

Readership Measurement in the Digital Age

Any Time, Anywhere, Anyhow

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Table of Contents

1.	Introduction	3
2.	A Brief History of Readership Measurement	3
3.	Two Approaches	4
4.	21 st Century Research Challenges	5
5.	Innovation in Readership Measurement: Around the World	7
6.	emma	11
7.	Summary	17

1. Introduction

It is useful to look back in history to see how particular research methods have evolved over time. Are they still relevant to the way we do things today or should we scrap them and start over? Readership measurement to support the buying and selling of advertising first took place in a systematic way some 75 years ago in the UK and, in many respects, is remarkably similar today.

The world has, of course, changed out of all recognition since then. Newspapers have many more pages and sections than they did. Many are in tabloid or 'Berliner' formats, as well as the more traditional broadsheet size. Both newspapers and magazines have benefited from improved printing technologies which have enabled good quality colour and photographic reproduction to play a far more prominent role than in the past.

The digital revolution has meant people can choose to read newspapers and magazines online via computers, eReaders, tablets and Smart TVs, as well as in print.

The sheer number of publications has mushroomed over the years, with titles for every conceivable interest group, region and political persuasion. Some content is only available online, with no printed version.

In short, peoples' reading options have become much broader and more diverse with far greater choice than has ever been available before.

But does the measurement system need to change in order to reflect these developments?

2. A Brief History of Readership Measurement

It was a simpler time when, in 1939, the first proper readership survey was carried out in Great Britain¹. The *Survey of Press Readership* was financed by the national advertising agencies' association, the Institute of Incorporated Practitioners in Advertising, in order to assist its members in making advertising placement decisions across newspapers and magazines.

Earlier surveys in Britain had been concerned with trying to establish independent validation of publishers' circulation claims; most had used street intercepts rather than surveys representing the whole population.

The 1939 study interviewed 43,000 people over the age of 13, chosen to be as representative as possible of the whole population. Lists of newspapers and photocopied front covers of recent magazine issues were used to prompt them to recall reading during the most recent period of time related to a publication's publication frequency. For example they were asked which daily newspapers they read 'yesterday', which weeklies in the previous week and so on.

They were also asked where they had obtained the copy read (e.g. bought their own copy, read it in a waiting room etc.) and how regularly they read it.

In the United States, readership research began when a popular magazine, *Life*, realised that circulation numbers were substantially understating the number of people reading the magazine and thus its potential value to advertisers.

A series of studies carried out between 1938 and 1947 (known as *Life's Continuing Study of Magazine Audiences*) involved interviewers taking a quota sample of respondents page by page through a full copy of an issue of the magazine and asking whether they had read it.

Over time, a handful of competitor titles were added to the survey and other magazines carried out their own studies. They were always limited, however, by the practical difficulties for the interviewer of carrying around so many magazines from house to house.

These two different approaches were to characterise very different philosophies of readership measurement which were to come to a head many years later in the USA.

3. Two Approaches

Each country had started with the same challenge: to measure the number of *readers*, rather than only the number of copies *sold*, but ended up going down very different paths.

The technique adopted by Britain's IIPA came to be known as 'Recent Reading', as it focused on peoples' reading in a recent time period. The underlying hypothesis was that readership was likely to be recalled more accurately when asked in this way rather than asking questions about 'normal' or regular habits.

The US (where newspapers were not and are not a significant national medium, as they are in the UK) focused on trying to establish accurate readership estimates for magazines. It is a medium where most readers are not the people who actually buy the title. For greatest accuracy, it was felt important that they should be shown actual issues of a magazine in its entirety in order to verify whether or not they read any part of it, as they may only have seen one or two articles or items. This technique came to be known as 'Thru-The-Book' (TTB).

Practical considerations led to the development in the 1960s of a cut-down version of Thru-The-Book by the Simmons company, enabling more magazines to be measured using stripped down copies of each title as prompts (which had to be physically carried by the interviewers).

In Great Britain, the Recent Reading technique was retained. The National Readership Survey, formally launched in 1956, is still in use today and follows the same basic approach. A question on the frequency of reading was added in 1968 (how many out of X issues have you read?). In 1984 a method was introduced enabling more titles to be asked about on the survey — instead of asking about each one individually, the 'screening' procedure was modified, allowing people to reduce the number they were asked about in detail.

The basic idea – that most people only ever read around 10-15 titles, whereas advertisers want estimates for many hundreds of publications out in the market – is that people are asked to look at or 'screen' titles grouped in sets of six similar titles (e.g. home interest, women's interest etc.) and ask whether they have read or looked into them in the past year.

Most can then be discarded quite quickly, instead of people having to be taken painstakingly through magazines or newspapers they never look at.

In the US, the Thru-The-Book approach always suffered from the limitation that interviewers could not physically carry hundreds of magazines around with them. This was one of several reasons that MRI, a competitor using the Recent Reading technique and which launched in 1979, ultimately prevailed (and remains the currency of readership measurement in the United States today).

This question around the basic approach to readership measurement is but one of many that have been debated over the years. Others concern such topics as the way titles are presented, the wording of the readership question, the length of the interview, sample bias, effects created by the order in which titles are shown to respondents, what other questions can be asked of the same people and how smaller titles can be measured.

Today, the challenges and opportunities presented by the digital era have added more questions, but have also presented some new solutions. It is to these that we will now turn.

4. 21st Century Research Challenges

There are two core challenges facing readership researchers in the 21st Century: the response rate challenge and overcoming imperfect memories. Neither of these are particularly new challenges, but they have been exacerbated by the arrival of multiple new platforms on which people can and do read newspaper and magazine content.

One of the trickiest problems facing market research of all types is that people are less willing than they were in the past to take part in surveys. It can be the result of them having less time to spend on activities of no direct profit to them, greater comfort saying 'no' to an interviewer, worries about personal security or identity theft and a host of other concerns.

A study by the Pew Research Center in the United States in 2012 showed how response to telephone surveys had fallen in the fifteen years from 1997 to 2012 from 36% of the numbers dialled to just 9%².

In the study, it was found that respondents were different than non-respondents. Not so much on their demographic profile, but in areas such as their involvement in civic and political matters. Those with greater civic involvement and large social networks, it is suggested, have a greater propensity to agree to take part in interviews than those who are less active.

Response rates are not helped if the interviews are long, the questions are boring and they cannot be engaged in the process. Yet clients are demanding more data, not less, so the pressure for more questions is high.

Face-to-face interviews are likely to be even harder hit than telephone interviews, as they are the most intrusive kind. In addition, they are also negatively impacted by the growing number of people living in security-protected buildings or enclaves.

The key issue for researchers is to identify whether there are any systematic *biases* in the kinds of people responding to surveys versus those who do not – clearly, the lower the

response rates achieved, the harder this will be to achieve, although techniques such as weighting can be used to help alleviate this problem.

Having recruited respondents, we turn to the long debated question of memory effects. No respondent has perfect recall, so we have to try as hard as possible to prompt memories without over-prompting them. The key objective is to ensure that when they are asked about their reading they neither over-claim nor under-claim reading levels. Both can occur.

Recent Reading does not pretend to measure reading to newspaper or magazine *issues*; instead, it measures reading occurring over a specified period of *time*. It is assumed that reading in the last publication interval is broadly equal to reading of an average issue.

So if, for example, you take a large sample of people and follow their reading habits over the course of a year, the thinking behind Recent Reading proponents is that whether you measure this group's reading of specific issues whenever it occurs or whether you ask them about reading of any issues in a specific month, the total amount of reading will end up at the same levels.

But it is not quite so simple. When asking about reading of any issues over a specific time period, we assume people have clear memories of time. But it is possible that somebody asked to recall whether or not they have read a monthly magazine at any point in the past month may find it difficult (especially if they are not regular readers of the publication) to pinpoint the exact time they read it.

They might claim, for example, that they read it in the past month when, in fact, it was five weeks ago (known as 'telescoping' in research jargon). Or, in contrast, if they happened to have leafed through the title in a doctor's waiting room three weeks prior to the interview, they may well have forgotten the occasion.

Other possible effects have been noted. What is termed 'parallel' reading occurs when a reader reads two different issues of a magazine within the same issue period (e.g. two issues of a monthly title during the same month or two issues of a weekly in the same week).

Despite reading two different issues over this period, they can only be counted once under the Recent Reading approach. So to the extent this might be common behaviour, it leads to an *under*-estimate of reading levels for the title concerned.

'Replicated' reading has the opposite effect: it occurs when readers look at issues of a publication after the issue period has finished and are thus counted as readers outside the period of interest.

For a weekly title, for example, the data looks the same regardless of whether two different issues were read (one last week and one two weeks ago) or only one issue (two weeks ago and again during the last week).

Replicated reading leads to over-counting. It will have a greater impact on the readership of magazines with longer shelf lives.

All these issues have been debated over the years. Learned papers have been written and experimental studies carried out, generally suggesting that these two tendencies cancel each other out in the main.

Another concern is over possible reader confusion, especially for titles read irregularly. This can happen between magazines or newspapers with similar names, front covers or content. When respondents are shown a typed list of titles or a masthead, will this be a sufficiently accurate aid for them to remember exactly which titles they did in fact read?

As noted earlier, dealing with memory effects and declining response rates are not new challenges for the research business. However, new requirements from users of the research have only made things tougher.

Most publications can be read on-line or via apps. Readers can access content through printed copies at the newsstand, via PCs and laptops, eReaders, Tablet computers and Smartphones. Digital reading can be fleeting — or it can match the time spent reading printed copies.

This has two effects on readership measurement. First, it makes it even more difficult for respondents to remember exactly where they saw particular content (was it on a dedicated site or via a news aggregator or other website? Was it in print or on an app?). They may remember the content better than they can recall the carrier.

Second, trying to capture – in detail – readership of each version of a publication on each platform will add extra time and complexity to the questionnaire. Which is sure to have a negative impact on peoples' willingness to participate in the survey.

We also need to be clear with respondents on what 'reading' is. Most surveys define reading as any reading of any issue, anywhere. Many try to eliminate the most casual of events (like passing a newsstand and glancing at the headlines on a newspaper) by specifying that it should last for at least a couple of minutes. Such precision does not yet exist in on-line measurement (website 'hits' may last just seconds).

5. Innovation in Readership Measurement: Around the World

Although, as noted above, the basic structure of readership measurement has stayed the same for more than 50 years, with incremental adjustments to address issues as they arose, a number of surveys made the decision to leap forward more quickly, implementing more fundamental changes to address the rapid developments in the newspaper and magazine reading environment.

These fall into four main areas: online collection of data from respondents; the use of specific magazine issue covers to prompt reader recall; the integration of online measurement from a separate survey and modelling of readership for smaller newspaper titles.

5.1. NOM

One of the surveys that chose to leap was the Dutch readership survey overseen by NOM.

In 2003, recognising that the vast majority of homes were by then connected to the internet, The Netherlands became the first country to move to a predominantly on-line data collection method for its official readership survey. Three years later, in a bid to address some of the concerns about the Recent Reading technique, the survey started to collect magazine reading data using the covers of specific issues (instead of mastheads) to prompt readership recall.

Before the internet, it was logistically very difficult for an interviewer to bring copies of each individual issue of a magazine and newspaper (180 in the case of the Dutch survey) along to the interview and to ask people about their reading of these particular issues — only to have to change magazines every time a new issue was put on sale. This was one reason why Thru-The-Book was discontinued in the United States.

There was also the concern that people who read their copies a little later than others (having had the titles passed on or having seen them in a public space) would not have read the most current issue in the time period they were being asked about.

The advantage of the internet is that the covers (used as surrogates for complete issues of each title) can be digitally stored, updated whenever they need to be and then used as prompts for respondents. Covers of several issues can also be shown, enabling the accumulation of readers over time to be captured.

In the NOM design, magazines are first filtered by asking respondents to look at screens containing groups of similar magazine mastheads and asking whether any of the titles on the screen have been read or looked at in the previous 12 months. This allows the long list of titles on the survey to be quickly brought down to a more manageable set to be asked more detailed questions about.

Each title passing through this filter (usually around 10-15% of all the titles shown) is then asked about individually using a screen prompt which features the six most recent covers. People are asked to indicate for each of the six issues whether they read it, did not read it or whether they were unsure.

As new issues are published, the latest cover is substituted for the oldest cover on the screen. In the pilot carried out before officially introducing the approach to the survey, it was found that measuring newspapers using front covers had only limited impact versus using mastheads. This, combined with the logistical obstacles of daily changes in the screens that would be needed for newspapers, led to a decision to continue using mastheads as prompts.

The pilot did find that overall readership levels for magazines versus the old Recent Reading method rose by 14%, while those of weekly titles were 21% higher³.

The main explanation for the increase is undoubtedly the fact that people can more easily identify the titles they read when they see a front cover, even when the reading was quite casual and some time in the past.

As noted earlier, Recent Reading can lead to people 'telescoping' reading which took place longer ago in time than the period asked about, 'parallel' reading of multiple issues within a single publication interval and 'replicated' reading of older issues within this time.

The Specific Issue Readership (SIR) approach eliminates much of this uncertainty. Reading of older issues in a recent time frame (replicated reading) is not counted in the SIR method. Reading of multiple issues (parallel reading) is.

A decision was made after introducing the SIR method that published results would still be in the form of Average Issue Readership, mainly because the sample size and composition did not allow for robust weekly or monthly reporting of individual title results.

SIR was formally introduced onto the NOM survey in 2006.

More recently, NOM has begun to measure the level of individual title reading on mobile devices in the questionnaire, though results will only be available in the second half of 2013.

5.2. Etude ONE

Another of the more radical changes in readership measurement occurred in France in 2011. For many years there, newspapers and magazines were measured on separate surveys. Newspaper readership was tracked using a telephone survey, while magazines were measured on a face-to-face study.

In 2009 a decision was made by industry body Audipress in conjunction with its stakeholders to unify both studies and to prepare for the digital age. Recruitment was to be mainly (90%) by telephone, to ensure full representation of the population. An additional 10% of people less comfortable with being interviewed by phone or rarely at home were to be interviewed face-to-face.

Data collection for 80% of the sample was to be online (Computer-Aided Web Interviewing or CAWI). The remainder (all of the face-to-face respondents and a proportion of those recruited by telephone) were to be interviewed in their homes via a technique known as 'Double Screen CAPI'.

This involves interviewers using two computer screens — one for them to administer the interview and the other to replicate the on-line interview exactly, showing magazine and newspaper logos as prompts.

Throughout 2010, qualitative and quantitative pilots were carried out by Ipsos to determine the optimum way of presenting the survey to respondents. Multiple ways of presenting titles on screen were tested, alongside a voiceover from a 'virtual' interviewer to ensure respondents understood what they were being asked to do.

A whole set of new questions about reading via digital platforms was also introduced for the first time in France. The survey was launched in 2011 with just under 36,000 interviews annually. Due to different sampling and a different method of data collection, data was not comparable with previous results from the old surveys.

Of course the data was different. In general terms, newspaper readership on Etude ONE was 12% higher and magazine readership 6% lower than the old methods suggested. However the market has accepted that the methods used by the new survey are more modern and better capture readership habits than the former approaches.

With the Dutch and then the French surveys moving mainly on-line, several other countries have now followed suit, first testing then implementing surveys where data is collected fully or partly on-line. These include surveys in Norway, Switzerland, Portugal, Denmark, Taiwan, Thailand and Hong Kong.

MRI in the United States has also used an online survey for several years to complement the main face-to-face survey there, by collecting issue-by-issue reading of magazines. Data collected is indexed and applied as factors to the Average Issue Readership figures reported by the main survey.

5.3. Data Fusion

A further development in readership measurement now implemented in close to a dozen countries around the world including those in the UK, The Netherlands and the US – is to 'fuse' data from the currency online audience measurement systems onto the readership surveys.

In a nutshell, this involves first comparing the demographic and other characteristics of panellists from the online surveys (carried out by companies such as comScore and Nielsen) with those of respondents from the readership surveys. Following this, the panellists from the online audience measurement panels are 'matched' with respondents from the readership survey sample.

The on-line behaviour of these panellists is then 'ascribed' (or fused) onto their matching respondents on the readership survey, meaning that users can analyse all the data together. Thus, readership of any title can be examined both for the printed versions and their corresponding websites in a single database, without having to burden people with long, detailed questions on website usage on the surveys. It also means that users will be getting website audience data already being used in planning and buying.

The logical next step in this process is to take a third database, this time capturing peoples' use of mobile devices to read newspapers and magazines in all their forms and to fuse this, too, onto the database. This is a work-in-progress at present (2013), as mobile measurement technology has only just reached a point where the technology is available for large-scale passive tracking of peoples' activity on these devices.

In the Netherlands, mobile readership of individual publications was added to the NOM survey at the beginning of 2013, with results still awaited. In the US, MRI has already added question about reading on mobile devices, as have a number of other countries.

The Holy Grail, however, is to collect these data passively without adding lots of time to an already-lengthy readership survey, which can lead to irritation amongst respondents.

5.4. Local newspapers

One more aspect of readership measurement where innovation has taken place is worth noting here, although it has been a standard feature of UK readership measurement for many years. This is the measurement of local newspapers.

The challenge of measuring newspapers which may have significant reach in a particular locality is one of sample size. In a national survey, several thousand interviews across the country are generally deemed sufficient to give statistically robust readership estimates for titles with reasonable national coverage and circulation.

But in a town with (say) just 1% of the population of a country, even very large national samples will give poor representation. To take an example, Australia's adult (14+) population is around 17.2m. A national sample of 50,000 people means that 344 people are represented by each respondent.

A town with a population of 20,000 may, if the sampling is precisely proportionate by town and region, have a total of 58 respondents representing them on the survey. If half the

population read the local newspaper, perhaps 29 of them will register on the survey. 29 respondents is insufficient for analysis purposes.

In fact, few national surveys (other than the census) are as precisely representative of geography as this: for reasons of cost and efficiency, sampling is usually carried out in 'clusters' (concentrated in particular areas which are themselves spread evenly by geography). So it is possible the effective sample size in many towns will be smaller than their share of the population might seem to merit (or larger in some cases).

The point is, a national sample cannot feasibly ever properly represent the full range of small towns and districts or report statistically robust audience figures for their local newspapers. Ipsos estimated that, to cover every newspaper selling more than 2,000 copies in Australia with a reporting sample of 150, a national sample of some 550,000 people would be required – every year!

So another approach is required. JICREG, the organisation representing the UK's regional and local press, was set up in 1990. Their solution to tackling the lack of a robust currency measurement for smaller titles was to build a model to try and predict readership levels from data they did know about the newspapers.

These included audited circulations, information about the household characteristics of the newspaper circulation areas and information about the newspapers themselves. It was hypothesised that the average number and type of people living in each household in a catchment area, the class of newspaper (weekly, daily, free etc.) and the number sold could be directly related to how many people were likely to read it.

A model was built and tested against results from more than 50 separate local newspaper readership surveys that had been carried out by individual publishers to find out if such a link existed⁴. Finding that it did, the model was built and launched in the market (and re-validated on improved data in 1995). This showed, as the first model had, that circulation was the strongest single predictor of readership levels at the local market level.

It is now the accepted currency for readership in the UK local marketplace.

6. emma™

Our challenge in Australia at the beginning of 2011 was to take what we had learnt over 75 years of readership measurement, what we knew about the innovations in methodology carried out over the years and what we were seeing before our eyes as readers adapted and changed their behaviour amidst new digital products and technologies.

Everything we proposed needed to be tested in the marketplace and pored over by a team of technical and methodological specialists, as well as by an independent expert.

emma[™] has landed on a very different approach from the methodology currently used in the market. The main changes are as follows:

- The sample is mainly recruited by telephone and data collected online
- Magazine reading is prompted using the three most recent front covers of each title

- Respondents are asked first to screen all the titles on the survey and then about reading. In all cases, they are asked to state 'yes', 'no' or 'not sure' for every title screened in. They do not just pick the ones they read from a list.
- Branded section readership within newspapers is measured and reported on
- Online usage via PCs and laptops of publisher brands is measured by Nielsen and fused to emma[™]
- Reading via Smartphones and tablets is captured on the survey, but will later be measured separately and passively
- Readership of the smallest regional and community newspapers is modelled and integrated into the main database. Other titles benefit from 'booster' samples.
- A new, more contemporary set of segmentation variables has been included in the study.

6.1. Sample

The population surveyed comprises all English-speaking residents in Australia aged 14+ living in private households. Targets are based on Census definitions and data provided by the Australian Bureau of Statistics and are updated in accordance with Government projections in December each year.

The sample is constructed so as to be representative of the adult population and is distributed across urban and regional areas to maximise efficiencies of scale. Additional booster samples are carried out where necessary to increase the number of interviews in key regional areas to provide more statistical rigour.

Respondents are recruited by telephone and invited to complete an online questionnaire on their media usage habits. If they are unable to access a computer, the interviewers will offer to set up a face-to-face appointment in their home.

While there, field staff will also attempt to carry out additional interviews in the same location, thus building the number of door to door surveys conducted. This multi-modal approach assists with difficult to reach cohorts such as those living in apartments, those without home access to the internet and mobile-only households. A proportion goes on to complete a second questionnaire where product data is collected.

With at least nine in ten Australians having internet access in the home, the use of online to present the survey means that the stimuli can be dynamic, engaging and exact, reducing the level of confusion and erroneous survey responses. It also facilities a quicker data capture, streamlined and superior quality control processes and less 'interviewer effect' (e.g. potential tendency to claim readership of 'prestige' titles to impress the interviewer). It can also be conducted seven days a week.

The presentation of screens, font, colour, wording and layout were all tested through a series of qualitative and qualitative pilots to ensure that the optimal design was utilised.

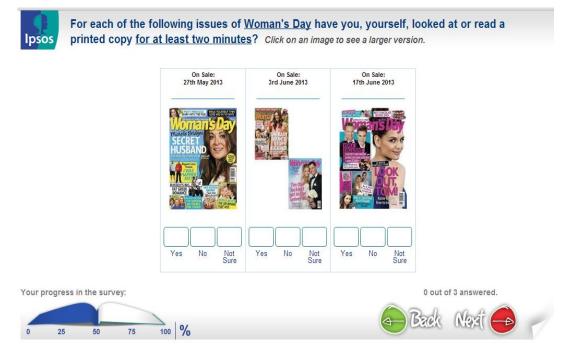
6.2. Magazines

When Ipsos responded to the TRW readership tender in July 2010, a key goal was to harness the power of digital technology to improve, deepen and expand the measurement of readership.

The move to on-line interviewing and data collection offered us the chance to use real live covers of the most up to date issues (as had been pioneered in the Netherlands) to stimulate people into remembering whether or not they read *particular* issues (as opposed to the traditional approach of asking about reading of *any* issues in specific time periods).

It offers the opportunity of tracing how magazines build readership issue by issue, as more casual readers are attracted. Critically, it could also enable magazine publishers — should samples be sufficient - to offer the kind of granular audience data to put them on a par with the TV data being used in market mix models.

As in the Netherlands, the emma[™] survey employs colour covers. The three most recent issues of a magazine are shown to respondents with on-sale dates provided as a further memory trigger. The most recent cover appears on the right of the screen and the oldest on the left.



Our testing of this method showed, as we had expected, that readers did differentiate between covers and that reading did accumulate for each individual issue as time passed (at varying speeds).

6.3. Reading Screener

As noted above, screening is a way of reducing the number of titles respondents are asked to answer questions about to improve their concentration and engagement in the survey. Titles never read are removed quickly through this method. They are presented in groups of up to six similar titles on a single screen and people are asked whether they have read them in the last 12 months.

For newspapers, the screening questions are asked of brands grouped by publication frequency (daily, weekly, twice weekly, thrice weekly); magazines are grouped by publication genre (sporting, woman's fashion, general interest, mass woman's etc).

For each title, respondents are asked to select yes, no or 'not sure' to the question of whether they have read the titles shown on the screen in front of them in the past 12 months. One screen might, for example, contain several TV listings magazines; another might show a group of daily newspapers in the region where people live.

All people who answer 'not sure' or 'no' to reading a brand are removed from answering subsequent reading questions on these titles.

6.4. Branded Sections

One particular innovation in emma[™] is that readership of branded sections within individual newspapers is measured. To our knowledge, these are rarely measured on national readership surveys, although in the UK, sections of Saturday and Sunday newspapers are covered.

Readership questions are asked about several hundred individual branded sections of national, metro and regional newspapers in the second survey. Questions are asked of those who have read or looked at the relevant parent newspaper over the past week, for daily sections, or past month for weekly sections. All sections are presented using a colour masthead while the host newspaper brand is shown to provide context and minimise confusion.

Branded sections can be analysed by all survey variables to provide rich insight on reading habits and reader profiles.

6.5. Online Readership

It is, of course, possible to ask people about reading of newspapers and magazines online at the same time as they are asked about reading of printed copies. This is the way it is done in many countries.

The advantage of this approach is that the same people are being asked about their total reading experience and can thus be analysed as a single data set.

There are three main disadvantages with the approach however:

- 1. It adds time and complexity to the questionnaire, exacerbating the challenge of falling response and co-operation;
- 2. It depends on people accurately remembering events that may be long past;
- 3. It creates a new set of audience numbers for online audiences which are not 'currency' in the market.

As a result of this, Ipsos examined the feasibility of following in the footsteps of the many countries that have settled on fusing data from a separate panel of people whose online behaviour is already being measured and used in the marketplace (in the case of Australia, by Nielsen Online) onto the readership survey sample.

The basic approach used is outlined above in Section 5.3 – essentially 'matching' Nielsen Online's panellists with individuals in the emma™ sample and then integrating their passively tracked visits to newspaper and magazine websites onto emma™. This enables total (print +

online) audiences to be reported from a single database. Details of the fusion model (audited and approved by Dr Rob Hall, emma $^{\text{m}}$'s independent auditor) are available in a separate White Paper.

The method is easily validated, can be updated regularly and provides output accessible at the click of a button via planning and analysis software.

6.6. Mobile & Tablet Reading

Independent forecasts suggest that 35-45% of households are likely to have a tablet computer today and that 65%⁵ of the population will own a Smartphone by the end of 2013.

Data from emma™ show that the number of people using these devices for reading newspapers/magazines and related activities is already significant. For the time being and in common with most other readership studies around the world that measure mobile reading, usage of this technology is measured by recall methods.

The survey collects channel usage information across major media brands for print, online, mobile and tablet. The nature and style of the question format, like all other aspects of this metric, were piloted and tested before full implementation to ensure clarity of questioning, optimisation of respondent interaction and sensibility of data outcomes were addressed.

Users are now able to obtain a total audience reach estimate across all platforms by major masthead.

In the medium term, as with PC and laptop usage, passive methods of data collection are likely to provide a more robust and granular measurement. A method by which a sample of tablet and mobile users are tracked via an app installed on their devices has been successfully piloted in Australia. This will be expanded onto a larger sample in the coming months, enabling mobile platform readership to be integrated into the full database, delivering granular, title-by-title readership estimates across all platforms.

6.7. Regional and Community Newspapers

As noted above in Section 5.4., collecting readership data for regional and community newspapers is not without its challenges. Australia is a vast geography with a large number of smaller regional and community newspapers, which are challenging to measure in a statistically robust manner from a national sample. We estimated, in fact, that a national sample of some 550,000 people would be needed to properly report all newspapers with circulations above 2,000!

Ipsos therefore proposed to TRW to build a model that used a combination of circulation and other data to estimate readership levels and duplication within each area, similar to that used in the United Kingdom by JICREG for the last 15-20 years. This approach has the benefit of providing data on smaller circulating publications in regional and community areas without the cost burden associated with the accumulation of massive sample sizes. These, of course, are costly and in essence prohibitive for publishers with smaller titles.

Having tested a variety of approaches to questionnaire design, mode of recruitment and data collection, a model was built to include the key inputs of audited circulation results, census profiles from the ABS at a granular geographical level and survey results from each local area.

Apart from the basic finding that circulation levels are good predictors of reading levels at a regional and community level, the idea behind the model is that the demographic composition of readership found for a group of similar titles (a 'class') will be reflected in the readership compositions of individual titles that make up that class.

Robust (large sample) survey data for each class of titles is therefore used to overcome the limitations of small samples for individual titles, thereby allowing us to make accurate estimates of readership by demographic for smaller titles.

Readership estimates now based on a solid platform for over 350 titles and are dynamic in such a way that they reflect the natural growth of an area in terms of population and/or circulation.

In detail this means that there are three qualifying structures which apply to the regional and community data:-

- 6.7.1. Main Survey Input (Class A Titles): all titles with an audited circulation of 5,000+ are asked about on the Main Survey (also includes regional sample boosts of 500 for certain key areas). However, only those titles with a circulation greater than 10,000 and a reporting sample of more than 150 people are reported using Main Survey-only data;
- 6.7.2. In-Market Survey Input (Class B1-CD): all other titles which are included in the Main Survey and have a circulation above 5,000 but below 10,000, have their readership estimate informed by the modelling process using local booster surveys as well as the Main Survey;
- 6.7.3. Modelled-Only (Class D): titles with a circulation below 5,000 not asked about in the Main Survey or our booster surveys, or which have a circulation above 5,000 but a reporting sample of less than 50 are given modelled readership estimates.

6.8. Segmentation

Segmentations attempt to group individuals by a range of behaviours and attitudes which go beyond standard demographics such as age, gender or income. Psychographic segmentation tools such as VALS and Myers Briggs are used in a wide range of business environments. As part of the emma™ development, a new segmentation was derived to provide an up to date view of the Australian landscape.

With input from the Ipsos *Mind & Mood* team, directed by Dr Rebecca Huntley and leading Ipsos segmentation experts, a segmentation was developed using input from emma™ data in such areas as activities, modern day attitudes to issues in Australia, media consumption and a personality framework known as 'Big5 Personality Traits'.

This custom-built, contemporary clustering of Australian consumers provides a rich insight into the "Head" and "Heart" dimensions of a consumer's personality and is useful in demonstrating differences in title readership beyond demographics.

The ten segments range across the dimensions of Assertion, Affiliation, Progressiveness and Conservatism and will enable all users to yield a profile for product, services and media according to need.

7. Summary

Readership of newspapers and magazines has been measured using surveys for some 75 years now, mainly for the purpose of helping advertisers evaluate the role individual titles can play in their marketing campaigns. Society, technology and the passing of time have meant that techniques have needed to be modified over the years.

In many ways, Australia stood at the forefront of survey-based readership measurement in the 1970s. Our goal is that emma™ will push Australia back to the leading edge of innovation in this science again.

There are many reasons why measurement of newspaper and magazine readership has needed to be re-thought and re-launched here. One of the most important is simply that people are less and less willing to take part in a process that demands so much of their time when they are likely to be relaxing from a hard week at work and that they will either refuse to take part or will make every attempt to make the experience as quick and as painless as possible, leading to less accurate responses than might have otherwise been the case.

The advantages of moving from a primarily paper-based, face-to-face approach to an on-line data collection method are many. They include:

- We interview every day of the week. Most people remember events that are closer to them in time. By interviewing every day, we are able to get a more accurate picture of reading throughout the week. Our analysis suggests that newspaper issues read 7 days before the interview generate almost 20% fewer reading claims than when they are asked about the day after the reading took place. Because people simply forget, especially their casual reading.
- We show titles to respondents one-by-one and ask them to say yes or no. This gives every title an equal chance of being considered (the order is rotated so that no publication consistently appears early or late in the process). The current method for many titles involves showing people lists of titles and asking them to pick which ones they have read from the list. Again, this has been shown by our research to systematically lead to *under*-counting of readership. On a list, it is easy to skip over titles read only casually or simply to get to the end. In our approach, a considered decision must be made for each title it is as quick to say yes as it is to say no.
- We show recent (and constantly updated) front covers of magazines to prompt respondent memories. We believe this to be a superior memory aid either to lists of title names typed on a sheet or images of older covers. People are more likely to forget older issues (especially if they are very casual readers). Again, under-counting readership.
- We have not created a new on-line currency. Instead, we fuse the existing currency used in the market to our sample using internationally-accepted techniques. This reduces the burden on respondents and enables users to work with familiar data.

- Online interviewing offers respondents greater convenience. People can do the survey in their own time not simply when an interviewer calls on the weekend when they may have many other things to do.
- Our survey is independently audited. Audit results will be published. This is essential to maintain credibility, especially in such a fast-changing world.

¹ Green, Andrew (2010). From Primetime to My Time: Audience Measurement in the Digital Age. pp20-27. WARC

² http://www.people-press.org/2012/05/15/assessing-the-representativeness-of-public-opinion-surveys/

³ Petric, Irena and Appel, Marion (2007) *The Readership Currency: Dutch Design*. Proceedings of the Worldwide Readership Symposium.

⁴ Shepherd-Smith, Neil (1997). *The Prediction of Readership From Circulation and Census Data*. Proceedings of the Worldwide Readership Symposium.

⁵ http://www.telsyte.com.au/