

How does the online survey mode affect answers to a customer feedback loyalty survey?

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Abstract

Consumers access and communicate information today through diverse platforms enabled by a wide selection of devices – be it tablets, smart-phones, laptops or even e-readers. Soon more consumer will be responding to consumer feedback survey on tablets and smart phones. In this study we will conduct a simple “Net Promoter System” survey. NPS surveys ask customers to evaluate their experience via a simple “Likelihood to Recommend” question and one or two follow-up questions. These surveys’ brevity and focus on direct contact with customers make them particularly good candidates for Smartphone and tablet mode surveys. The “Likelihood to Recommend” question is asked on a 0 to 10 scale. Past experience with NPS surveys proves that customers from different cultures use 0 to 10 scale differently, leading to different NPS results. Our goal is to understand whether and how answering these questions on different gadgets will affect NPS scores. The findings will be particularly useful to build better understanding of how online survey mode can affect scale use and help companies take advantage of mobile platforms for customer feedback.

Key Words: Online surveys, Smartphones, Tablets, Customer Feedback, Net Promoter System – NPS, Likelihood to Recommend, 0 to 10 scale, open-ended text question

1. Introduction

Penetration of mobile devices like Smartphones, tablets and e-readers are rapidly increasing. Nielson recently reported that 49.7% of mobile phones in US are Smartphones, up from 38% in 2012. Gartner claims there will be 1 billion Smartphones worldwide by the end of the year. NBC news states 87% of Smartphone users prefer Smartphone over desktops to check their emails.

Mobile devices present marketing researchers and companies with opportunities. These devices provide an avenue to find respondents who were otherwise difficult to reach. Some difficult to reach demographic groups are becoming easier to reach on mobile devices, e.g., Hispanics, African-Americans, 18-29 year olds, males and blue collar workers. Pew reports that 15% of adults and 25% of teens use Smartphones as their primary tool for online access.

An increasing number of Market Research firms are building tools to enable collecting online surveys via mobile devices and also building mobile online panels. Mobile surveys make it possible to reach respondents during their normal course of activities, e.g., while shopping, on the location of a business, etc. Mobile penetration may be an even more important tool for reaching respondents in developed countries.

With that said, mobile devices pose several important challenges to companies that want to collect data from online surveys

Formatting for smaller screen sizes

- Questions and sentences need to be shorter
- Response options need to be limited

Survey length: Mobile online surveys generally must be shorter in order to get high enough response rates

Quality

- Selecting response options can be more difficult using touch controls on a mobile device
- Answers to open ended questions may be shorter

Affect on respondent answers: It is also possible that the experience of taking a survey on a mobile device could affect how a respondent thinks about the question and the answers they provide

1.1 Introduction to NPS[®]

NPS¹ is an increasingly common type of online survey that companies use to assess the health of the relationship with and to generate feedback from customers. NPS surveys are particularly useful for mobile research by consumer product and service companies because they are very short and may reach customers that might be more difficult via traditional methods. Surveys collected from online samples will likely include a mix of surveys taken on PC and mobile devices. Thus, even if not intended, NPS survey results will likely include data from respondents taking the survey on mobile devices. It's important for the companies to understand how surveys taken on mobile devices will affect the score and the quality of the data generated.

NPS stands for Net Promoter[®] System or Net Promoter[®] Score and is a simple score that indicates how loyal a company's customers are compared to competitors

The NPS score is generated from a short survey of customers who are asked "*How likely are you to recommend [insert Retailer/Brand] to a friend or colleague?*". Respondents indicate their likelihood by rating on a scale from 0 (not at all likely) to 10 (extremely likely). The survey also includes a few follow up open-ended or multiple choice questions asking respondents to provide information about why they gave that score.

Those who score 9 or 10 counted as Promoters. Those who score 0 to 6 are counted as Detractors. Others are counted as Passives. The Net Promoter[®] score is the difference between the percent of the promoters and percent of detractors

Companies can gauge their performance in the market by tracking their NPS over time and in comparison to competitors. Companies use the feedback generated to

¹Net Promoter[®] and NPS[®] are registered trademarks of Bain & Company, Inc., Fred Reichheld and Satmetrix Systems, Inc.

improve the score by making changes that will reduce the number of detractors and increase the number of promoters

1.2 Purpose of the research

The purpose of this research was to assess whether and how responses to customer loyalty and feedback NPS surveys differ between surveys taken on PC and mobile devices.

The key questions that we would like to understand:

How do responses to the 0 to 10 Likelihood to Recommend question differ on PC vs. Smartphones?

How do answers to multiple choice questions asking what respondents would or would not recommend differ on PC vs. Smartphone?

How do answers to multiple choice selection on the number of positive/negative referrals differ on PC vs. Smartphones?

What is the quality and content of responses to open ended questions about why a score is given?

Important NPS/mobile research questions that we are not testing for in this study:

We are not testing the effects of different survey formats and question types

We are not testing for differences between respondents who might self-select on a mobile vs. PC device

We are not testing for the differences between taking the NPS survey at the time of service vs. delayed time

1.3 Results/Key Insights will be useful for several reasons

Provide better understanding of device differences of online surveys

Help companies who collect NPS responses from surveys taken on mobile devices better understand the comparability and the strengths and limitations of these methods

2. Survey Research Design

The survey was formatted and programmed to be compatible for both PC based and Mobile based devices. We developed two short nearly identical NPS surveys: a Wave1 (Lead) survey and a Wave2 (Follow-up) survey.

The Wave1 survey asked a battery of questions to qualify a respondent as a customer of one or more target retailer brands. The Wave1 survey also asked set of NPS questions for each of the qualified brands. Half of the respondents were asked to take the Wave1 survey on a PC device. The other half took the survey on a mobile device

The Wave2 survey did not re-qualify respondents for retailers, but repeated the NPS questions for the same set of retailers. Respondents were required to take the Wave2 survey on the alternative device.

The survey was programmed and launched to two proprietary panels from Survey Sampling International. Data were collected in May 2013. The first wave of survey invitations was sent out on May 2nd and the second wave was sent out on May 14th, 2013

Respondents targeted for the survey were from SSI's general population panel and 'Quick Thoughts'TM panel. Quick ThoughtsTM is SSI's proprietary panel of

respondents who have downloaded a survey application optimized for tablet devices

Respondents qualified to complete the survey if they had made any purchase in the last 12 months for six well-known retailers: three e-commerce retailers (Amazon.com, eBay, Overstock.com²) and three brick-and-mortar retailers (Wal-mart, Target, Best Buy).

2.1 Methodology

The following table describes how the sample were divided into random groups and how the structures of the Wave 1 and Wave 2 surveys was compared. Note that in both waves and sample groups a device check was enabled to make sure that respondents took the survey on the intended device. Other than device there was no difference between Wave 1 and Wave 2 surveys. Respondents were asked to self-report the brands they shopped in both the surveys and were asked NPS questions on different brands based on their first survey responses. For the second survey the NPS question on different brands were asked only if it matched between the first survey and the second survey responses.

Panel randomly assigned to Group 1 (PC first) or Group 2 (Mobile first)

	Group 1 (PC first) 50% of sample	Group 2 (Mobile first) 50% of sample
Wave 1	Invitation requested the respondent to take the survey on a PC Device check prevented survey from being taken on a mobile device Respondents qualified NPS questions on qualified brands	Invitation requested the respondent to take the survey on a Mobile device Device check prevented survey from being taken on a PC device Respondents qualified NPS questions on qualified brands
Two week lag between Wave 1 and Wave 2		
Wave 2	Invitation Wave1 respondent to take the survey on a Mobile device Device check prevented survey from being taken on a PC device Qualified stores re-confirmed NPS questions on qualified brands	Invitation Wave1 respondent to take the survey on a PC Device check prevented survey from being taken on a mobile device Qualified stores re-confirmed NPS questions on qualified brands

Although the survey formatting and programming was the same for display on the PC and mobile device, the actual display can be different. The next set of figures demonstrates how the Likelihood to Recommend and the open-ended free response questions look at the two types of devices. Note that the mobile devices require scrolling right and left to see the full range of options. Also the mobile device's display requires more word wrap.

² The sample size was very small for Overstock.com and hence was excluded from the data analysis.

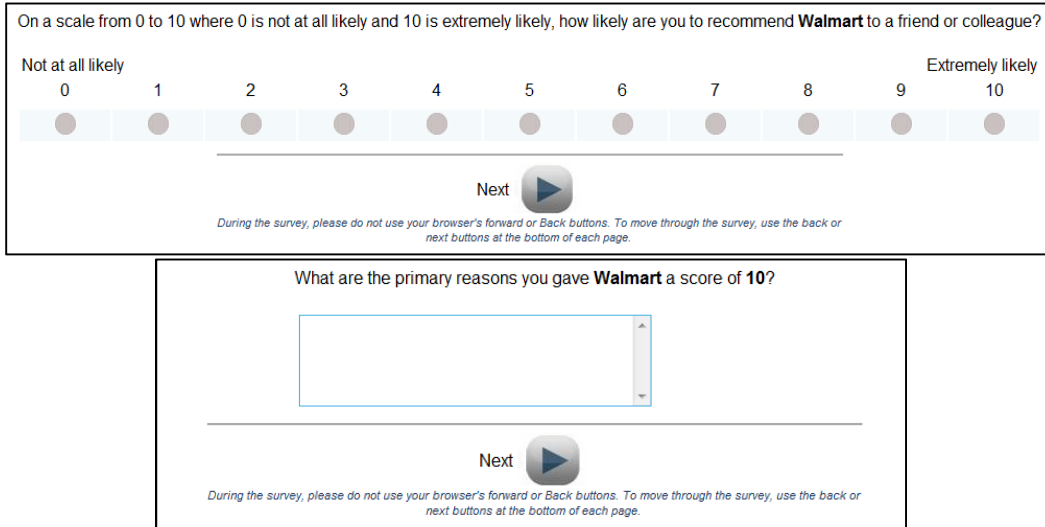


Figure 1: PC based survey screen shot of the NPS question “Likelihood to Recommend” and the follow-up open-ended text question

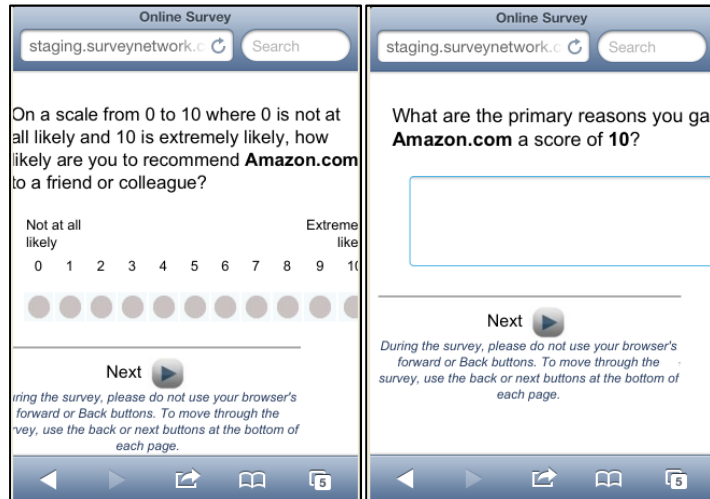


Figure 2: Mobile based survey screen shot of the NPS question “Likelihood to Recommend” and the follow-up open-ended text question

2.2 Hypothesis of the research

Our hypotheses focus on what we expect to observe when comparing the responses to the same survey questions when taken on PC or Mobile devices

1. We expect there may be differences between NPS scores from surveys taken on different devices, we hypothesize that the relative NPS scores will not be different. The relative positioning of brands along the NPS scale will be the same across devices. Thus, brands with the highest NPS scores on the PC will also have the highest NPS scores on the mobile devices.
2. While we expect that the distribution of responses to the Likelihood to Recommend question may be different across devices. It is possible that those who take the survey on a mobile device may use the lower or upper end of the 0 to 10 scale less often than those who take the survey on a PC. This could be in part driven by display effects or because the questions are more difficult to answer on a mobile device. If scale use is different between devices then we

would expect that the NPS scores could differ depending on the device. However, we believe in scale use will be larger for surveys taken on a Smartphone than for surveys taken on a PC device

3. Responses to multiple choice questions may invoke different attitudes when taken on a PC or a mobile device. We hypothesize that we may see differences in response patterns that can be attributed to more error in the mobile data, but we do not expect we see any differences in the overall rankings of which factors were identified as reasons to recommend.
4. Responses to open-ended questions may be easier or harder on one device compared to the other. Responding to these questions may be intuitively more inviting or interesting on one device compared to the other. We hypothesize that there may be differences in
 - a. The number of respondents providing answers to the open-ended questions
 - b. The amount of feedback generated on different devices
 - c. The nature and quality of the feedback generated

Analysis / Results of the research work

Result 1- We hypothesized that we would find differences in NPS scores across devices. However, we found no significant differences in NPS scores / Likelihood to Recommend (0 to 10) scores across different devices. We also checked whether there were any differences between how people answered the NPS question across Wave 1 and Wave 2.

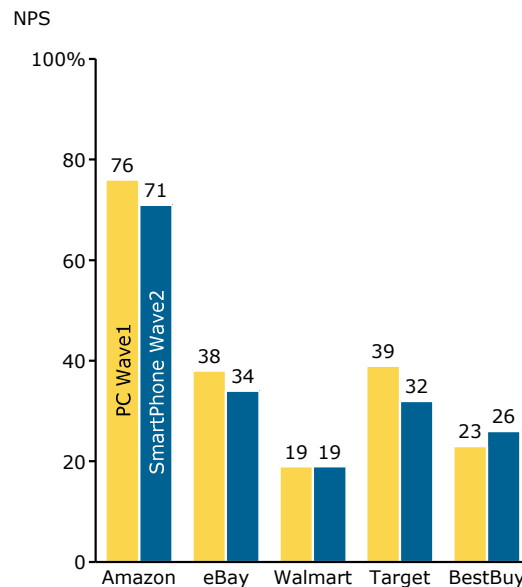


Figure 3: Comparison between the same set of respondents who took the Wave1 survey first on PC and Wave2 survey on mobile devices

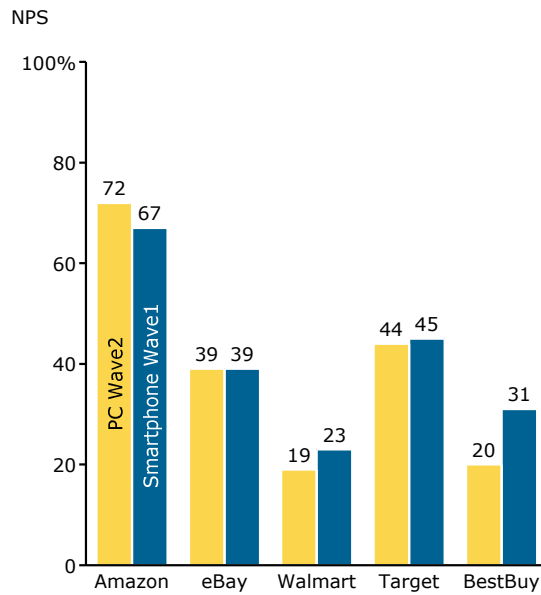


Figure 4: Comparison between the same set of respondents who took the Wave1 survey first on mobile devices and Wave2 survey on PC

Result 2- We found no significant differences in how respondents responded to the Likelihood to Recommend (0 to 10 scale) question on PC and Smartphones. However, there was a pattern that suggested that respondents who select “10” for the first survey regardless of a device are somewhat more likely to select “10” in their second survey.

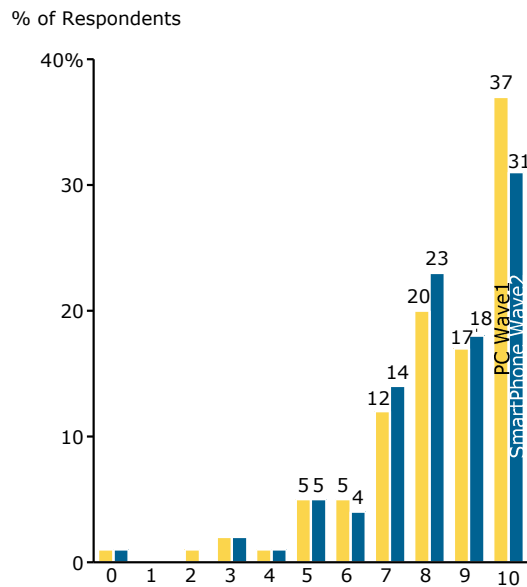


Figure 5: Respondents from PC Wave1/Smartphone Wave2- Weighted average of all brands (Amazon.com, BestBuy, Ebay, Target, Wal-Mart) for all respondents on Likelihood to Recommend (0to 10 scales) question

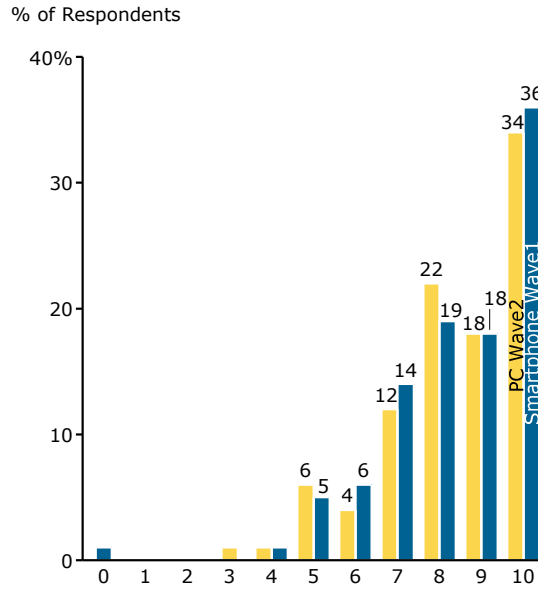


Figure 6: Respondents from PC Wave2/Smartphone Wave1 – Weighted average of all brands (Amazon.com, BestBuy, Ebay, Target, Wal-Mart) for all respondents on Likelihood to Recommend (0 to 10 scale) question

Result 3– We see no significant differences between multiple choice questions asking respondents to select the reasons why they would recommend a brand on a list of attributes. In the next two figures we show the distribution of responses for Amazon. Different brands were recommended for different reasons but the charts looked the same in that there were no differences in the relative height of of the bars between devices

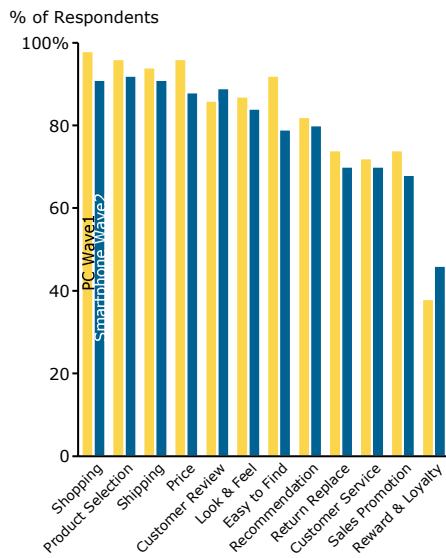


Figure 7: Respondents who selected Amazon as one of their current retailers and recommended Amazon on various attributes both on PC Wave1/Smartphone Wave2 devices

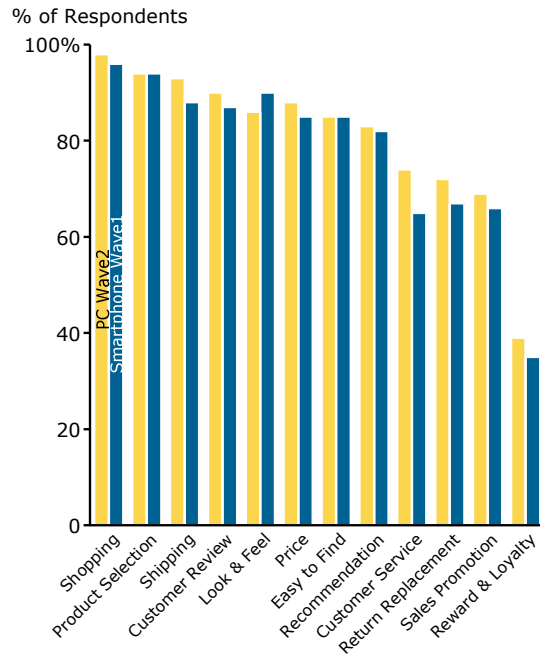


Figure 8: Respondents who selected Amazon as one of their current retailers and recommended Amazon on various attributes both on PC Wave2/Smartphone Wave1 devices

Result 4— There are no significant differences in a number of positive/negative referrals by respondents on any of the brands by different devices

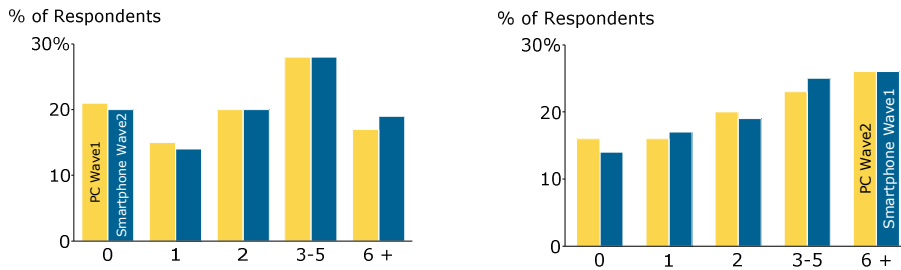


Figure 9: Number of positive referrals by respondents for Amazon both on PC Wave1/ Smartphone Wave2 device

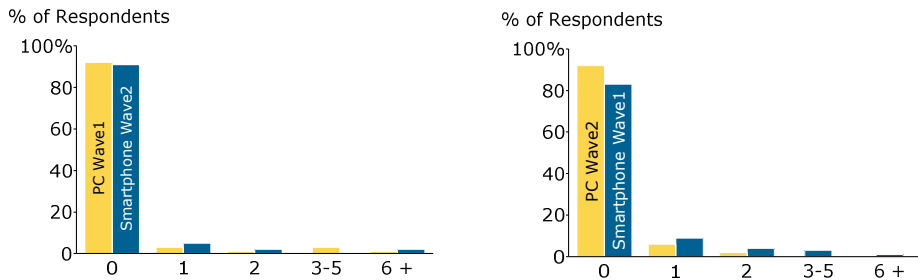


Figure 10: Number of negative referrals by respondents for Amazon on PC Wave2 / Smartphone Wave1 device

Result 5– Open-ended text responses were compared on three dimensions: the number of people who provided comments, the themes that were mentioned in the open ended responses and the quality and depth of the sentences provided in the open ended responses. There were no differences in the number of people answering the open ended questions.

A code scheme was developed using all the PC and Mobile surveys where responses were categorized into different themes. Each survey was then coded as to whether or not each theme was mentioned in the respondents answer. Comparisons were then made between the frequency with which themes were mentioned in each device. There were no significant differences in device effect between potential themes identified by brand. However, there is suggested pattern that respondents are probably telling more about a brand and comparing to its competitors on PC than on Smartphones



Figure 11: Open-text question by same respondent for a given brand on PC (Orange call-outs) and Smartphone (Blue call-outs)

Conclusion

Based on our analysis of comparing responses from different devices on multiple brands we find no significant differences in responses across different devices. On an aggregated level NPS scores / Likelihood to Recommend (0 to 10) scale values indicated no difference between PC and Smartphone results. Also comparing multiple choice questions and open ended text format answers gave us the same results. Hence, we feel comfortable with results from online surveys that may have both PC and Mobile based responses. Business conducting customer loyalty surveys in particular NPS surveys should be able to compare their results without any issue of device biases in their data. However, it is important to keep in mind the format of the question and how it is displayed on the screen for PC and Mobile devices.

Our analysis compared responses to identical NPS[®] survey questions on PC and Smartphone devices. We found no significant differences in responses to the Likelihood to Recommend questions, multiple choice questions asking about the drivers of recommendation, or the number of recommendations made. While we found some differences in the number of words used to respond to open-ended questions, we found that the information and insights derived from open-ended questions were the same. The NPS[®] scores calculated from the data were statistically identical between device for all brands tested.

Business leaders make large investments based on their desire to improve their NPS[®] scores relative to competitors. They look for information from the closed and open ended text answers to help them understand where to make investments. If we had found differences due to device business leaders would be justifiably concerned that the insights from NPS[®] surveys would be muddled by differences in the mix of device from one time period or brand to another.

Fortunately, by carefully controlling for differences in sample we have been able to demonstrate that the device is not a driver of differences in how respondents answer the NPS[®] questions. Even if the percent of respondents taking the survey on mobile device continues to grow, this should not be a reason to suspect differences in NPS[®] over time. If businesses do see differences in NPS scores between devices it may be better to attribute these to differences in the sample – either in terms of how the sample is recruited and invited to participate or self-selection in terms of which device a person prefers to use to respond to the NPS survey. It is also important to keep in mind the format of the questions and how are they displayed on the screen for PC and Mobile devices. Regardless, businesses should feel comfortable mixing responses from online and PC-based surveys to the degree that they feel that the pooled samples are representative of their customers.

Future Research Steps

Of course, there will continue to be more research to do to explore how the growing use of mobile devices will impact market research surveys and NPS[®] customer feedback surveys. In particular we think that the study should explore whether this holds true for business-to-business surveys and across countries. There is also potential to explore whether location based surveys will provide different and perhaps better insights in certain circumstances when compared to surveys taken on a PC – remote from the occasion of service or consumption experience.

Acknowledgements

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