



Research & *Customer* Insight

Understanding

“undesirable” respondents

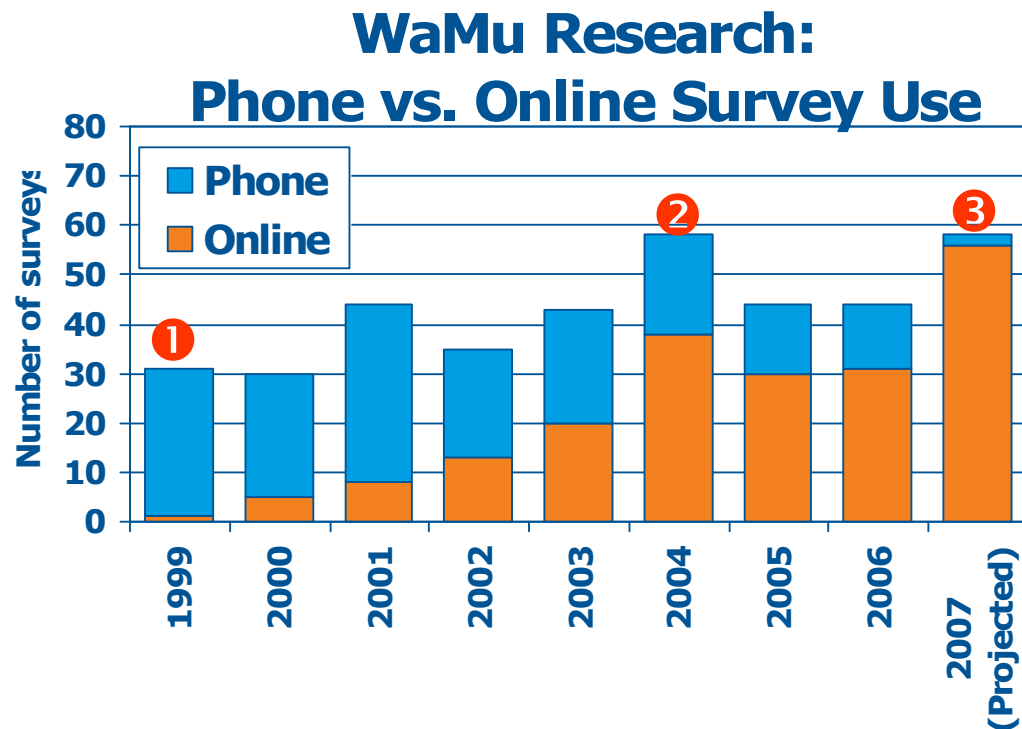
Ron Gailey – February 12, 2008

Exploring survey participants who give questionable responses

Known as “undesirable respondents”

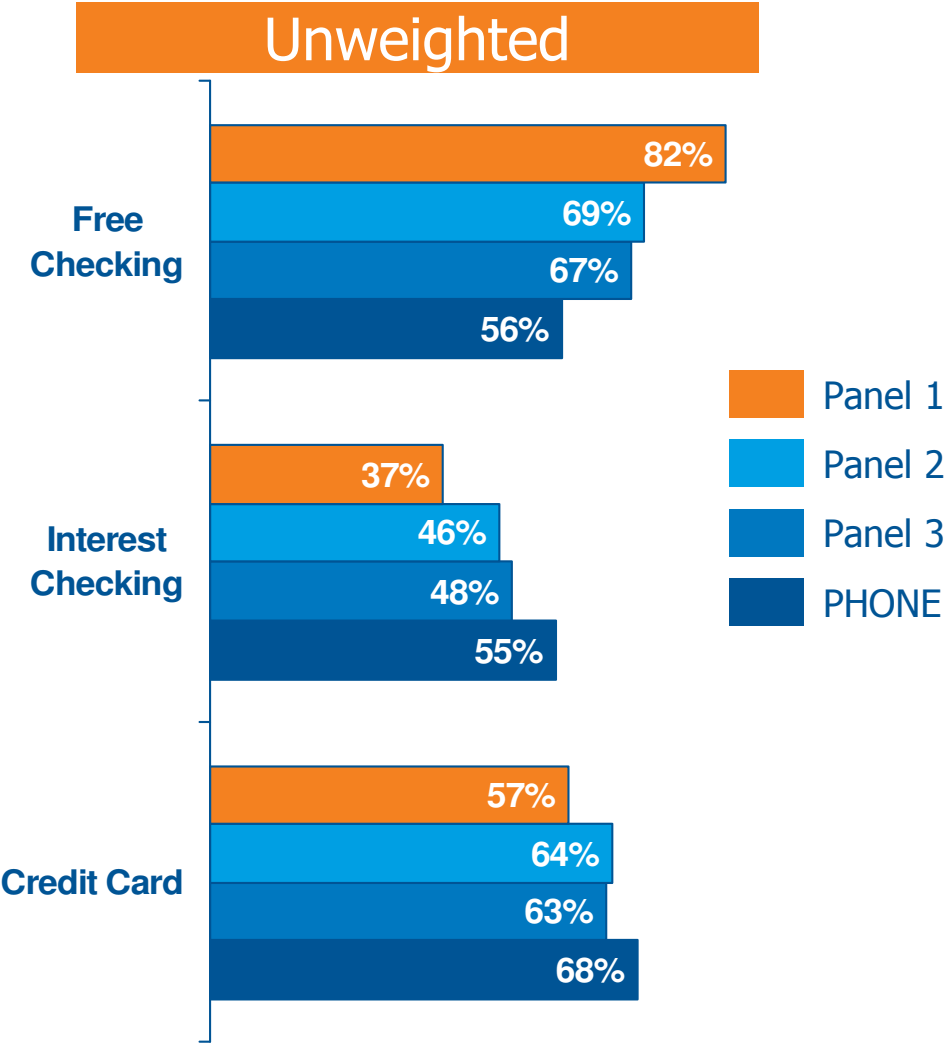
- How we got curious
- Sizing the problem
- What undesirable respondents look like
- How they affect results
- What to do about them

Online surveys became WaMu's standard in 2004

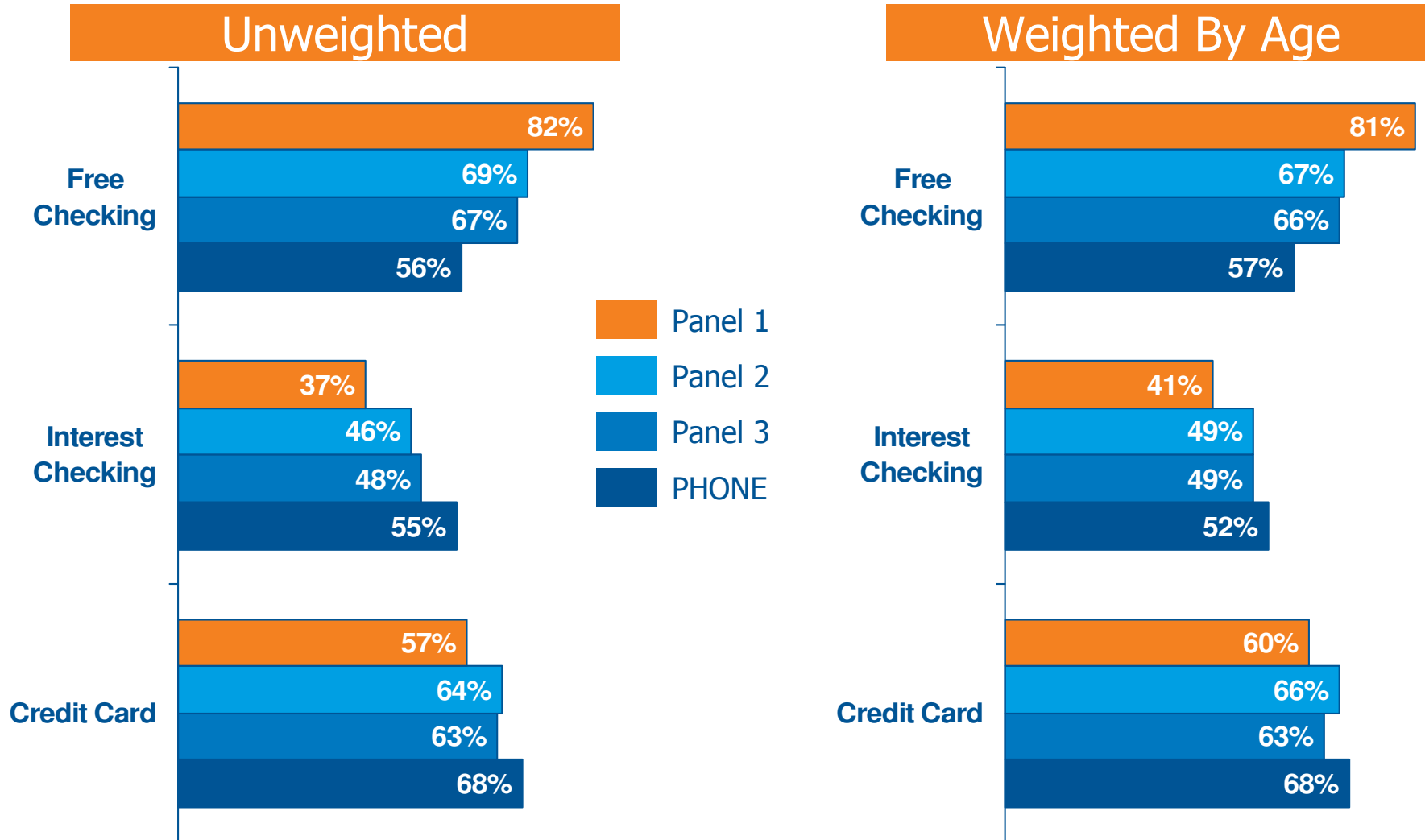


- 1 Began using online surveys in 1999
- 2 By 2004, most were online (66% vs. 34% phone)
- 3 In 2007 nearly all our surveys are online

Product use differs across panels



Product use differs across panels and weighting doesn't fix it



Sized the problem using 11 surveys

Survey design

Screeners / basics

Product demand

Product feature
importance

General attitudes

Demographics

- Added “trap” questions
- Tested 3 panels
- Surveys were 7-15 minutes
- 7th grade reading level

Hypothesis: Those not paying attention will fail trap questions

Trap 1: Low incidence product

Screeners / basics

- Product demand
- Feature importance
- Attitudes
- Demographics

Which of these products do you have?

	Yes	No
Checking	<input type="radio"/>	<input type="radio"/>
Savings	<input type="radio"/>	<input type="radio"/>
Mortgage	<input type="radio"/>	<input type="radio"/>
Home equity loan or line of credit	<input type="radio"/>	<input type="radio"/>
Reverse mortgage	<input type="radio"/>	<input type="radio"/>

Trap 2: Select “very important”

Trap 3: Straight lining

Screeners / basics
Product demand
Feature importance
Attitudes
Demographics

Please rate the importance these product features.

	Extremely Important	Very Important	Somewhat Important	Not very Important	Not at all important
Can pay online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay by phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay from a credit card	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To ensure data validity, please select “Very important” for this row	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay from a checking account	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Trap 4: Flipped attitude

Screeners / basics
Product demand
Feature importance
Attitudes
Demographics

Please indicate how much you agree or disagree with the following statements.

	Mostly Agree	Somewhat Agree	Somewhat Disagree	Mostly Disagree
I try new products before other people do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I frequently pay my bills online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm more of a "saver" than a "spender"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely or never pay my bills online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Annotations: A red box labeled "Fail" points to the "Somewhat Agree" radio button for the statement "I frequently pay my bills online". A black box labeled "OK" points to the "Somewhat Disagree" radio button for the statement "I rarely or never pay my bills online".

Trap 5: Enter number

Screeners / basics
Product demand
Feature importance
Attitudes

Demographics

To validate your survey results, please type this randomly generated code in the space provided: 7865

The results were alarming

Test	Average failure rate
Failed <u>any</u> test	34%
Select “very important”	30%
Straight lined feature importance	18%
Flipped attitude	11%
Enter number (demographics)	<1%
Low incidence product (screener)	<1%

- Results were generally similar across 11 studies
- Problems in all panels

What in the world is going on?

Deep Dive Survey: “Trapped Respondents”

**Generic
Product
Demand
Survey**

**If “failed” a
trap question**

Ask follow-up Questions

•**Version 1: Open Ended**

OR

•**Version 2: Closed Ended**

Deep Dive Survey: “Trapped Respondents”

Intro: Set them at ease

Sometimes we receive responses we don't understand or find confusing. We'd like to ask a few follow-up questions so we can understand why you responded the way you did.

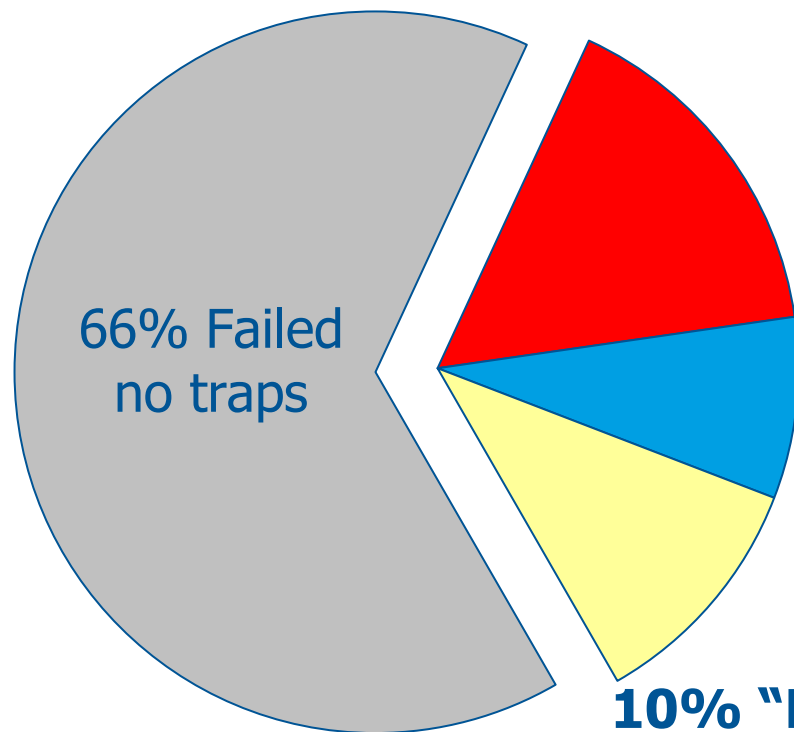
As with the rest of this survey, your answers will remain confidential and will not be reported back to any survey panel.

Closed-ended questions

Options included...

- I just wanted to get my incentive or reward
- I purposely didn't select "very important"
- I accidentally clicked the wrong box
- This survey is boring
- I was distracted while taking the survey

Undesirables fell into three groups



16% "Bad":

- Failed two traps
- Failed one trap and gave no good reason
- Admitted bad behavior

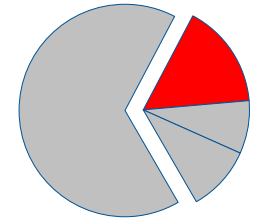
8% "Disinterested":

- Failed a trap due to lack of interest

10% "Difficult survey or distracted":

- Failed a trap and said question or survey was hard
- Momentarily distracted

“Bad” respondents - 16%



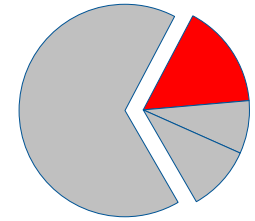
- 7% Failed two trap questions
- 1% Completed the survey faster than we could read
- 2% Wouldn't give a reason they failed or typed in garbage text

"scasac;lkn;lkn;lasc;lasmc;laamsc"

- 2% Admitted “just wanting the incentive”
- 2% Straight lined follow-up questions
- 2% Rebels - “I missed the question on purpose”

“(Trap questions are)... stupid things to put in your survey when you are answering regular questions”

"Bad" respondents' results can not be trusted

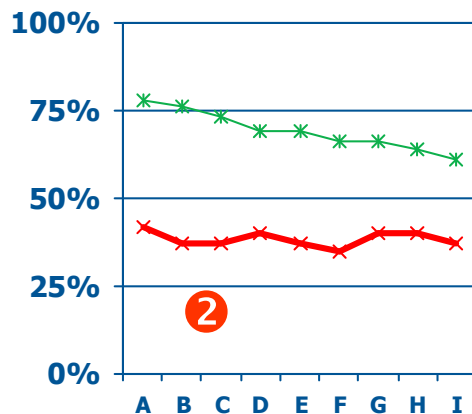


Product Demand Results

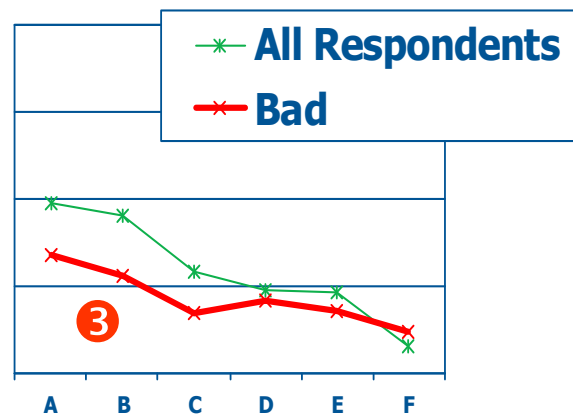
Overall	"Bad"	Demand w/o "Bad"
28%	14% 1	30%

- 1** "Bad" respondents had lower demand
- 2** Gave random feature ratings
- 3** Attitude variation flattened
 - Much more likely to straight line the attitude ratings

Feature importance ratings

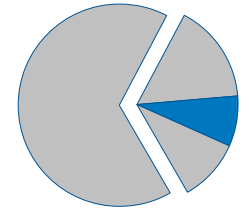


Attitude ratings



- RECOMMENDATION: Drop "Bad" Respondents

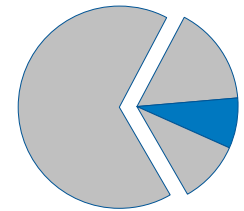
Disinterested respondents – 8%



Failed a trap due to lack of product interest

"I have no opinions about mortgages because I know nothing about them. Therefore I mark all questions as neutrally as possible. I usually stop reading them after the first five or six."

Use caution in eliminating “Disinterested” data

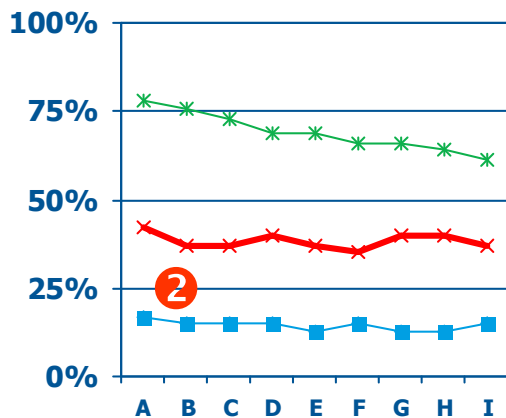


Product Demand Results

Overall	“Disinterested”	Demand w/o “Disinterested”
28%	2% 1	29%

- 1** They have lower demand
- 2** Many straight-lined (neutral) or skipped feature ratings
- 3** They re-engaged, showing similar attitudes to others

Feature importance ratings

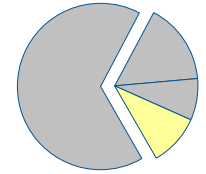


Attitude ratings



- RECOMMENDATION:
 - Keep them
 - Skip or modify questions that could be irrelevant

“Difficult survey or distracted” respondents – 10%



Failed a trap question and said the question or survey was hard, or they were momentarily distracted

- 4% Blame themselves

"I'm sorry I misunderstood the question."

- 2% Blame the survey

"It was inadvertent. The questions are so lumped together it's difficult to keep them all straight."

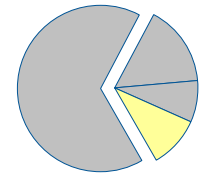
- 1% Technical difficulty

"I was moving my mouse and accidentally clicked it and it went into a spot."

- 4% Momentarily distracted

*"A friend's baby hit the Next button before I could go through the question."
"I was watching my sons and missed the question."*

Difficult survey and distracted people may have made an honest mistake

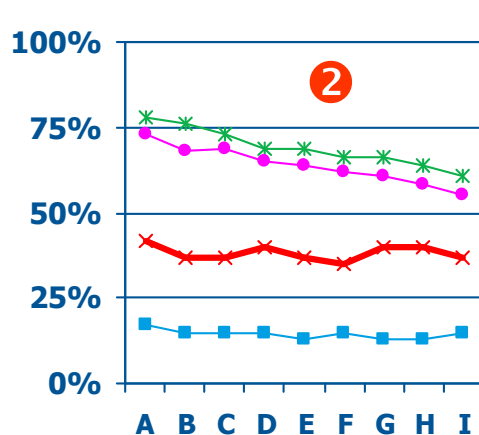


Product Demand Results

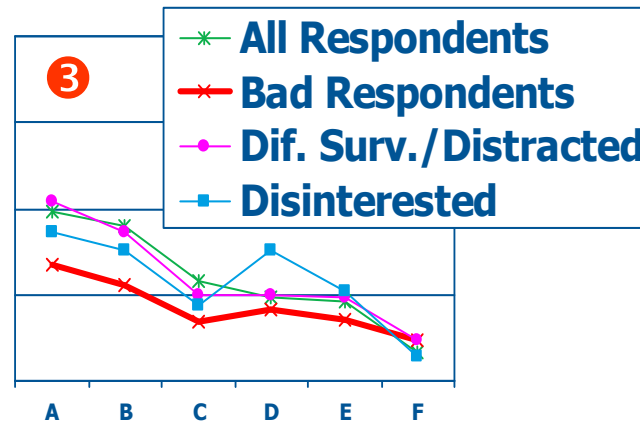
Overall	"Difficult Survey/ distracted"	Demand w/o "Difficult Survey/ distracted"
28%	23% 1	28%

- 1** Their demand is close to the overall results
- 2** Feature ratings mirror all respondents

Feature importance ratings



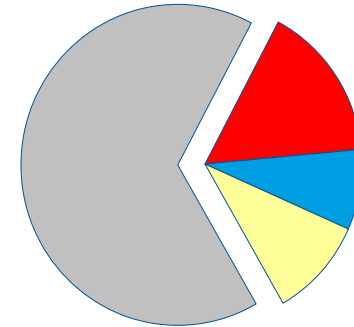
Attitude ratings



- 3** Attitudes are also very similar to all respondents
- **RECOMMENDATION:**
 - Keep them

Exploring Respondent Engagement

Three reasons “disinterested” and “difficult survey/distracted” folks fell into traps:



- ❶ Perceived question irrelevance
- ❷ Grid question behavior

"I hit the wrong box. I couldn't see the top of the screen."

"I usually stop reading after the first five or six."

- ❸ Education level

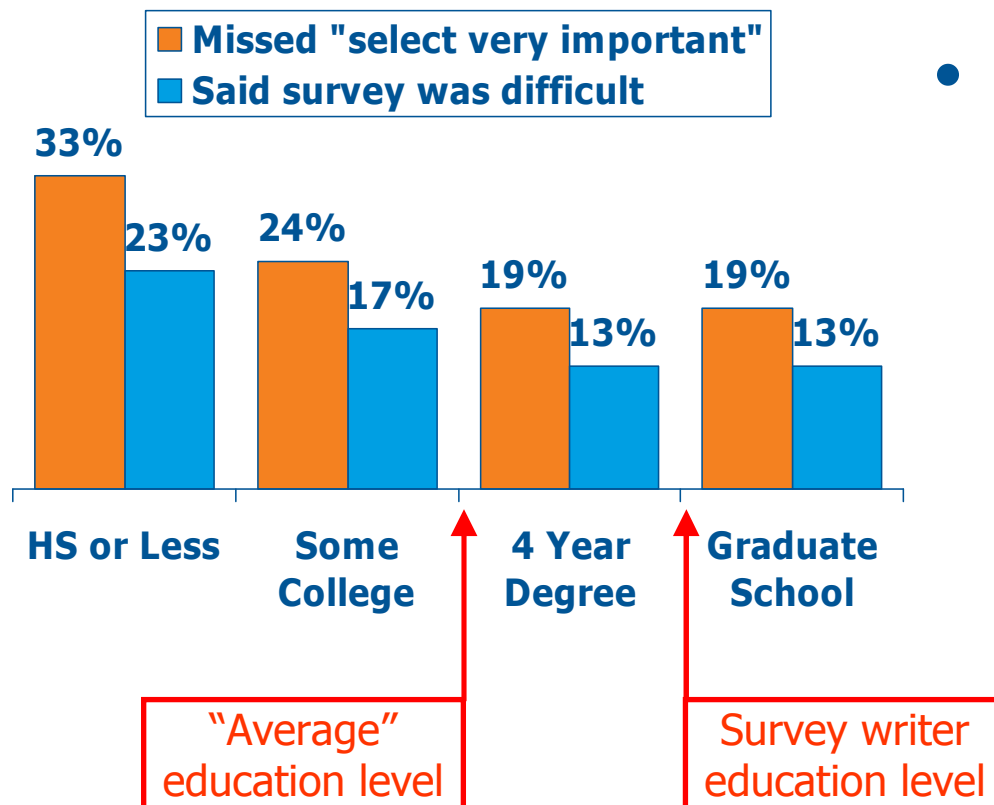
Grids: Longer grids lead to failures

- Over 9 studies, feature importance failures averaged 23% + 0.7% per item
 - For a 10 item grid 30% give bad information

Please rate the importance these product features.

	Extremely Important	Very Important	Somewhat Important	Not very Important	Not at all important
Can pay online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay by phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay from a credit card	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To ensure data validity, please select "Very important" for this row	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay from a checking account	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

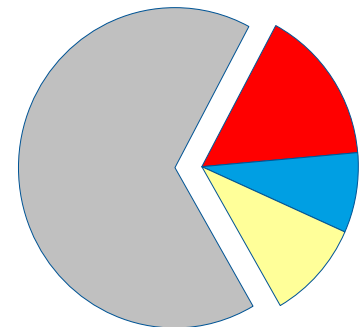
Less educated people miss “traps” more and say questions are difficult



- Surveys may be at too high a reading level
 - Test survey was 7th grade level
 - Some key questions were 11th grade level

Exploring Further – 2nd Survey

- Minimize “Confused” respondents by:
 - Simplifying the survey wording
 - Breaking up lengthy grid questions
- Minimize “Disinterested” respondents by:
 - Rephrasing to make questions more relevant



Reduced wording by 25% and highlighted key phrases

Before

- 48 words
- Suitable for a phone survey

Which of the following best describes how you feel about Washington Mutual (WaMu)?

1. It's better than all other banks
2. It's better than most other banks
3. It's as good as other banks, but no better or worse
4. It's worse than most other banks
5. It's worse than all other banks

After

- 38 words
- Underlining makes text easier to scan

How do you feel about Washington Mutual (WaMu)?

1. Better than all other banks
2. Better than most other banks
3. As good as other banks, but no better or worse
4. Worse than most other banks
5. Worse than all other banks

Reduce “mental gymnastics”

Before

- 20 words
- Makes you think

Over the past 12 months, what was the average amount you spent making purchases using that credit card each month?

After

- 12 words
- Easier to respond

In a typical month, how much do you spend on this card?

Split grids and changed background colors

Before

- Large grids
- Anchors could move off page

	Extremely Important	Very Important	Somewhat Important	Not very Important	Not at all important
Can pay online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay by phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay from a credit card	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay from checking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

After

- Smaller grids
- Anchor always visible
- Better formatting

	Extremely Important	Very Important	Somewhat Important	Not very Important	Not at all important
Can pay online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay by phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can pay from a credit card	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Used different introductions for feature importance grids

Before

- Everyone saw the same introduction

Please indicate how each of the following features impacts your overall reaction to this product.

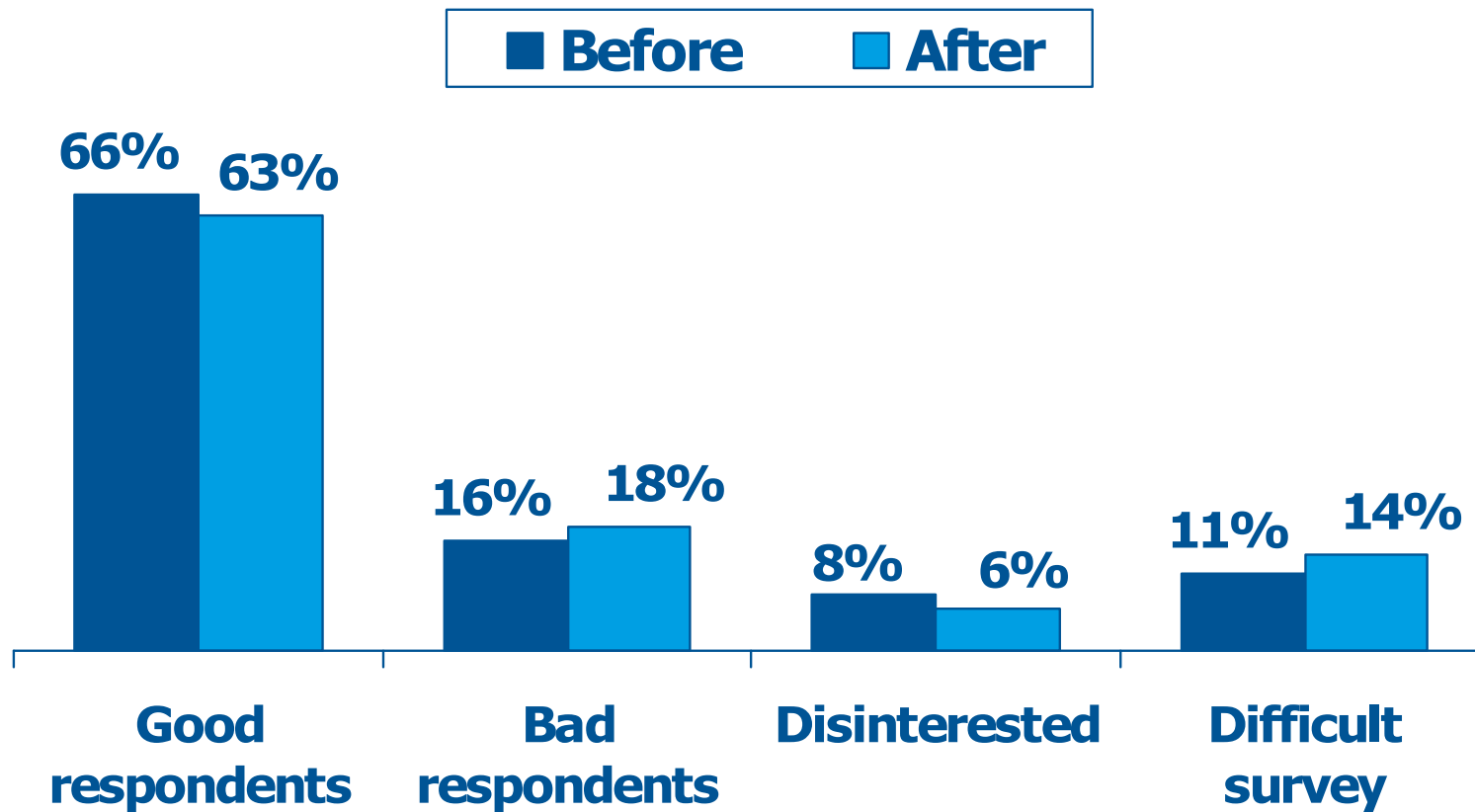
After

- People who were not interested received customize instructions

Even though you're NOT very interested in the product we'd like to compare your thoughts with people who are.

How would these features and benefits impact your interest in ANY credit card?

Despite the measures, results didn't notably change



Next steps

The Journey Continues . . .

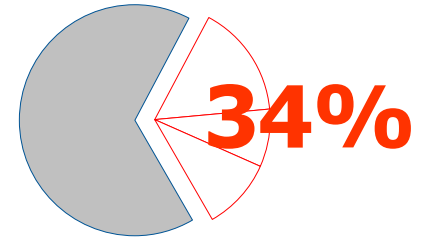
Survey Next Steps

- Warnings, pop-ups and other ways to re-engage
- Assure relevancy to minimize disengagement
- Explore grid alternatives
- Create more interaction. Etc., etc.

Work With Sample Providers

- Append demographics, survey history, recruitment method
- Return bad sample for scrubbing and potential removal

Parting Thoughts



- Too many are disengaged, partially engaged, or distracted
- Perhaps half can be salvaged – but how?
- We have developed a way to identify and remove “bad” respondents that minimizes randomness
- Sample providers, vendors and clients must work together



Thank You