CHAPTER 5

Is Asia-Pacific ready for online political polling?

By Rainer Faus

1. Introduction

Face-to-face and CATI (Computer Assisted Telephone Interview) have been the gold standard methodologies for political polling over the last few decades. Whilst online research has been used for commercial market research since the late 90's political pollsters have been hesitant to pick up the new methodology. This is, firstly, due to the higher sample quality that pollsters require: Political polling typically targets the total population of voters and needs to be representative of the electorate in terms of all demographics including age, gender, area, education, household size, income and other variables. Commercial researchers usually focus on a specific segment, and typically restricting age groups to younger respondents is making it easier for them to get satisfactory sample quality. Secondly, political pollsters fear adopting the yet unproven methodology because they face the reality check of public scrutiny at elections: if their predictions are inaccurate this is very easy to detect after election day and will not only be known to political actors, but also to the general public where final surveys are published before the election.

2. Online research is coming

However, recent developments have shifted the rules of the game in favour of online research. Face-to-face interviewing as the most labour-intensive methodology of surveying has become close to unaffordable in most developed countries and landline telephone penetration is declining, particularly amongst the younger, leading to issues of representativity when conducting CATI surveys. At the same time Internet penetration is rising in most countries of the region which is a necessary condition for conducting political polling online.

Table 1 shows Internet penetration and its growth over the last decade for selected countries in the region.[1]

Table 1: Internet penetration and growth of Internet penetration in selected countries

	Internet Penetration 2010 (% population)	User Growth (2000-2010)
New Zealand	85%	334%
South Korea	81%	107%
Australia	80%	158%
Japan	78%	111%
Singapore	78%	205%
Taiwan	70%	158%
Malaysia	65%	357%
Philippines	30%	1385%
Thailand	26%	660%
Indonesia	12%	1400%
India	7%	1520%

New Zealand now has the highest penetration in the region with 85 percent followed by South Korea (81 percent) and Australia (80 percent). On the bottom of the list we see that, despite huge growth rates, Internet penetration remains low in countries like India (7 percent), Indonesia (12 percent), Thailand (26 percent) and the Philippines (30 percent), meaning that pollsters are far away from conducting political polls online in these countries. However, there is no clear threshold in terms of Internet penetration that is required for online political polling; it depends on the specific purpose of polling[2] and on how well the Internet population reflects the electorate.

1 Data on Internet usage, Internet usage growth and the definition of an Internet user from IWS (http://www.internetworldstats.com; Retrieved on 26 July, 2011). IWS "defines an Internet user as anyone currently in capacity to use the Internet […] There are only two requirements for a person to be considered an Internet user:(1) The person must have available access to an Internet connection point, and(2) The person must have the basic knowledge required to use web technology."

2 For instance, Australian/New Zealand polling organisation UMR Research co-conducted online polling in India assessing 'elite' views following a number of attacks on Indian students in Australia (http://umrresearch.com.au/doc/indianstudentreportjuly2009.pdf; Retrieved on 26 July, 2011)

A reasonably high Internet penetration is a necessary condition for conducting political polling online but it is not sufficient. Besides the standard requirements for sampling that apply to all data collection modes, there are two main conditions that need to be met in order to conduct online political polling. Firstly, the Internet population needs to be reasonably representative of the total population and secondly pollsters need to find ways to draw random samples of the Internet population.

The first point becomes clear when looking at the example of Singapore. Table 1 showed that with 78 percent of Singaporean residents having access to the Internet, Internet penetration seems to be very high in the country. A study by the *Infocomm Development Authority of Singapore* (2009)[3] provides a more detailed picture though. Not only is usage of the Internet skewed heavily towards younger residents (only 13 percent of residents over 60 years used the Internet in 2009) but younger residents are also much more likely to be frequent Internet users. Hence, the Internet population in Singapore is, on average, younger and data on educational attainment by age suggests that they are likely to also enjoy higher levels of education than the total population.

Looking at Australia on the other hand Table 1 shows that 80 percent of the population are using the Internet, a similar figure to Singapore, but a recent study by the Australian Bureau of Statistics (ABS) indicates that usage amongst older residents is much higher than in Singapore (31 percent of residents over 65 years are using the Internet). Whilst the age distribution is less of an issue than in Singapore, the ABS study points to another issue: Internet usage is lower amongst residents outside metropolitan areas and in households with lower incomes[4].

Internet penetration can be considered a good indicator for the feasibility of conducting political polling online. If Internet penetration is too low, pollsters will have to use other data collection methods such as face-to-face or CATI polling. However, even if Internet penetration is high, such as in New Zealand or Australia, pollsters need to be very careful when

3 Infocomm Development Authority of Singapore (IDA)(2010): Annual survey on infocomm usage in households and by individuals for 2009 (http://www.ida.gov.sg/doc/Publications/Publications_Level3/Survey2009/HH2009ES.pdf; Retrieved on 26 July, 2011)

4 Australian Bureau of Statistics (ABS)(2009): Household use of information technology, Australia2008–09; (http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8146.02008-09?OpenDocument; Retrieved on 26 July, 2011)

sampling and can't just assume that the Internet population represents the total population.

The issue for pollsters to draw random samples of Internet users is solved by so called Internet Access Panels which are sample databases "of potential respondents who declare that they are willing to receive invitations to participate in future Internet interviews if selected."[5] These respondents are usually demographically profiled so that sample selection can be matched with population parameters.

Given the issues mentioned above regarding different levels of Internet access and frequency of use of the Internet, there is reason to believe that Internet Access Panels do not reflect the general population and hence Internet Access Panels have been criticised for a lack of representativity by attracting respondents with certain characteristics. However, there are high quality Internet Access Panels that differentiate themselves, mainly by how they recruit (double opt-in, invitation only, telephone recruitment), reward, manage and sample panel members[6]. As for other modes of data collection, such as face-to-face and telephone interviewing , extreme care needs to be taken when choosing an Internet Access Panel for conducting political polling online.

As long as the discrepancy between the demographic profile of the online sample drawn and the demographic profile of the population is not too big and the demographic parameters of the total population are known to the pollster and collected in the survey, the online sample can be calibrated by weighting demographic parameters back to the actual population distribution. Besides demographic weightings there are a range of other options available to pollsters, including weighting psychometric variables

5 European Society for Opinion and Marketing Research (ESOMAR)(2009): Conducting market and opinion research using the Internet (http://www.esomar.org/uploads/pdf/ESOMAR_Codes&Guideline-Conducting_research_using_Internet.pdf; Retrieved on 26 July, 2011)

6 European Society for Opinion and Marketing Research (ESOMAR) names 24 questions to ask online panel providers in order to help determine their quality (http://www.esomar.org/uploads/pdf/ESOMAR_Codes&Guideline-Conducting_research_using_Internet.pdf; Retrieved on 26 July, 2011)

and propensity weighting[7]. Unfortunately there is no "one-size-fits-all" model applicable to all countries in all circumstances so getting this right usually requires a fair bit of research and piloting.

Summing up, in order to achieve accurate and insightful results, Internet penetration and the quality of Internet Access Panels need to be sufficiently high and remaining weaknesses of the latter need to be known to the pollster in order to be adjusted for. If any of these do not apply, online polling should not be applied in this context.

3. Advantages of online political polling

If CATI is established and tested for decades why would pollsters choose to conduct political polling online? The answer is that if the preconditions are met, online polling offers a range of advantages: The ability to show respondents multimedia content, reduced social desirability effects, the use of more sophisticated question formats and scales, and cost effectiveness.

3.1. Ability to evaluate multimedia content

The most obvious advantage of online surveys is that they can include any type of multimedia content, such as images, videos, sound clips and leaflets. Advanced techniques such as video evaluation tools, known to the public as 'worming' can be used for testing TV ads, enabling respondents to express their attitudes towards a TV ad by using a response slider whilst watching the ad. Special tools have been developed to provide insight into how TV ads or other material such as leaflets, are perceived: which element is seen first? How long do we look at the individual elements? What draws the most attention? And perhaps, most importantly: what are we missing? This can provide crucial information for pollsters when advising on advertising and campaigning material.

3.2. Reduced social desirability effects

The lack of an interviewer present when answering survey questions leads

7 Propensity weighting describes weighting methods that are used to compensate for non-response in a survey, for example by adjusting sampling weights of respondents in the sample using estimates of the probabilities that they responded to the survey. (Kalton G, Flores-Cervantes I. (2003): "Weighting Methods" *Journal of Official Statistics*,19, 81-97)

to a reduction of interviewer effects. This is particularly the case when social desirability effects are large and can also reduce the share of non-response for questions that are considered "not for public", such as past voting behaviour or voting intention. Within political polls, the anonymity provided by online surveys is particularly highlighted as a way around the problem of the "spiral of silence" that is seen by some to be responsible for the under-recording of Conservative voting in United Kingdom political polling, particularly in the 1990s[8].

3.3. Use of more sophisticated question formats and scales

There is a greater variety of question types and scales available which has the potential to decrease respondent fatigue and to provide more valuable insights for pollsters. Whilst questions need to be kept rather simple in telephone surveys in order to be understood by respondents, online surveys offer visual cues to respondents and hence keep them more engaged. Pollsters can use more varied and sophisticated question types such as rankings, sort games, highlighting of displayed text and the use of numeric scales also becomes more intuitive to respondents when visually displayed. Having a greater variety of question types makes answering questions more 'fun' for respondents reducing fatigue. Furthermore, in an online survey setting the respondent can go through the questionnaire in his own time enabling him to reread questions and to have more time to answer them. The ability to reread the answer categories also reduces primacy and recency effects[9] that are common in CATI settings. And finally, the use of scales provides high resolution of data enabling more advanced multivariate analysis such as regression modelling.

3.4. Cost effectiveness

Last but not least, with sample sizes that are usually used for political polling online surveys are significantly less expensive than CATI surveys and the relative savings increase with sample size and questionnaire length. Without 'human' interviewers required, respondents are doing

8 Kellner, Peter (2003): First among equals (http://www.research-live.com/features/first-among-equals/2000035.article; Retrieved on 26 July, 2011)

9 Primacy and recency effects refer to the effect that people tend to remember the first few things and the last few things in a list more than those things in the middle. We also tend to assume that items at the beginning or the end of the list are of greater importance or significance. (See: Miller, N. and Campbell, D. T. (1959): "Recency and primacy in persuasion as a function of the timing of speeches and measurements" *Journal of Abnormal and Social Psychology, 59, 1-9)*

most of the work themselves and in their own time. This allows the pollster to ask more questions, collect more demographic information and thus delivers richer data at a lower cost. Furthermore, if the Internet Access Panel has a sufficient size, even targeting of low incidence segments becomes economical as the pollster can focus on crucial segments such as soft and swinging voters who are likely to change their mind and vote for another party. These studies can include in-depth qualitative analysis, quantitative analysis of attitudes towards personalities and issues as well as demographic profiling.

4. Some limiting factors

However, there are also some downsides: Besides the abovementioned issues regarding representativity of the Internet population that can be adjusted for by weighting this refers mainly to the slower turnaround of online surveys and the limited size of current Internet Access Panels. The slower turnaround compared to CATI surveys is due to the nature of how respondents are contacted. Whereas with CATI, the interviewer calls the landline or mobile phone of the potential respondent, online survey respondents are usually invited by email to participate in the survey. Potential respondents will often only become aware of the survey after a certain time if they are not online 24/7. To avoid sample bias, pollsters try to prevent the survey to be completed only by heavy Internet users. Therefore fieldwork time would usually take a few days whereas urgent phone polls can be conducted within a few hours if required. There are ways around that though: Notifying respondents by SMS or pre-inviting them to a survey that is going to start at a later time. However, generally speaking, CATI interviewing delivers faster turnaround.

The current size and quality of Internet Access Panels limits online polling in most countries to large geographic entities. In most cases, polling can only be conducted on the national level and in some countries on state level but sample sizes are usually not sufficient to look at areas with a small population, as Internet usage doesn't necessarily translate into Internet Access Panel membership and only few other options exist for pollsters to randomly sample respondents from a certain area. This is a major disadvantage to CATI where pollsters are theoretically able to contact each phone number in a specified geographic area through RDD

(Random Digit Dial)[10].

For pollsters this is particularly an issue in countries with majoritarian, or plurality, voting systems[11] based on single-member seats as they will find it hard to conduct crucial seat polling online. In these countries nationally representative surveys are conducted to get a read on what people think about certain issues and how this affects their vote but they have the potential to disguise actual majority situations for instance if a party is set to win the majority of the popular vote but fails to win a majority of seats. The more unrepresentative a voting system is in terms of how votes are translated into winning seats, the more misleading are survey results based only on nationally representative surveys.[12]

5. Online political polling: The example of Australia

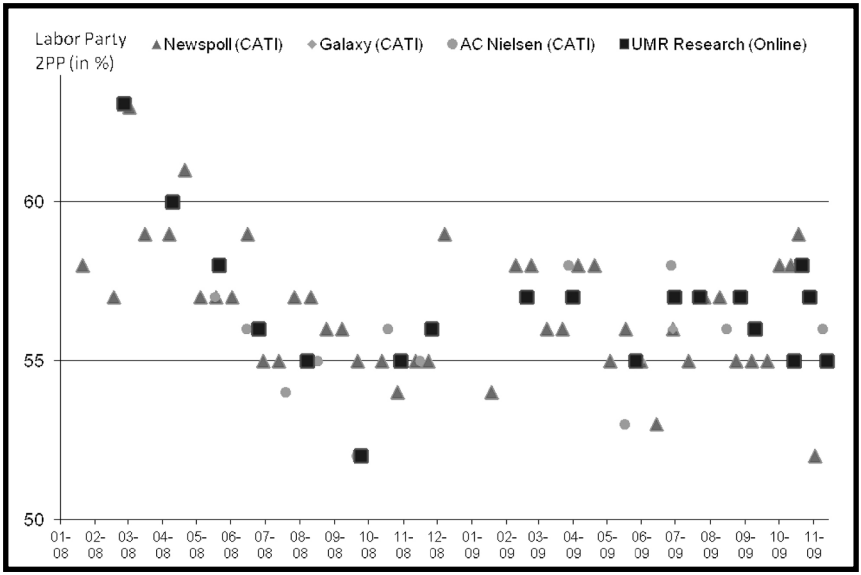
After a few trials during the Australian federal election campaign in 2007, Australian/New Zealand polling organisation UMR Research has started an extensive online political polling programme by implementing a monthly

10 However, Australian/New Zealand polling organisation UMR Research has successfully conducted surveys in areas with relatively small populations. For instance, UMR Research conducted a survey using its own SayIt panel in the New Zealand city of Christchurch prior to the Mayoral election in September 2010 accurately predicting the election result (http://umr.co.nz/Media/Christchurch_MayoralElectionResearch_Sept10.pdf; Retrieved on 26 July, 2011)

11 Majoritarian, or plurality, systems represent the oldest and simplest electoral system category, based on the principle that whichever candidate receives the most votes in a constituency is deemed elected. The following three varieties of majority systems operate on the basis of single-member constituencies: a) ‚First-past-the-post' (FPTP) or simple majority. This is the most straightforward electoral system, and is found in the UK, USA, Canada and India. b) Second Ballot Majority Runoff or absolute majority. This system requires a candidate to obtain one more vote than half the votes cast in order to be elected. If no candidate gets that many votes, a second round is held. In this system, either a simple majority is sufficient in the second round, or a „run-off" election is held between the two candidates who received the most votes in the first round, also along absolute majority lines. France and the Ukraine both use variations of this system. c) Alternative Vote. This system also seeks to ensure that a candidate is elected by an absolute majority, but does so in a single round using Preferential Voting (i.e. expressing a rank order of preferences) instead of the latter two-stage system. Constituents vote for a single candidate but indicate, in declining order, their preferences for other candidates. If none of the candidate gets an absolute majority on the first count, the candidate who polled the fewest votes is eliminated, and his preferences are distributed among the remaining candidates. This is repeated until one of the candidates has an absolute majority. This is used in Australia and for the Irish presidential elections.(See: European Centre for Parliamentary Research and Documentation (2000): Electoral systems in Europe: an overview. European Centre for Parliamentary Research and Documentation, Brussels.)

12 The representativeness of electoral systems can be measured by special indices. The Gallagher Index (or least square index) is used to measure the disproportionality of an electoral outcome: difference between percentage of votes received and percentage of seats a party gets in the resulting legislature. (Gallagher, M. (1991): "Proportionality, Disproportionality and Electoral Systems" Electoral Studies 10)

Chart 1: Australian Labor Party Two-Party-Preferred Vote 2008-2009 from UMR Research online polling and CATI polling from *Newspoll*, *Galaxy* and *AC Nielsen*



track of a set of key political metrics including voting intention. Chart 1 shows that on the crucial metric Two-Party-Preferred (TPP) vote[13], UMR Research's online polling results were generally in line with CATI results by *Newspoll, ACNielsen and Galaxy Research* that were published in Australian media in 2008 and 2009.

Even though the 'hard' test of an election had not yet been passed, the consistency of the online results with the established CATI methodology was quite encouraging so that UMR Research was commissioned in 2009 and 2010 by the Australian Labor Party to conduct nationwide benchmark studies online. But the key question remained: in a majoritarian system,

13 In the Australian Alternative Vote System, the Two-Party-Preferred (TPP) Vote is seen as the crucial vote measure. It refers to a distribution of preferences where, by convention, comparisons are made between the ALP and the leading Coalition candidates. In seats where the final two candidates are not from the ALP and the Coalition, a notional distribution of preferences is conducted to find the result of preference flows to the ALP and the Coalition candidates. (Australian Electoral Commission Glossary: http://www.aec.gov.au/footer/Glossary.htm; Retrieved on 26 July, 2011)

such as the Australian preferential system which is based on 150 seats, how can online polling be used in the election campaign?

In the 2010 Australian federal election campaign the newly elected Labor Prime Minister, Julia Gillard had to defend an eight seat majority against the Liberal-National Coalition. Whilst her party was polling above the 2007 result in her home-state of Victoria and in South Australia, the situation of the Labor party was dire in New South Wales, Queensland and Western Australia where it was facing the loss of a number of marginal seats. Hence, there was the need to keep an eye on the overall national situation, but also to monitor crucial marginal seats that needed to be held in order to remain in power.

UMR Research adapted a hybrid approach for the election campaign, applying online, as well phone methodologies. Online polling was used for weekly nationwide benchmark surveys as well as TV ad testing. Phone surveys (CATI) were used to track voter sentiment in a basket of 20 marginal seats in Queensland and New South Wales on a day-by-day basis as well as for an extensive Seat Monitor programme particularly for marginal seats that were not part of the daily tracking.

The online benchmark surveys focused on the big picture but also provided in depth information on issues, personalities and message development. It was firstly used to track key metrics such as voting intention, leader performance ratings and preferred prime minister on the national level. Moreover, it offered a wealth of detailed information on the election campaign and was central in determining which issues were most important to voters, how satisfied they were with how the government was handling these issues and which parties they trust to handle them. Briefly, how issues were playing out for the parties. It provided intelligence on the two leaders and their attributes in terms of strengths and weakness and was essential in developing messages that resonated most with voters. Additional TV ad tests, called "Ad Labs," helped identifying the impact of Labor and Coalition TV ads. Given the huge amount of insights gained from these online surveys the seat-specific phone polling could be kept at a reasonably short length.

The outcome of the election was interesting in a way that neither the online nor the phone component alone provided the full picture before

the election but both pieces of information were required to understand what was happening before election day. As predicted by the nationwide online polling Labor was holding on to a narrow majority of votes of just over 50 percent. However the marginal seat phone polling conducted until the day before the election predicted heavy losses for the Labor party in Queensland and New South Wales which also proved to be true on election day. Labor suffered a net loss of 11 seats, most of them in Queensland and remained four seats short of a majority government. With Labor and the Liberal-National Coalition both having won 72 seats, Australia had its first hung parliament since 1940 and Labor eventually formed Government with the help of the Greens MP and three independent MPs.

It's quite important to understand that whilst both online and phone polling proved to be accurate, they served different purposes: The national online polling provided overall direction in terms of messaging and advertising but due to the small sample size by state failed to detect the rather grim situation for the Labor in marginal seats particularly in Queensland. At the same time, whilst not designed to reflect the nationwide picture, the phone polling provided a high resolution picture of target seats in key states.

6. The way forward: Is Asia-Pacific ready for online political polling?
What are the lessons learned from this for other countries in the region? The example of Australia indicates that in parliamentary systems that apply majoritarian or plurality voting systems, online polling can provide useful insights and direction by showing what is on the political agenda and how this affects voting. But as long as individual seat polling is not feasible online it will only be used as a complementary tool and phone polling will still be necessary for individual seat polling.

Let's have a look at the countries under consideration again. Table 2 lists the countries again, ranked by Internet penetration. Of the countries with high Internet penetration, only New Zealand uses a proportional

Table 2: Internet penetration, voting systems and representative online political polling:

	Internet Penetration 2010 (% Population)	Internet Penetration Classification	Voting system (First or only chamber of parliament)[15]	Representative Online Political Polling
New Zealand	85%	High	Proportional MMP	YES
South Korea	81%	High	Mainly plurality[16]	COMPLEMENTARY
Australia	80%	High	Alternative vote	COMPLEMENTARY
Japan	78%	High	Mainly plurality	COMPLEMENTARY
Singapore	78%	High	Plurality	COMPLEMENTARY
Taiwan	70%	Medium	Mainly plurality	COMPLEMENTARY
Malaysia	65%	Medium	Plurality	COMPLEMENTARY
Philippines	30%	Low	Mainly plurality	NO
Thailand	26%	Low	Plurality	NO
Indonesia	12%	Low	Proportional	NO
India	7%	Low	Plurality	NO

voting system, a Mixed-Member-Proportional (MMP) system[14] to be precise. National vote results are relevant for the party composition of the parliament and seat results are only of secondary importance which makes the country perfectly suitable for online political polling. All other

14 A mixed member proportional or MMP electoral system usually combines the local representation of a first past the post electoral system with the proportional representation list system to achieve results where the proportion of seats won by a political party comes close to matching the proportion of the total vote for that party. In a mixed member proportional electoral system, voters usually vote for both a local candidate and for a political party, and the members are elected from single member electoral districts and from party lists. (Shugart, S. Matthew and Martin P. Wattenberg, (2000): „Mixed-Member Electoral Systems: A Definition and Typology", in Shugart, S. Matthew and Martin P. Wattenberg (2000). "Mixed-Member Electoral Systems: The Best of Both Worlds?" Oxford: Oxford University Press

15 The voting system might be different for the second chamber, the presidential election or any level other than the national level. The suitability of online polling methodologies might be different in this case. However, looking at this in more detail is beyond the scope of this chapter.

16 South Korea and other countries labelled as 'Mainly plurality' apply a voting system for the first or only chamber where more than half of MPs are elected in single-seat constituencies and less than half are elected by proportional representation.

countries from the list apply plurality, or mainly plurality, voting systems meaning all, or at least the majority of members of parliament are elected in single member constituencies. In these countries, online polling may provide important and interesting insights including vote shares, but will likely fail to predict the seat share of parties in Parliament. For instance, UMR Research conducted a nationwide online survey in Singapore days before the General Election in 2011[17] and found that 61 percent would vote for the ruling PAP, a very close result to the 60 percent of votes for the PAP in the election. However due to the Singaporean voting system the PAP gained 92 percent of the seats which would have been impossible to predict without polling individual seats.

Due to the low Internet penetration in the Philippines, Thailand, Indonesia and India, online polling is not advisable at present and despite high growth rates this is not likely to change in the near future.
The table indicates that three criteria must be met in order to use online methodologies for online polling and predictions of parties' seat shares in parliament: Firstly, a reasonably high Internet penetration which is necessary for - secondly - asufficient quality of Internet Access Panels and thirdly a proportional voting system.

7. Conclusion

Is Asia-Pacific ready for political polling then? The only country which fully meets all three criteria is New Zealand where the advantages of online polling clearly outweighs its limitations. Although most pollsters still use CATI at this point of time, online methodologies will soon be state-of-the-art there.

In countries with mainly majoritarian or plurality voting systems online polling provides great insights into what voters think about certain issues and how this translates into the political mood and vote shares but can't predict the parties' seat shares in parliament. In Australia, Japan, Singapore, Taiwan and Malaysia the use of online methodologies as a complimentary tool is still underused but is clearly set to rise in the next few years
The low Internet penetration in the Philippines, Thailand, Indonesia and India still limits the use of online methodologies for representative political polling. The huge Internet user growth rates however, give an indication that although still very far away, online political polling is on its way.

17 http://umrresearch.com.au/doc/Singapore_Pre-Election_Study_May11_Final.pdf; Retrieved on 26 July, 2011"