Join the Mobile Movement & Optimize Your Surveys

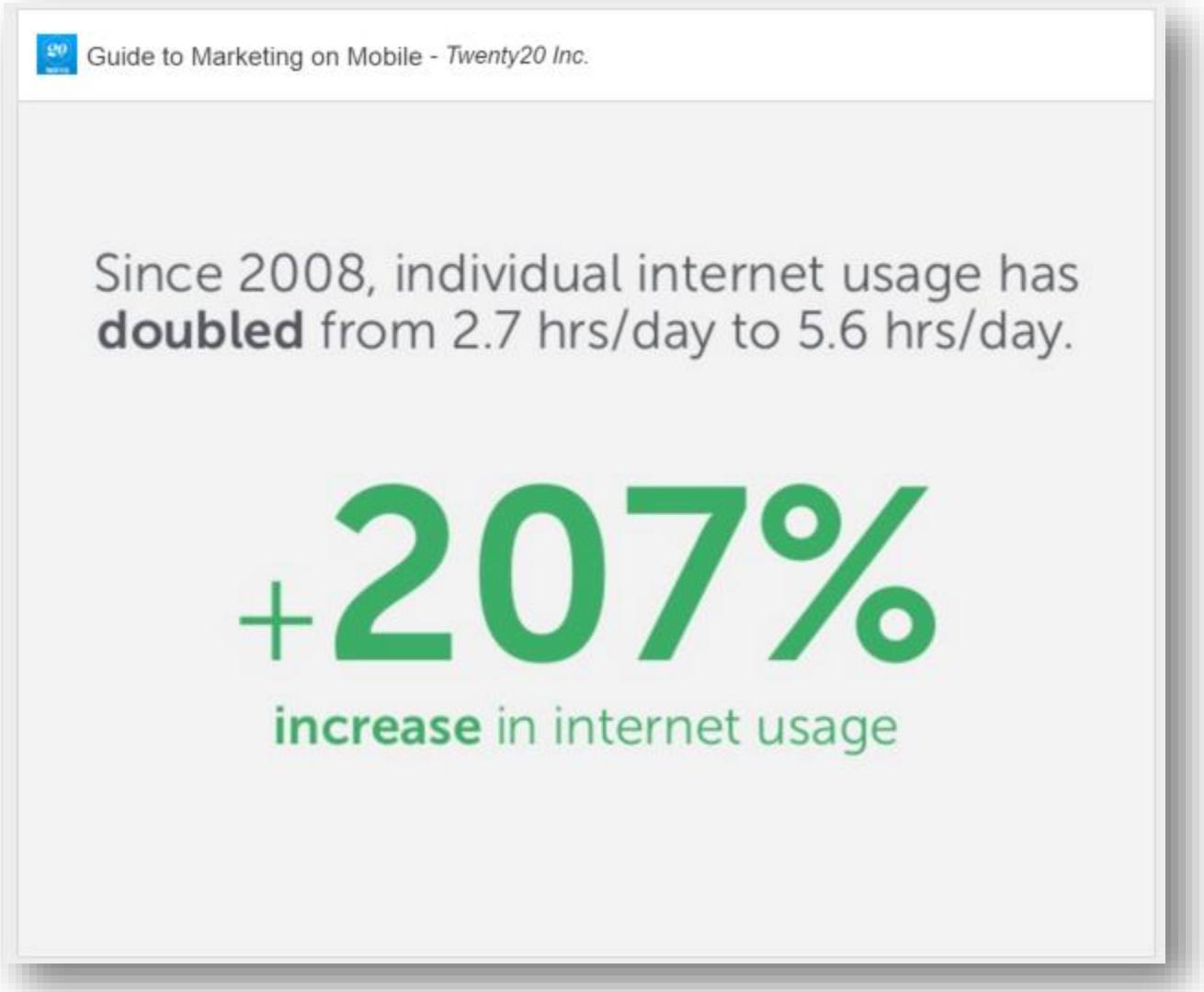
Agenda

- Best Practices for Mobile Research
  - General Interviewing
  - Choice Experiments
- Lighthouse Studio v9.1 Mobile Features

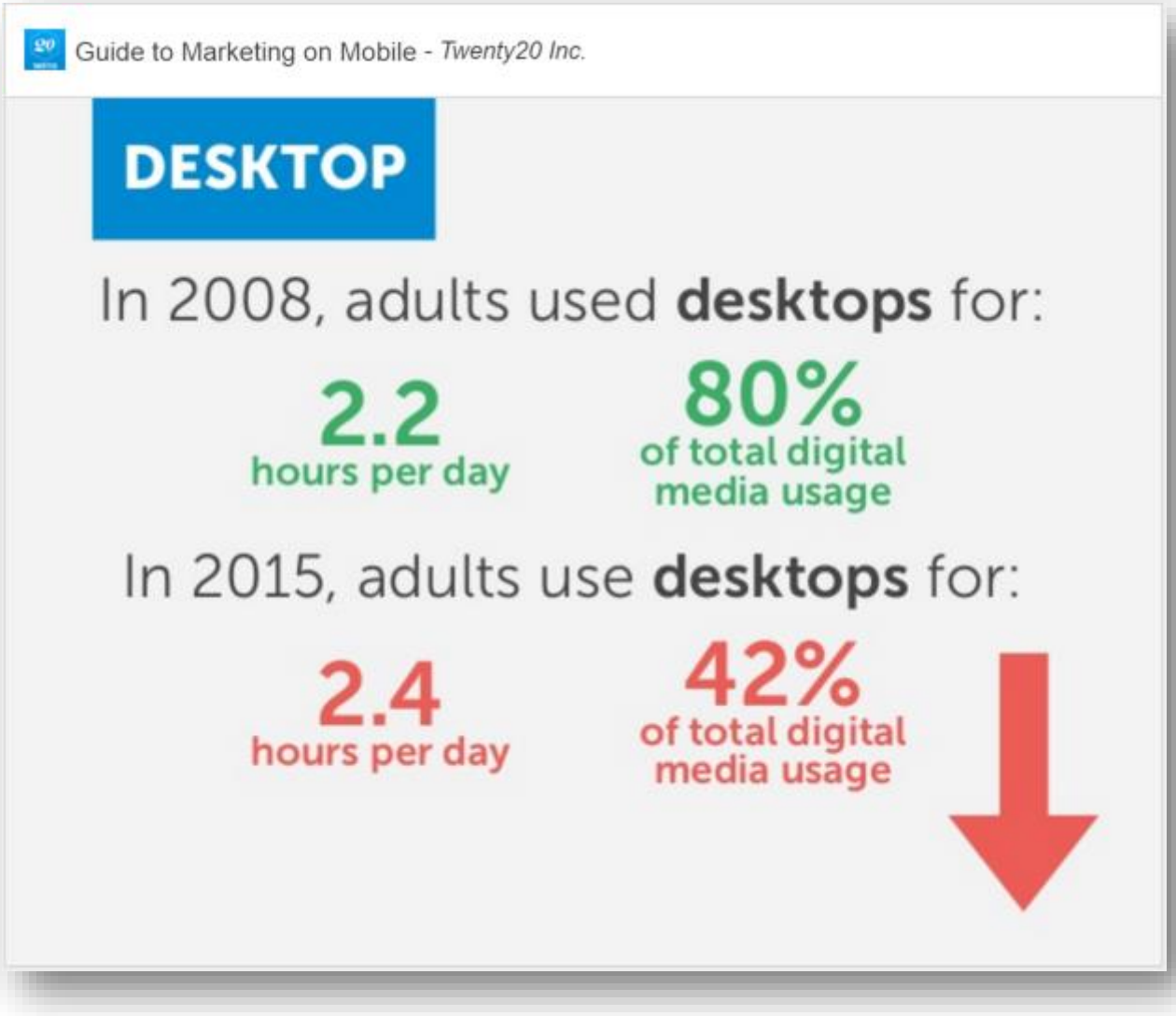
Why are we here?

Research is evolving!

Consumers are evolving too!



Source - http://www.slideshare.net/MicahCohen1/guide-to-marketing-on-mobile/8-22hours_per_dayIn_2008_adults



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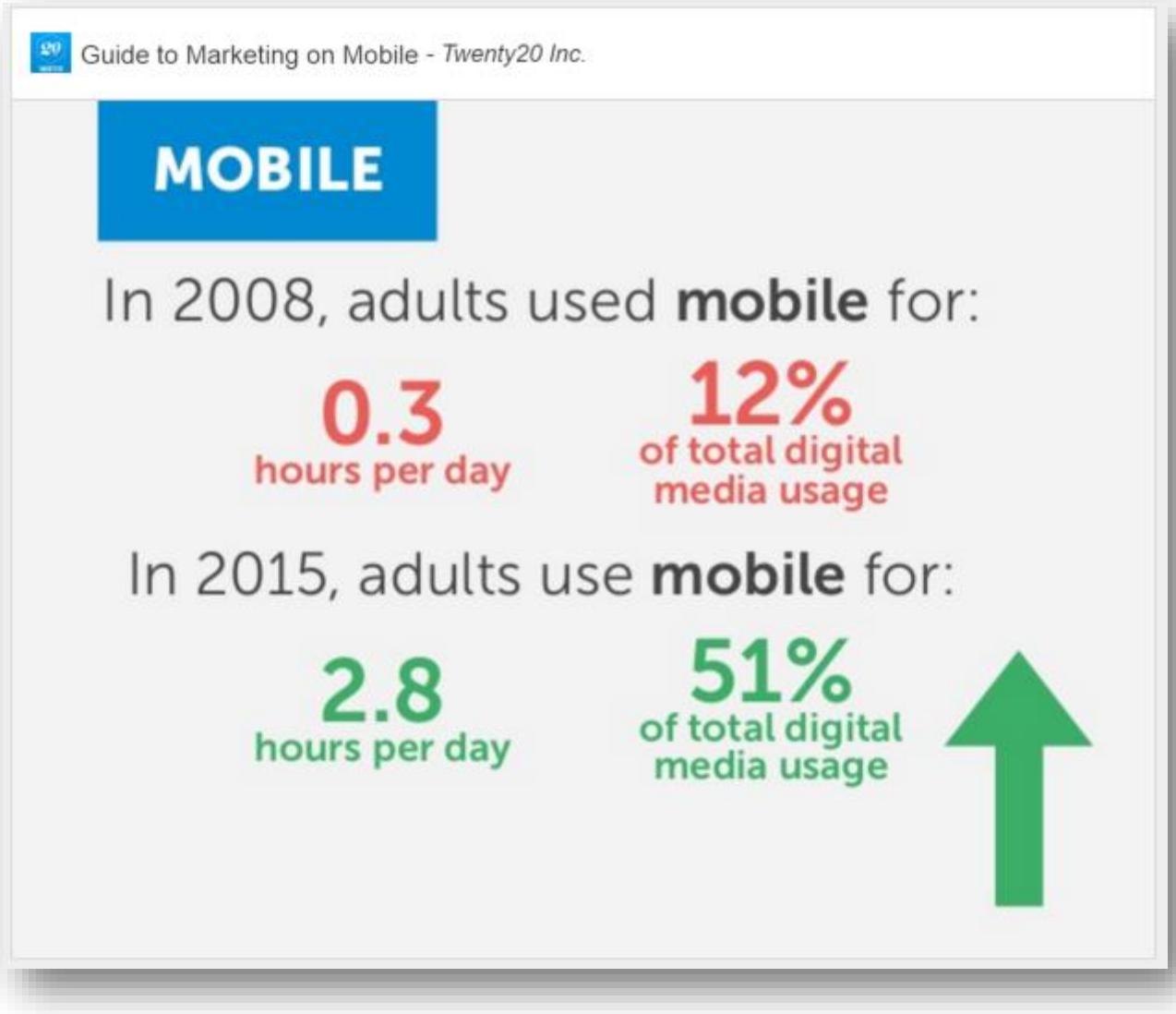

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And if that wasn't enough…

- 91% of adults keep their smartphones within arm's reach. (Source: Morgan Stanley)
- Twenty five percent of Americans use *only* mobile devices to access the Internet. (Source: GoMoNews.com)
- There are 5x as many cellphones in the world as PCs. (Source: ImpigoMobile)
- 31% of all survey starts were on mobile devices in the second quarter of 2015, with an additional 8% coming from tablets. (Source: MaritzCX)

If consumers are interacting with brands on their mobile devices…

…Then researchers have the opportunity to interact with consumers on their mobile devices.

But, some of us aren't there yet…

- While most surveys can be opened and viewed on mobile devices, they are typically designed to be taken on a computer.

- What are the risks?
  - Respondent fatigue
  - Poor user experience
  - Poor data quality
  - Increased drop-off rates
  - Demographic misses

Specifically, mobile vs. desktop sample is different

- Significant difference in age distribution between mobile (younger, <35) and desktop
- Females are more likely to use mobile
- Employment higher in mobile
- Tablet sample tends to aligns closer to desktop sample
- Mobile can capture lower income respondents (<$30,000) who don't have a computer in the home
- Mobile does a better job at reaching minorities, particularly African Americans and Hispanics

Source - https://www.researchnow.com/mobile-impact-research-missing-infographic/

Best Practices for Mobile Surveys

- Step 1 – Programming
  - Use a survey platform with a responsive design where a respondent's screen size is recognized when entering the survey and the template adapts accordingly
  - Use a survey design that avoids horizontal scrolling, as this can lead to poor user experience

Best Practices for Mobile Surveys

- Step 2 – Questionnaire Development
  - No grid questions – Reformat to single selects
  - Shorter scale lengths (5 or 7 point scales, preferably end-anchored)
  - Fewer number of answer choices
  - Shorter LOI (dependent on survey topic)
  - Be concise, use shorter text

Best Practices for Mobile Surveys

- Step 2 – Questionnaire Development (cont.)
  - No Flash, no streaming
  - Optimize images
  - Consider modularizing the survey
  - Always test your survey on a mobile device, a tablet and a PC prior to fielding
  - After making all of these changes and you still don't feel comfortable with a certain question type being asked of mobile, use skip logic

Can I really move from grids to single select?

- For web surveys, past research has not found a significant difference in survey means and little or no effect on response distribution by altering the scale from horizontal to vertical.
  - Couper, Traugott, Lamias. 2001. "Web Survey Design and Administration." Public Opinion Quarterly 65: 230-53.

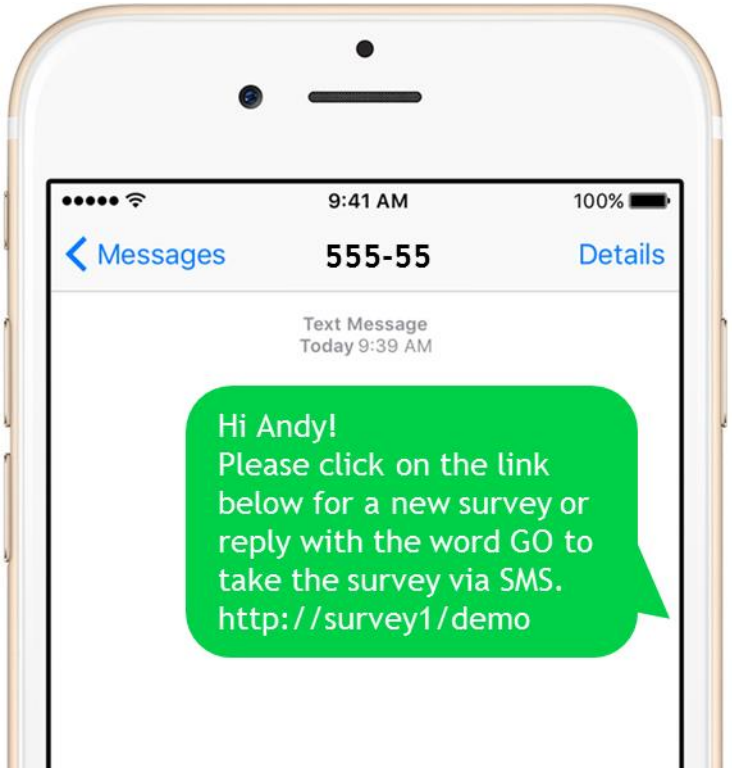
Which is better? Vertical scrolling or separate pages?

- The findings are diverse and there is no clear winner in terms of survey participation, completion rates, or non-response bias.
- That being said, spreading information over several screens can increase LOI. Since scrolling results in a lower LOI, a respondents survey experience may be better.
  - Bruijne, Wijnant. 2014. "Improving Response Rates and Questionnaire Design for Mobile Web Surveys." Public Opinion Quarterly 78: 951-62.
  - Mavletova, Couper. 2014. "Mobile Web Survey Design: Scrolling versus Paging, SMS versus E-mail Invitations." Journal of Survey Statistics & Methodology (2014) 2 (4): 498-518.

Want to get more people to take your survey on their mobile device?

- Consider an SMS invitation, which is more efficient compared to e-mail in encouraging mobile participation.

- 90 percent of text messages get read within 3 minutes of delivery. (Source: ImpigeMobileStrategy.com, 2011)



What about choice experiments?

- "Responders who choose to complete surveys in a mobile environment are able to do so reliably, and we should therefore not exclude those folks from choice experiments based on assumptions of the contrary. In light of the potential for capturing different segments in terms of preferences, we should actually welcome the increased diversity offered by presenting choice experiments in different web environments."
  - "Choice Experiments in Mobile Web Environments", White, 2013 SS Conference Proceedings, pg 69

Best Practices for Choice Experiments

- No need to oversimplify conjoint designs for mobile…
  - Research shows that respondents were able to complete very complicated conjoint tasks (4 concepts, 17 tasks, 10 attributes) with little difficulty or degradation in survey experience.
  - Respondents can comfortably cope with up to 10 attributes when attribute text is light.
  - Very few differences in importances or utility scores across the experimental conditions.
  - Diagnostics such as hit rates and MAE are largely comparable across the experimental conditions.
  - Research has shown comparable interview time between conjoints conducted on a mobile device and a PC.
  - Not surprisingly, respondents using a tablet have a better conjoint experience and better diagnostic scores than respondents using a smartphone. However, differences are not large enough to be concerning and both modes perform highly.

Source - Diener et al. 2013, White 2013, Kurz & Rausch 2016, Moore & Neuerburg 2016

Best Practices for Choice Experiments

- But it's always best to keep things simple.
  - Limit the number of concepts to what you deem is feasible for a respondent to evaluate.
    - 2 to 4 concepts is great with a lot of attributes
    - However, in the FMCG category, a CBC with just brand and price could show 8 to 12 concepts at a time
  - Ask more tasks
  - Consider designs where the attribute order is changed across different versions, particularly if using a responsive platform.
    - Lighthouse Studio has an option for this to be done automatically

Horizontal vs. Vertical CBC

- Vertical/ Stacked CBC is promising for mobile and exploratory research shows results are similar to a horizontal CBC (Moore, 2016). However, more research is needed to have a stronger understanding of the two approaches in comparison.

- From a high level, we can feel confident that vertical scrolling is a good option and would recommend continuing to field multiple versions of the exercise, as well as rotating the order of the attributes within the concepts (even though initial research suggests there is not any positional or order bias in the vertical CBC approach).

What about MaxDiff?

- Research from Yeh and Hanlon shows that device type does not significantly impact MaxDiff results.
  - MaxDiff scores across devices (Mobile, Tablet, PC) result in similar conclusions, predictiveness, and model fit.
- When modeling, as long as devices make up even proportions of the sample, pooled estimation of utilities provides the same results as estimation based on isolating each device.
  - Consider using a covariate or weights based on device type and always consider looking at results by device type.

Best Practices for MaxDiff Experiments

- Recommendations are the same for MaxDiff as Conjoint – be concise, use fewer items/screen but more tasks, etc.

- Future results on the appropriate number of items to show/screen, the number of screens, and the impact of the complexity/length of the items is to be shown at the Sawtooth Software 2016 conference.

Mobile MaxDiff: What Are the Optimal Number of Attributes, Screens and Level of Information Complexity? Michael Patterson, *Radius Global Market Research*

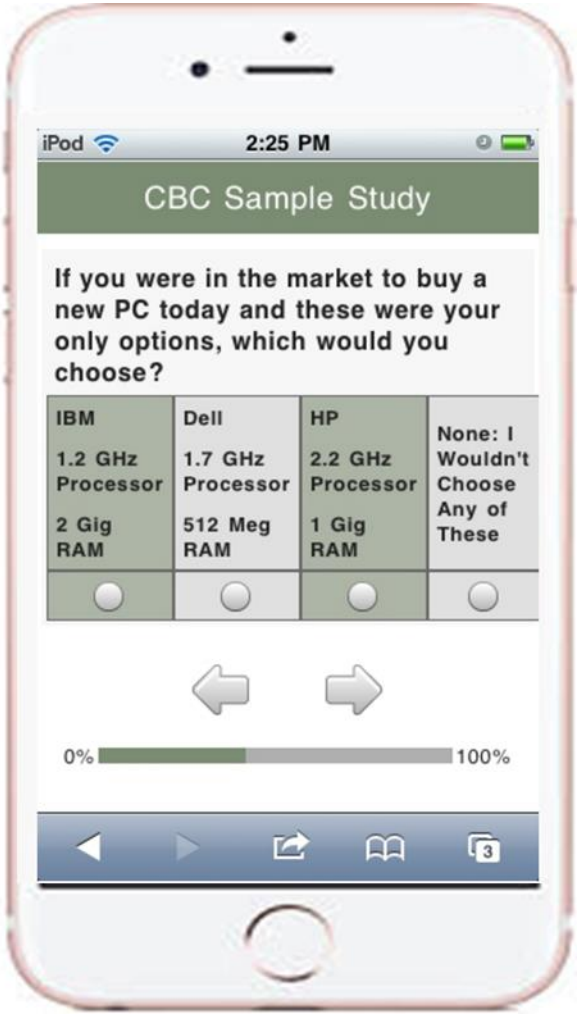
As research on mobile devices continues to increase, it is important to understand potential limitations associated with various analytic techniques. In this paper, we explore the impact that the number of items, the number of questions and the level of complexity of information have within MaxDiff exercises.

Choice Based Conjoint in a Mobile World – How Far Can We Go? Chris Moore, Christian Neuerburg, *GfK*

Given that more than two-thirds of panel respondents have used mobile devices to answer surveys, we conduct the most comprehensive study known using an 18 split-sample design and more than 6,800 (real) respondents to evaluate what effect different conjoint designs have on conjoint data. We derive concrete suggestions for optimizing CBC studies within a mobile environment.

Bottom Line

You can conduct choice experiments on mobile devices if you follow these recommendations!



MOBILE IMPROVEMENTS IN V9.1

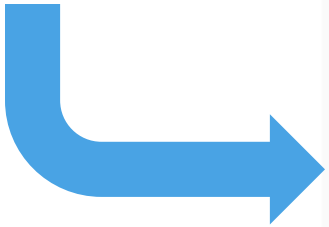
Mobile Grid Layout

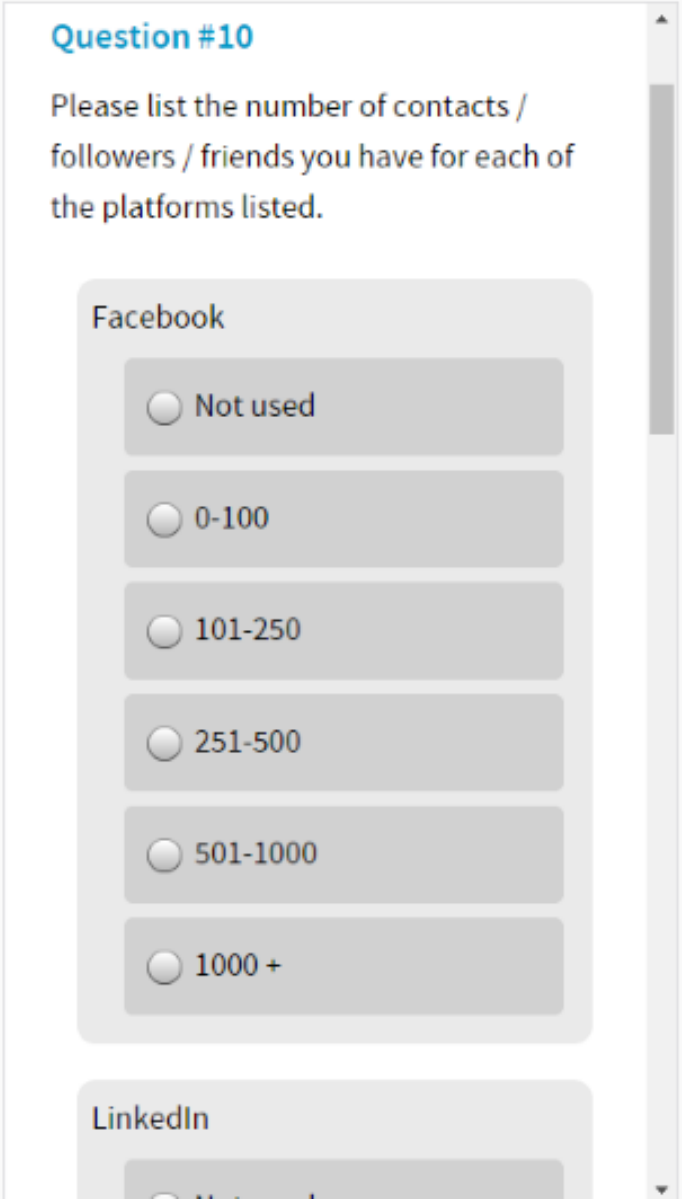
- Lighthouse Studio v9.1 automatically detects the size of the respondent's browser window and changes the layout of a grid question to be more usable on small screens (mobile devices etc.).
  - On small screens, each row (or column) of the grid question becomes a separate sub question on the same page.
  - This feature may be turned off if you prefer the standard layout on small screens.

Question #10

Please list the number of contacts / followers / friends you

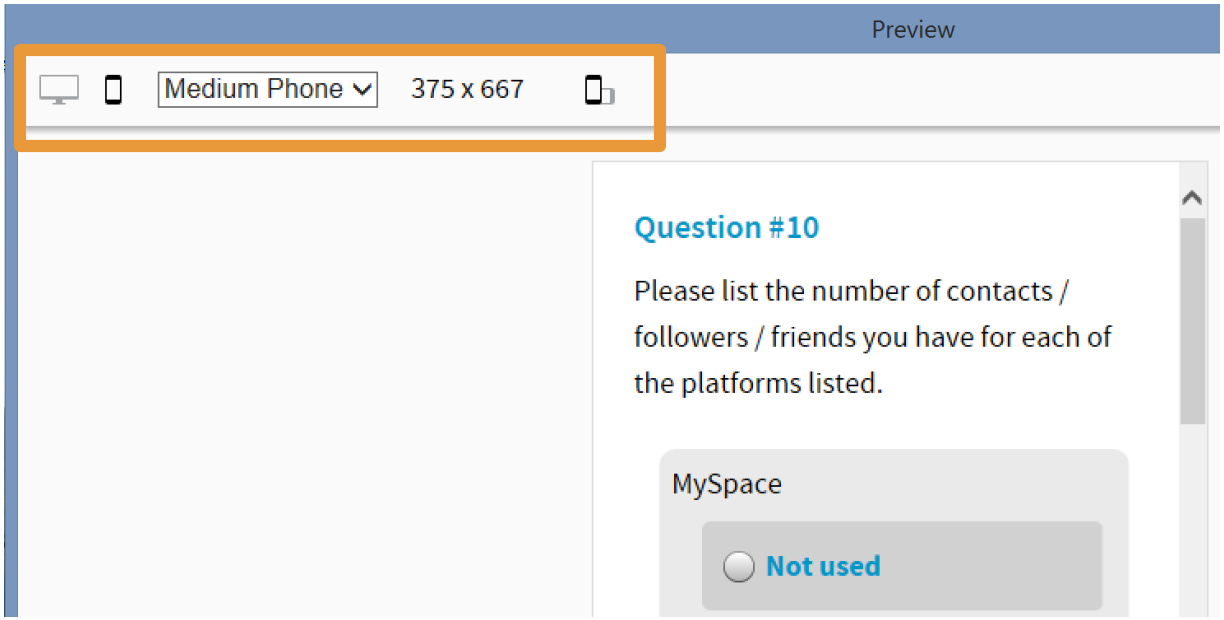
	Not used	0-100	101-250
Facebook	○	○	○
LinkedIn	○	○	○
Twitter	○	○	○
YouTube	○	○	○





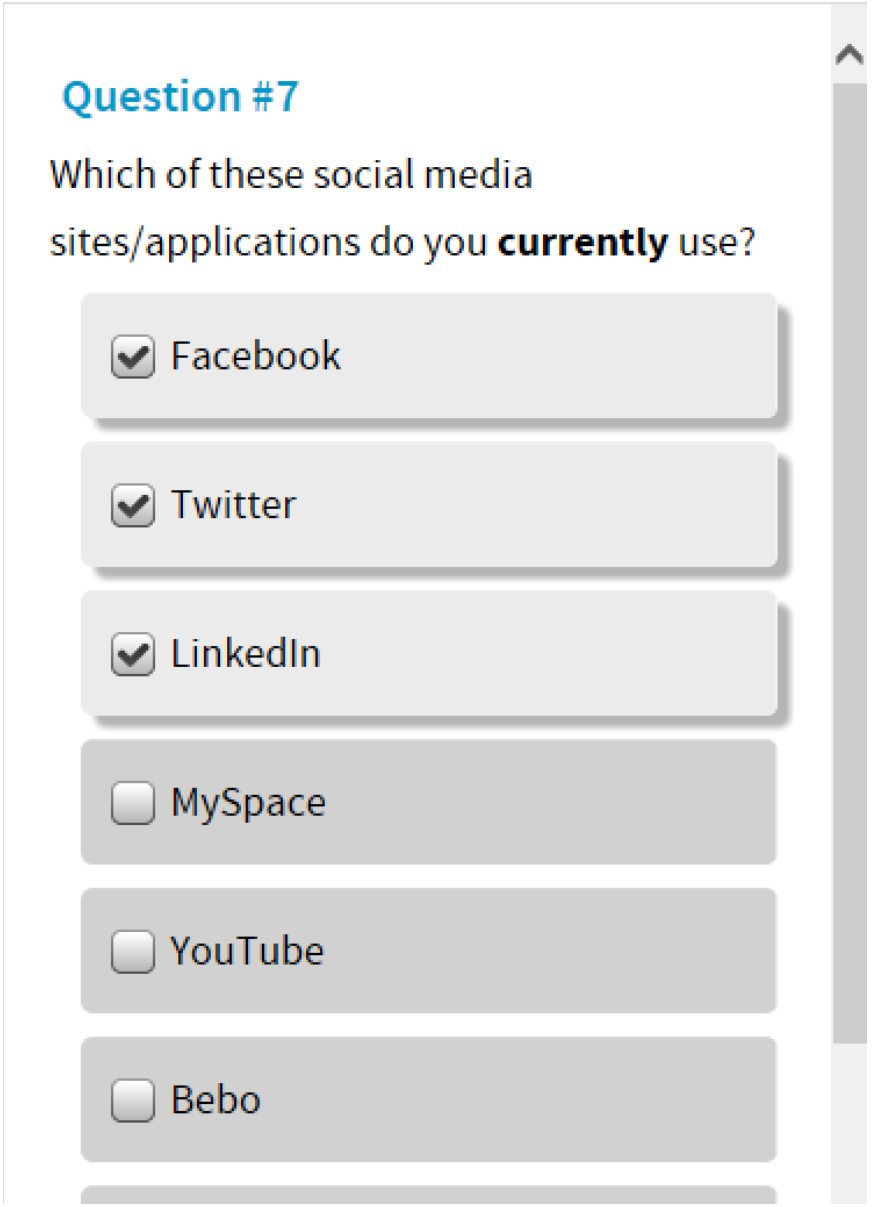
Mobile Testing

- Test and preview mode have been updated to simulate viewing a survey on a small screen.
  - You can additionally change screen dimensions and switch between portrait and landscape mode.



Select Question Update

- Responses to Select questions are now easier to choose on mobile devices.



New ScreenWidth() Sawtooth Script Function

- ScreenWidth() has been added to the scripting library and will return the respondent's browser width in pixels. This can be used in skip logic, quota control, etc.

- Screen width is also now available on data export. This will help you determine how many of your users are on mobile devices.

Test Your Images

- Wide images can “blow out the side” when viewed on a small screen. Consider adding max-width: 100%.

```
<img src="banner.jpg" style="max-width: 100%">
```

CSS for Small Screens

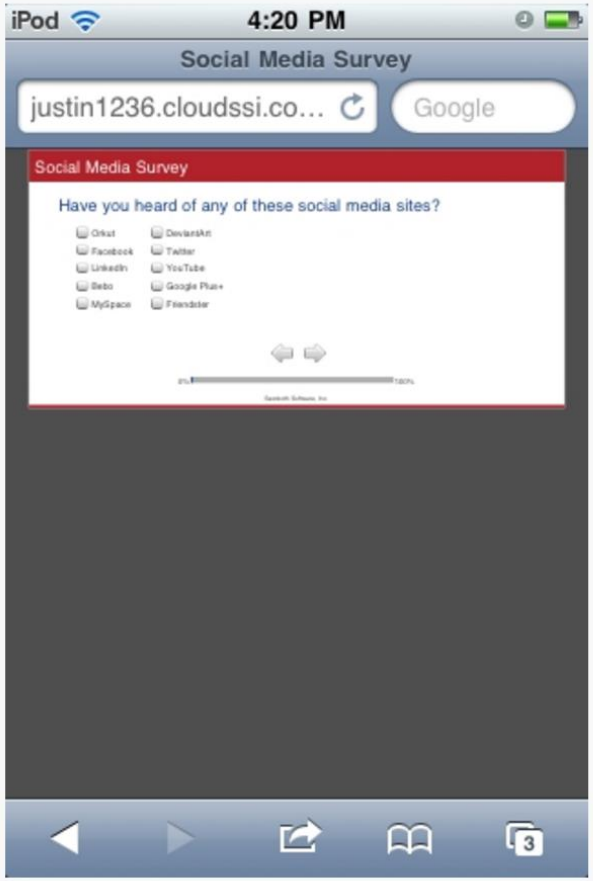
- Add specific CSS style rules for small screens.

```
@media only screen and (max-width: 800px)
{
    .question
    {
        width: 100%;
        padding: 5px;
    }
    img
    {
        max-width: 100%;
    }
}
```

- New to CSS? See: http://www.w3schools.com/css

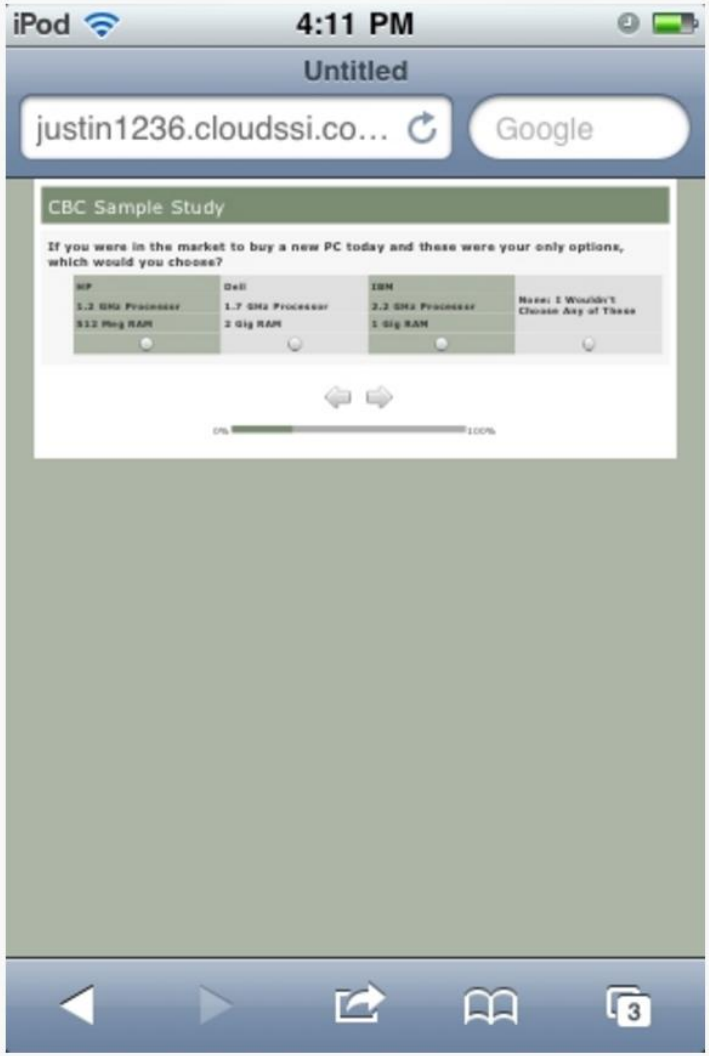
And don’t forget the improvements we made during v8!

Before



After

Before



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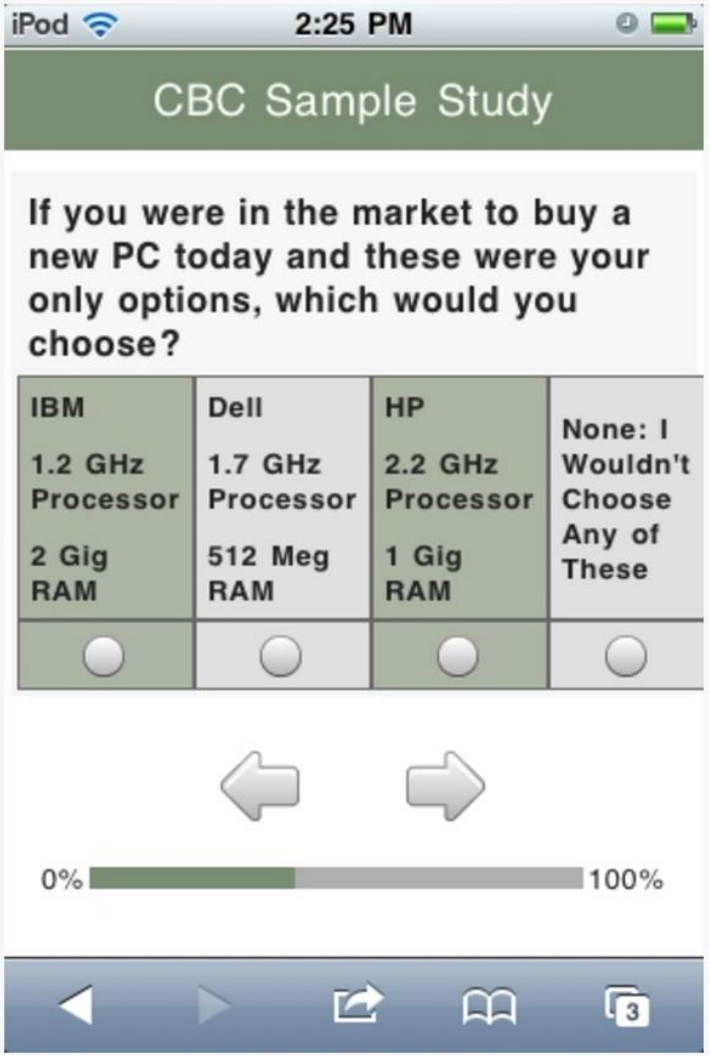

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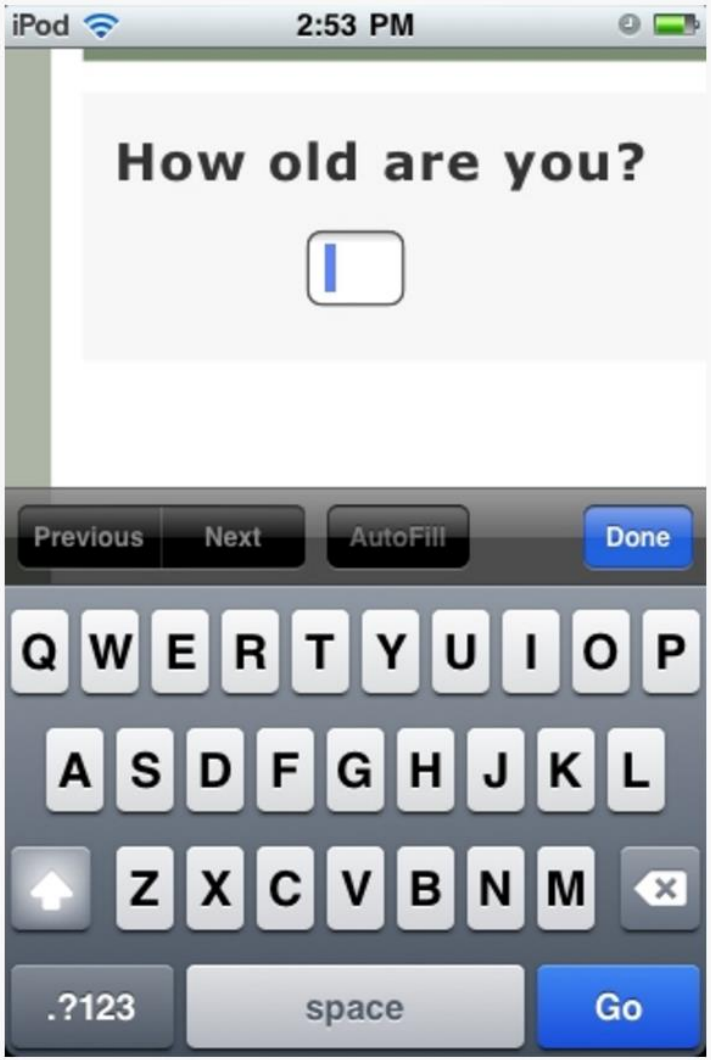

After

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Resources

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- Mavletova, Couper. 2014. "Mobile Web Survey Design: Scrolling versus Paging, SMS versus E-mail Invitations." Journal of Survey Statistics & Methodology (2014) 2 (4): 498-518.
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- White, Joseph. (2013). Choice Experiments in Mobile Web Environments. Proceedings of the 2013 Sawtooth Software Conference, Dana Point, CA. October 2013.
- Yeh, J, Hanlon, L. (2015) MaxDiff on Mobile. Proceedings of the 2015 Sawtooth Software Conference, Orlando, FL. March 2015.