

Usability & User Satisfaction with the 2020 Census Online Questionnaire

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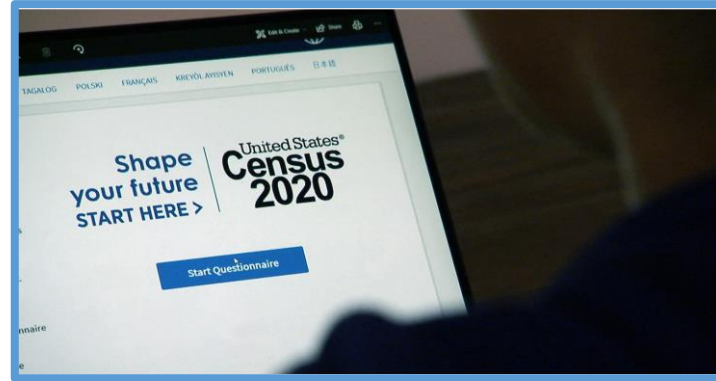
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Background: User Testing from 2012 to 2019 & the UX Survey

Usability testing:
Across the Decade



User
Experience
(UX) Survey

2012

2014

2015

2016

2017

2019

2020

2020

Census Day
April 1, 2020

Research Questions

- What is the user experience (satisfaction) of respondents with the online 2020 Census?
- What issues were people experiencing with the online 2020 Census?
- How do the results from the UX Survey compare with results from usability testing throughout the decade?
 - Did Decade Testing predict UX Survey results?
 - Were there limitations of Decade Testing?



Methods: Decade Testing

- Before each field test, 5 to 10 participants from metro DC area and different cities around the country completed questionnaire while thinking aloud
 - Answer census questions as they pertain to their real lives
 - Answer satisfaction and debriefing questions
 - Answer on PC, Smartphones & Tablets
- One-on-one sessions with test administrator & participant
- Video/audio recordings
- Analyzed user behavior and user comments to understand issues with the online instrument, provide recommendations to improve design, retest in next field period or next round

Methods: UX Survey

- Questions developed by team working on decennial census and who had conducted usability testing on the online census questionnaire
- Usability test results informed questions & response options
 - Overall satisfaction with the online 2020 census questionnaire
 - Reasons why satisfied or dissatisfied
- Sample of respondents from across the country texted link to 3-minute survey about experience completing online 2020 Census

Results

Issues we saw in both Decade Testing & UX Survey

Satisfaction Questions

Decade Testing

1. Overall reaction to the Web Survey:

Terrible 1 2 3 4 5 6 7 Wonderful NA

9. Overall experience of completing the survey:

Difficult 1 2 3 4 5 6 7 Easy NA

UX Survey

How satisfied were you with the experience of filling out your 2020 Census questionnaire online?

Very satisfied

Somewhat satisfied

Neither satisfied nor dissatisfied

Somewhat dissatisfied

Very dissatisfied

I don't remember

Someone else filled out my census questionnaire

Satisfaction Measures:

Very similar between two methods

User Testing

- Average score for ease of completing the survey across the decade was 86.3 out of 100.
- Average score for overall experience of the survey across the decade was 79.6 out of 100
- Generally positive satisfaction

UX Survey

- 75% of respondents said they were **very satisfied**
- 11% reported being **somewhat satisfied** with their experience completing the 2020 Census
- Generally positive satisfaction

Comparing Satisfaction: Decade Testing & UX Survey

- Decade testing satisfaction rates were indicative of what we learned in UX Survey
- Satisfaction questions were different but the sentiment of satisfaction in both methods reveal users generally satisfied with online census



Mobile Satisfaction: Decade Testing

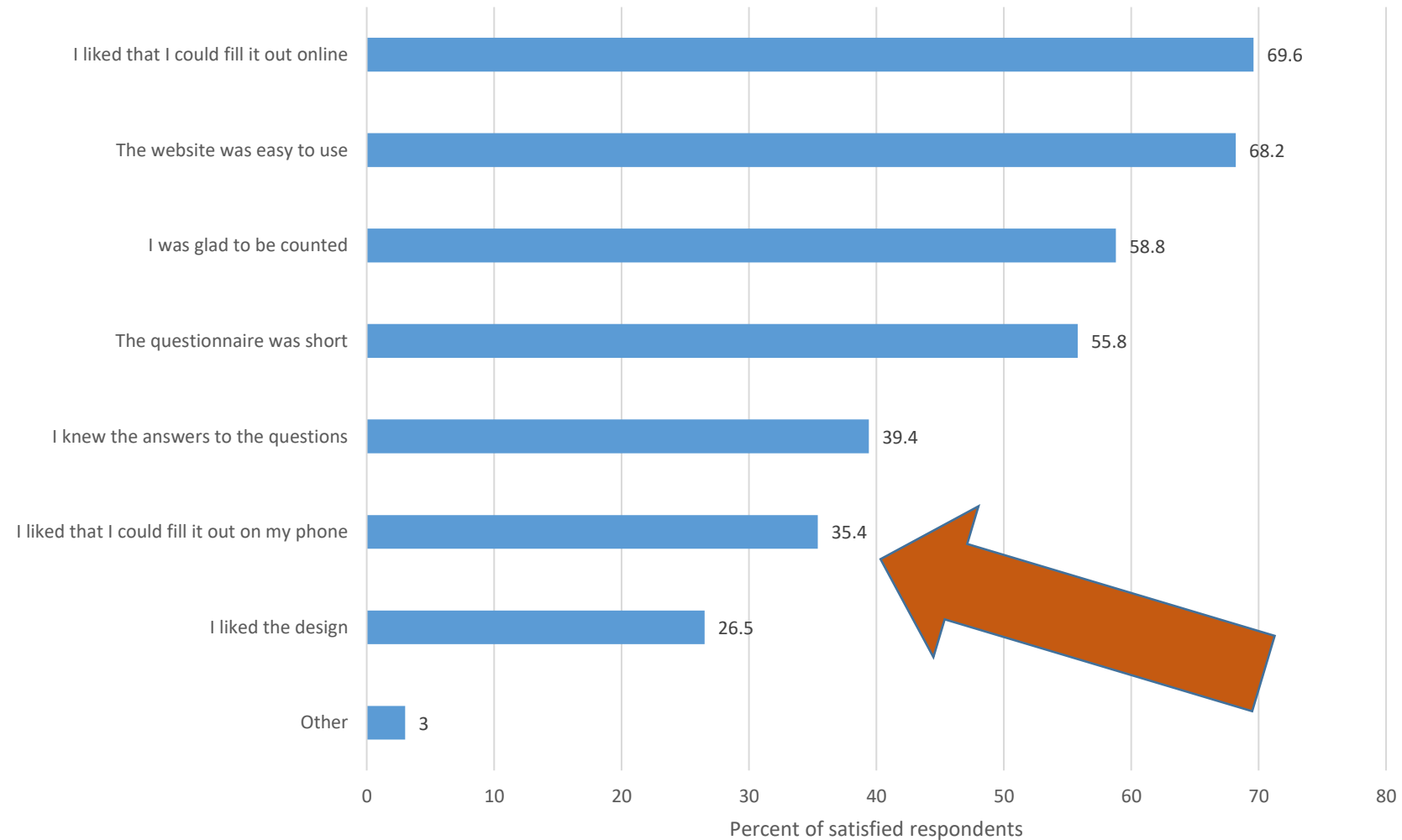
- Decade Testing –census on smaller screens
- Refined following responsive design & user feedback
- By 2020 mobile user experience was looking pretty good. UX Survey confirmed this.



UX Survey Satisfaction with Mobile

Reasons for satisfaction with the online 2020 Census

- UX Survey: Mobile satisfaction is high
- Of those satisfied with the 2020 online census, 35% reported liking ability to answer on mobile



Comparing Satisfaction with Mobile Design: Decade Testing & UX Survey

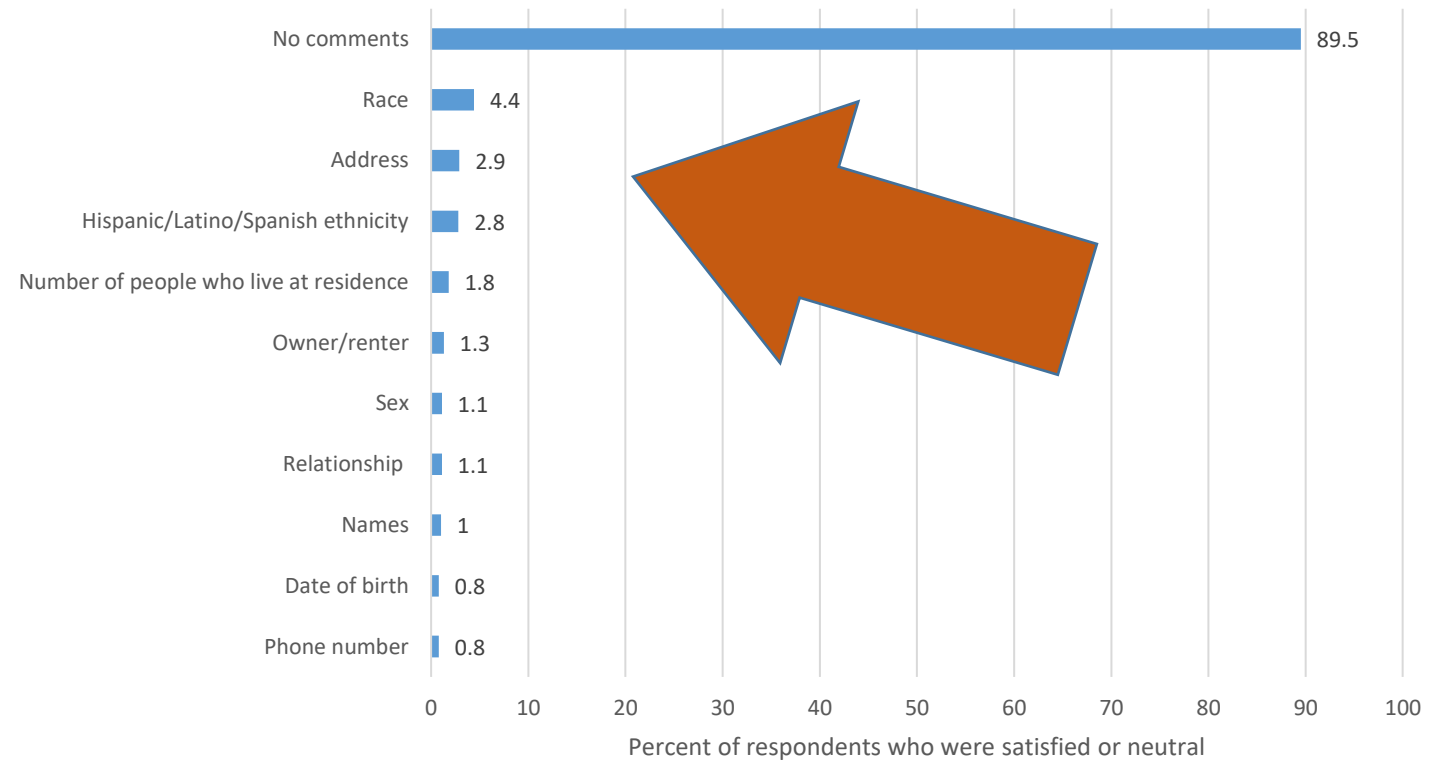
- Decade testing on mobile were indicative of what we learned in UX Survey



Comparing User Comments: Decade Testing & UX Survey

- Most respondents did not offer comments on questions in UX Survey
 - Focus in this talk on comments collected to top 3

Comments on the questions in the 2020 Census



Order and Design of Hispanic Origin & Race Question

- 2020 Census asked the Hispanic Origin question followed by the Race question

Hispanic Origin Question

Is Jane D Doe of Hispanic, Latino, or Spanish origin? ([Help](#))

No, not of Hispanic, Latino, or Spanish origin

Yes, Mexican, Mexican American, Chicano

Yes, Puerto Rican

Yes, Cuban

Yes, another Hispanic, Latino, or Spanish origin

Enter, for example, Salvadoran, Dominican, Colombian, Guatemalan, Spaniard, Ecuadorian, etc.

Race Question

What is Jane D Doe's race? ([Help](#))

Select one or more boxes **AND** enter origins. For this census, Hispanic origins are not races.

White

Enter, for example, German, Irish, English, Italian, Lebanese, Egyptian, etc.

Black or African American

Enter, for example, African American, Jamaican, Haitian, Nigerian, Ethiopian, Somali, etc.

American Indian or Alaska Native

Enter name of enrolled or principal tribe(s), for example, Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, etc.

Chinese

Filipino

Asian Indian

Vietnamese

Korean

Japanese

Other Asian

Enter, for example, Pakistani, Cambodian, Hmong, etc.

Native Hawaiian

Samoan

Chamorro

Other Pacific Islander

Enter, for example Tongan, Fijian, Marshallese, etc.

Some other race

Enter race or origin.

Feedback on Race & Hispanic Origin Question:

Very similar between two methods

Decade Testing

- “Why Hispanic origin and race are not just one question all together?”
- “It’s just plain white... I don't identify any other way other than just American.”
- “I’ve never heard of ‘Chamorro’ but Hispanic is not there.”
- “It's pushing me. It wants an answer. I could make something up.”

UX Survey

- 59% negative comments about separating people by race and origin
- 17% did not know how far back to go with their ancestry or heritage
- 37% race was not listed or they were dissatisfied with the choices provided
- 13% do not identify with a particular ancestry or heritage

Comparing Feedback on Hispanic Origin & Race Question

- Decade testing results on Hispanic Origin & Race screen were indicative of what we learned in the UX Survey



Results

Issues uncovered in UX Survey that Decade testing did not reveal

Decade Testing & UX Survey: Breakoffs

- Decade testing participants answered the entire census. No one ever broke off.
- There were break offs in the census & in looking at the UX Survey data – we could not find any particular reason with the screen designs or question content for why there was breakoffs.
- It's a limitation of decade testing: it cannot predict breakoffs
 - People we recruit in the decade testing studies may not have been the people who breakoff in real life.
 - We could not measure breakoffs with in-person, one-on-one, monetarily compensated studies

Decade Testing & UX Survey: Addresses Issues

- Decade testing identified issues with layout of address screen
 - Horizontal or vertical display of address fields
 - House number and street name fields
- UX survey identified
 - Incorrect addresses on census forms
 - Multiple mailings – Multiple Census Taker visits
 - Inability to easily report for vacant/seasonal residences
- Decade testing could not predict unusual situations when main task was to answer questions pertain to real life



Summary

- Decade testing: Effective in predicting satisfaction & understanding issues with screen displays & question content
- Decade testing: Ineffective in predicting breakoffs & other experiences outside of task “answer survey as it pertains to your real life”
- Going forward: Could incorporate some what we learned from the UX Survey
 - Recruiting
 - Recent movers
 - People with multiple addresses
 - Vignettes
 - Imagine you wanted to tell census that your second home was vacant
 - Imagine you received this in the mail [show mail materials with incorrect address] what would you do to fix it?

Questions?

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