus groups. Rather than recruiting individuals and arranging for them to meet in a central location, the affinity-group method requires only that, for each group, we recruit one person who is prepared to assemble ‘half a dozen of people who all know each other and see each other reasonably frequently’ (these might be friends, work colleagues, neighbours, members of a sporting or other club, etc) to meet in some familiar location (the home of one of them, an office, club, etc).

Because these are pre-existing, naturally occurring groups, they will tend to be internally homogenous. Achieving an appropriate diversity of respondents across a whole project will therefore require maximum heterogeneity between groups (and, typically, a larger number of groups than is normally used in ‘focus group’ work). The sampling principle of diversity between groups is central: each sample point (i.e., each group) should be as different as possible from every other sample point in terms of age, position in the life-cycle, socio-economic status, geographical location (metropolitan and regional, for instance) ... whatever characteristics are deemed relevant to the research.

The greater the diversity of the sample, the greater will be the range of attitudes (and the modes of their expression) available for data analysis. This is purposive sampling – the polar opposite of random probability sampling for statistical research. We are not attempting to represent particular sections of the population in proportion to their occurrence in the population: we are merely trying to ensure that as many different chips as possible will be included in the total mosaic of our sample.

Footnote: The Art of Listening
Apart from natural curiosity, the ability to listen – openly and uncritically – is the key characteristic of the skilled qualitative researcher. It is the ability to put ourselves into the shoes of others – to see the world from their point of view – that defines the qualitative researcher’s most valuable contribution to social science. But we are humans, and therefore as reluctant as everyone else to listen attentively, uncritically and sympathetically, especially when we disagree with what we’re hearing. Therefore, in addition to the theoretical training of our discipline, we need to master the art of listening. Above all, we must learn to resist that most natural of all human failings: to hear only what we’re listening for (Mackay, 1994).

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