



AMA Marketing Effectiveness Online Seminar Series

Marla Chupack - Moderator
American Marketing Association

A wealth of information is available for marketing professionals at



www.MarketingPower.com

The #1 marketing site on the web

Best Practices

White Papers

Professional Development Opportunities



Commonly Asked Questions

- Will I be able to get copies of the slides after the event?

Yes

- Is this web seminar being taped so I or others can view it after the fact?

Yes



Can You Trust the Data You Collect from an Online Survey?



Wally Balden,
Director of Internet Research,
Maritz Research

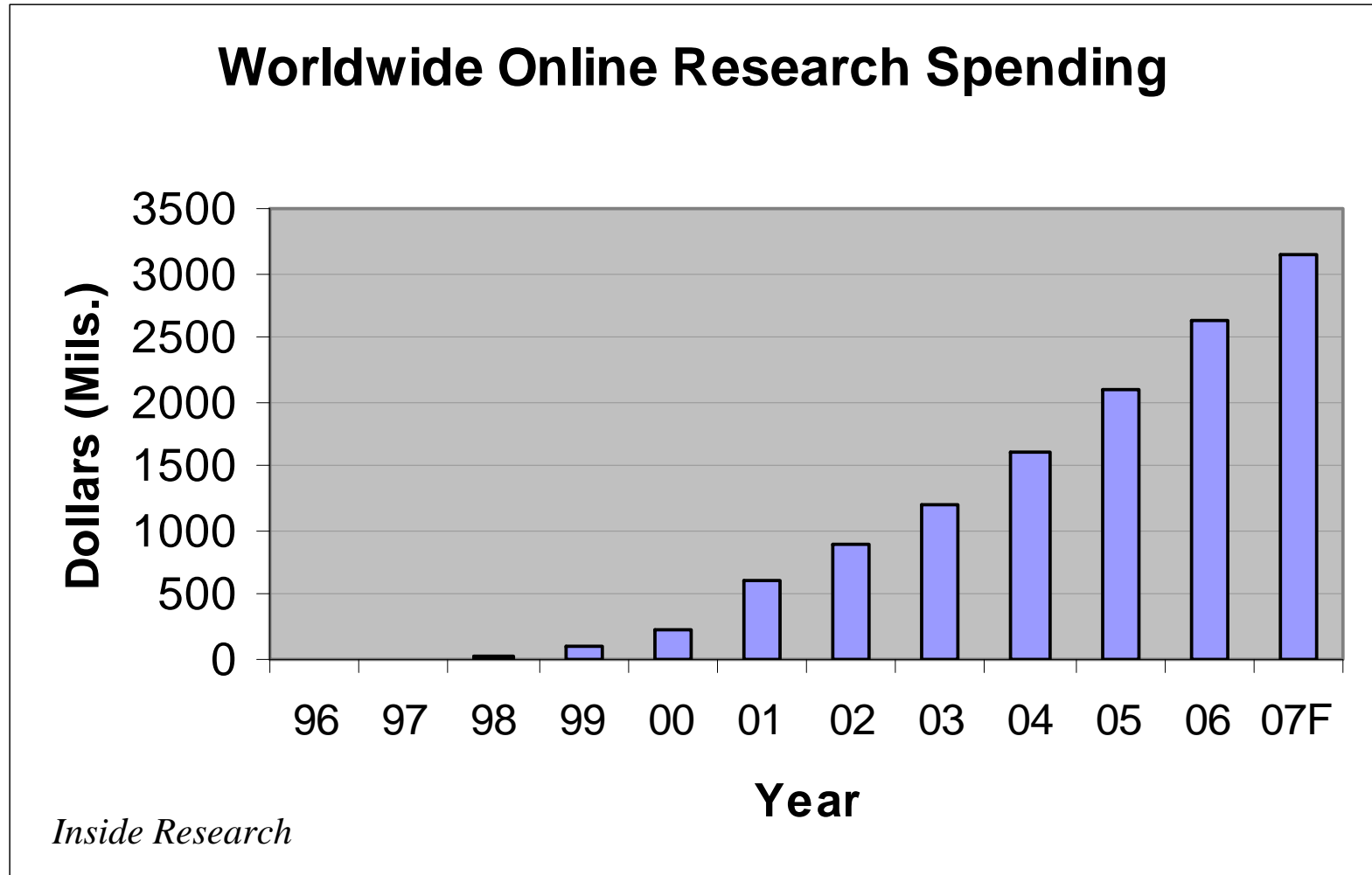
Opening Comments

- Focus today – online panels
- Maritz does not own its own panel
- Not meant to disparage or malign panels
- Panels have been aggressive in addressing quality issues

Discussion

- Defining Online “Data Quality”
- Why are we focused on this issue?
- Our responsibilities as researchers
- Findings from our own research
- A plan for improving data quality
- Final thoughts

Growth of the web



Compelling reasons for choosing web

- Declining response rates in other methods
- Accelerated data collection
- Less expensive
- Abundant supply of “willing” respondents

What about “Quality”?

It's a simple situation...



That could turn *bad*...



Conducting our Own Research

- Objectives:
 - Understand the depth of the problem
 - Understand how to identify poor quality respondents
 - Understand impact of poor quality data on decision making
- 8 Maritz Polls – 6 month period
- Variety of panels tested
- Focus on “bad” behavior
 - Fraudulent
 - Inattentive
 - Speeding

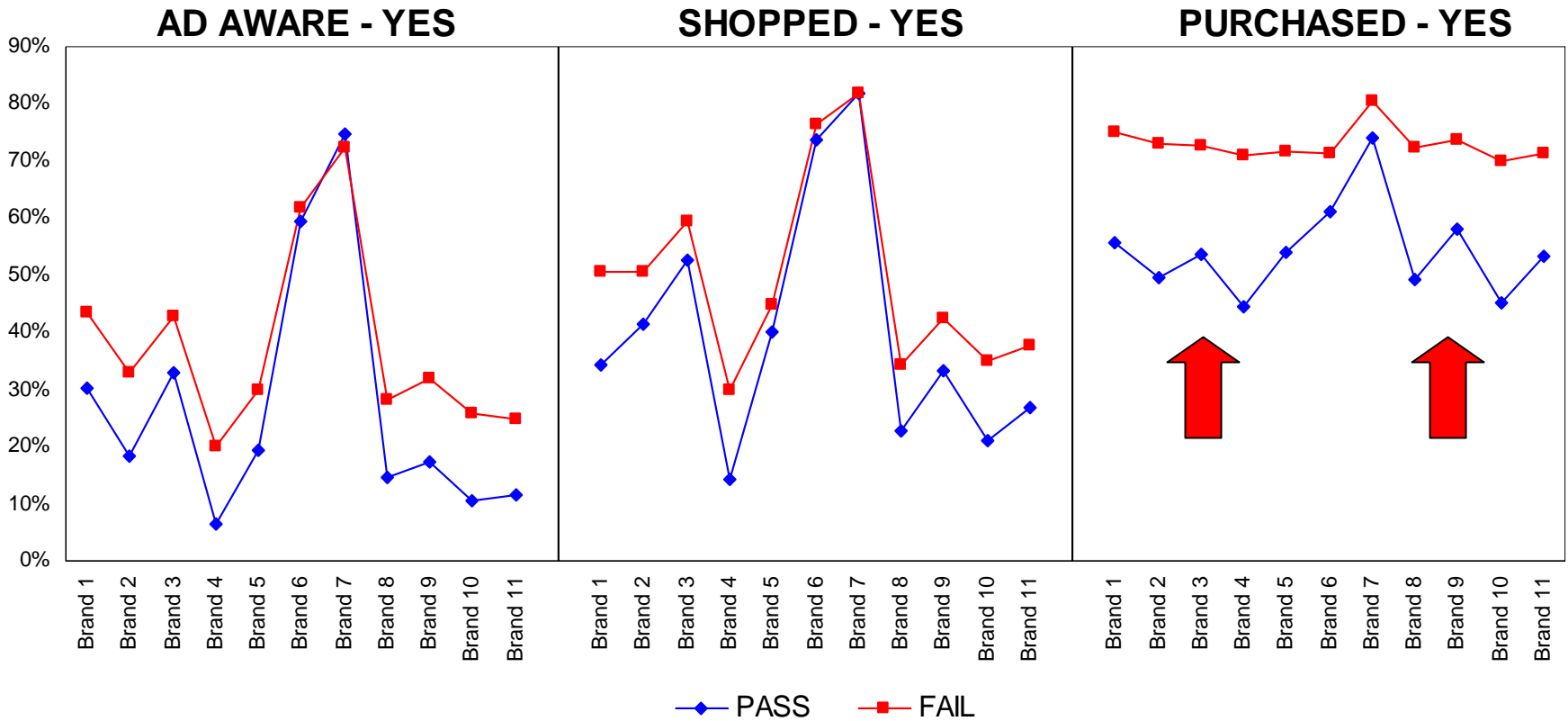
Conducting our Own Research – con't

- “Overt” traps included in each survey
 - Fake brand
 - Consistent response
 - Oppositely worded
 - Specific instruction
- Additional testing
 - Number of traps
 - Placement of traps
 - Wording of traps
- Timing of survey also evaluated – catch “speeders”

Percent Trap Failure

	Fake Brand	Consistency of answer	Oppositely worded	Specific instruction
Retail	10%	.1%	NA	35%
Airlines	8	NA	NA	18
Financial	NA	NA	NA	14
Tech	NA	4	43	36
Insurance	3	1	51	26
Auto	17	19	NA	8
Travel	NA	NA	NA	6
Employee	NA	1	18	8

AWARENESS, SHOP, PURCHASE



BRAND RATINGS

FAIL

PASS

<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>	<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>
3.06	25%	42%	33%	2.97	36%	27%	37%
3.08	22%	46%	32%	2.86	35%	37%	28%
3.00	26%	44%	29%	2.80	43%	27%	30%
3.16	21%	44%	35%	3.23	29%	22%	48%
3.00	26%	44%	30%	2.78	44%	25%	31%
3.36	13%	45%	42%	3.61	11%	28%	61%
3.41	12%	44%	43%	3.73	6%	28%	66%
3.35	12%	46%	42%	3.49	10%	39%	52%
3.46	11%	41%	48%	3.82	6%	22%	73%
3.34	12%	47%	40%	3.49	10%	40%	50%



BRAND RATINGS

FAIL

PASS

<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>	<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>
3.06	25%	42%	33%	2.97	36%	27%	37%
3.08	22%	46%	32%	2.86	35%	37%	28%
3.00	26%	44%	29%	2.80	43%	27%	30%
3.16	21%	44%	35%	3.23	29%	22%	48%
3.00	26%	44%	30%	2.78	44%	25%	31%
3.36	13%	45%	42%	3.61	11%	28%	61%
3.41	12%	44%	43%	3.73	6%	28%	66%
3.35	12%	46%	42%	3.49	10%	39%	52%
3.46	11%	41%	48%	3.82	6%	22%	73%
3.34	12%	47%	40%	3.49	10%	40%	50%



BRAND RATINGS

FAIL

PASS

<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>	<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>
3.06	25%	42%	33%	2.97	36%	27%	37%
3.08	22%	46%	32%	2.86	35%	37%	28%
3.00	26%	44%	29%	2.80	43%	27%	30%
3.16	21%	44%	35%	3.23	29%	22%	48%
3.00	26%	44%	30%	2.78	44%	25%	31%
3.36	13%	45%	42%	3.61	11%	28%	61%
3.41	12%	44%	43%	3.73	6%	28%	66%
3.35	12%	46%	42%	3.49	10%	39%	52%
3.46	11%	41%	48%	3.82	6%	22%	73%
3.34	12%	47%	40%	3.49	10%	40%	50%



BRAND RATINGS

FAIL

PASS

<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>
2.99	16%	66%	18%
3.18	11%	61%	28%
3.20	10%	61%	29%
3.14	12%	62%	26%
3.26	11%	58%	31%
3.18	12%	60%	28%
3.08	13%	66%	21%
3.18	10%	63%	27%
3.19	10%	62%	28%
3.16	12%	60%	28%
3.21	8%	64%	28%
2.93	20%	63%	17%
3.16	13%	60%	27%
2.92	20%	58%	22%
3.01	19%	59%	22%
2.87	24%	59%	17%
3.24	9%	60%	31%
3.19	12%	57%	31%
3.18	11%	61%	28%
3.28	8%	59%	33%
3.30	9%	58%	33%

<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>
3.08	27%	42%	31%
3.69	8%	29%	63%
3.68	8%	31%	61%
3.71	8%	28%	64%
3.71	11%	28%	61%
3.55	14%	36%	51%
3.14	18%	54%	28%
3.63	9%	33%	58%
3.56	10%	38%	53%
3.62	13%	29%	58%
3.78	6%	30%	64%
3.03	32%	36%	33%
3.57	11%	34%	54%
5.00	0%	0%	100%
3.26	26%	30%	43%
2.61	49%	30%	22%
3.84	7%	24%	69%
3.83	7%	26%	67%
3.63	9%	33%	58%
3.91	6%	20%	74%
3.83	5%	26%	68%



BRAND RATINGS

FAIL

PASS

<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>	<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>
2.99	16%	66%	18%	3.08	27%	42%	31%
3.18	11%	61%	28%	3.69	8%	29%	63%
3.20	10%	61%	29%	3.68	8%	31%	61%
3.14	12%	62%	26%	3.71	8%	28%	64%
3.26	11%	58%	31%	3.71	11%	28%	61%
3.18	12%	60%	28%	3.55	14%	36%	51%
3.08	13%	66%	21%	3.14	18%	54%	28%
3.18	10%	63%	27%	3.63	9%	33%	58%
3.19	10%	62%	28%	3.56	10%	38%	53%
3.16	12%	60%	28%	3.62	13%	29%	58%
3.21	8%	64%	28%	3.78	6%	30%	64%
2.93	20%	63%	17%	3.03	32%	36%	33%
3.16	13%	60%	27%	3.57	11%	34%	54%
2.92	20%	58%	22%	5.00	0%	0%	100%
3.01	19%	59%	22%	3.26	26%	30%	43%
2.87	24%	59%	17%	2.61	49%	30%	22%
3.24	9%	60%	31%	3.84	7%	24%	69%
3.19	12%	57%	31%	3.83	7%	26%	67%
3.18	11%	61%	28%	3.63	9%	33%	58%
3.28	8%	59%	33%	3.91	6%	20%	74%
3.30	9%	58%	33%	3.83	5%	26%	68%

BRAND RATINGS

FAIL

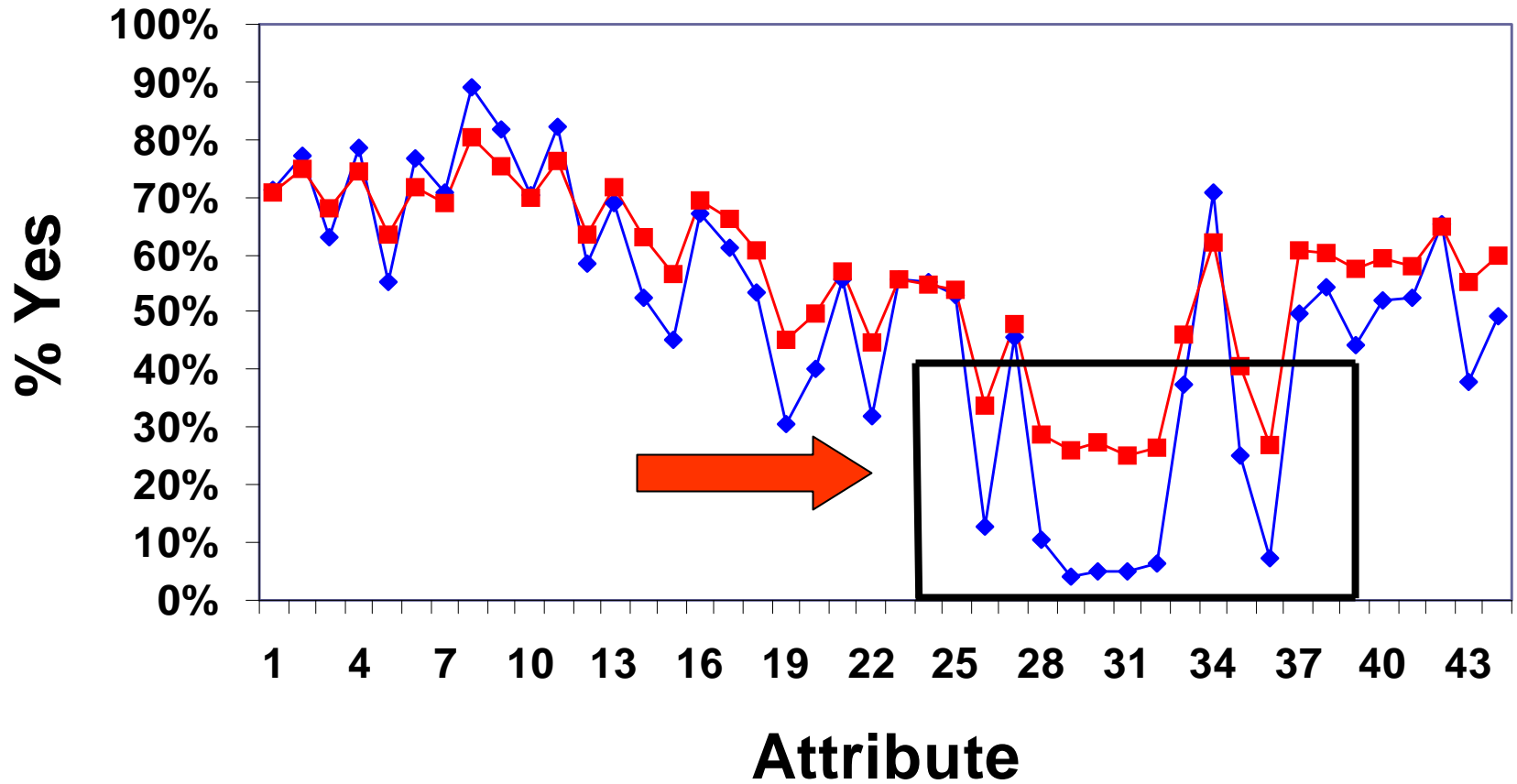
PASS

<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>
2.99	16%	66%	18%
3.18	11%	61%	28%
3.20	10%	61%	29%
3.14	12%	62%	26%
3.26	11%	58%	31%
3.18	12%	60%	28%
3.08	13%	66%	21%
3.18	10%	63%	27%
3.19	10%	62%	28%
3.16	12%	60%	28%
3.21	8%	64%	28%
2.93	20%	63%	17%
3.16	13%	60%	27%
2.92	20%	58%	22%
3.01	19%	59%	22%
2.87	24%	59%	17%
3.24	9%	60%	31%
3.19	12%	57%	31%
3.18	11%	61%	28%
3.28	8%	59%	33%
3.30	9%	58%	33%

<u>MEAN</u>	<u>Btm 2</u> <u>Box</u>	<u>Middle</u> <u>Box</u>	<u>Top 2</u> <u>Box</u>
3.08	27%	42%	31%
3.69	8%	29%	63%
3.68	8%	31%	61%
3.71	8%	28%	64%
3.71	11%	28%	61%
3.55	14%	36%	51%
3.14	18%	54%	28%
3.63	9%	33%	58%
3.56	10%	38%	53%
3.62	13%	29%	58%
3.78	6%	30%	64%
3.03	32%	36%	33%
3.57	11%	34%	54%
5.00	0%	0%	100%
3.26	26%	30%	43%
2.61	49%	30%	22%
3.84	7%	24%	69%
3.83	7%	26%	67%
3.63	9%	33%	58%
3.91	6%	20%	74%
3.83	5%	26%	68%



ATTRIBUTE RATINGS



Impact of Poor Quality Respondents

- Disengaged respondents exhibited a *consistently higher level* of awareness, usage and purchase
- ***Straight-lining*** was strongly evident among fraudulent/inattentive respondents
 - Most likely pick mid-point
 - May result in higher/lower mean
- Disengaged ***more positive*** regarding brand ratings
 - More likely to say “yes” than “no”
- Relative rankings not impacted – however, ***concern*** if this is part of tracking study

Impact of Poor Quality Respondents

- Speeding was a clear indication of fraudulent/inattentive behavior
 - Represented between 2% and 15% of sample
 - Speeders were much more likely to fail traps
 - Not all fraudulent/inattentive were speeders

Our Conclusions

- *Fraudulent, inattentive* and *speeding behavior* is evident in studies involving online panels
- Fraudulent, inattentive and speeding panelists answer differently than truthful or engaged panelists
- Decision making may be impacted by the inclusion of data from bad panelists
- This is too important an issue to ignore

Additional Learning

- Placement of traps did not impact failure rate
- Placing trap in grid or as stand alone did not impact failure

A Plan for Improving Data Quality

- **Our Mission** – *Improve online data quality by focusing on:*
 - **Prevention**
 - **Identification**
 - **Removal**
- Four areas of focus:
 1. Sample
 2. Invitation
 3. Survey
 4. Data cleaning

A Plan for Improving Data Quality

- Best practices/rules/guidelines defined and implemented at each step
- Most will be SOP – still room for subjective evaluation

Sample

Objective – *weed out poor quality panelists before they join*

- Work with your sample suppliers to ensure the following:
 - Traps are placed at enrollment
 - Maintenance surveys are conducted throughout year
 - Poor quality panelists are deactivated
- **“Quality Agreement”** should be established
 - Agreed upon rules and regulations
 - Panel company must sign in order to do business with MR

Survey Invitation

Objective – *reduce lying/cheating to qualify for survey*

- Incorporate best practices in survey invite
- Don't telegraph qualifications in subject line or in email invite, e.g....
 - “We are looking for homeowners who have spent \$500 or more on home improvement in the last year”
- Review email invitation with panel supplier prior to mailing

Survey

Objective – *identify and eliminate poor quality respondents during survey*

- “Overt” traps should be required for all online surveys involving panels
- Traps recommended for each survey:
 - Specific instruction – e.g., “Please check slightly disagree”
 - Timing - overall and specific pages (e.g. grid)

Survey

- Optional traps based on survey content
 - “Red Herring” – e.g., fake brand
 - Consistent of response questions – e.g., zip code and state of residence
 - Oppositely worded questions – e.g., I *always* order the most expensive item, I *always* order the least expensive item

Survey

- **“Strike”** system is employed
 - 2 strikes results in termination
 - Excessive speeding = 2 strikes = automatic termination
 - Range will be determined – if unreasonable it will result in 1 strike
 - Failure of “overt” traps will result in 1 strike
- If only 1 “strike” present we recommend culling out for evaluation at data cleaning stage

Data Cleaning

Objective – *identify and eliminate poor quality Respondents after data collection*

- Respondent must accrue 1 strike before additional investigation is initiated
- Not enough to eliminate on own
- Data cleaning steps
 - Primary:
 - Pattern logic – e.g., straightlining, zig-zag pattern
 - Logical response – e.g., high overall rating, low attribute ratings
 - Open-ends – illogical response, inconsistencies, gibberish, “copy and paste” responses

Data Cleaning

- Data cleaning steps – Secondary
 - Misrepresentation – e.g., click all, “select all”
 - Over click – e.g., click on more items than average person
 - Under click – e.g., click on less items than average person
 - Don’t know – e.g., check more “don’t know” than average person

Issue

- How do we distinguish between “fraud” and an honest mistake?
 - Speeding is best indicator of fraud/inattention
 - Combination of speeding and trap failure is next best indicator
 - Still may be a subjective call

		Actual	
		Honest	Cheat
Test	Honest	Keep	False negative
	Cheat	False positive	Remove

No Absolutes

Vigilance



Now this is not the end.
It is not even the
beginning of the end.
But it is, perhaps,
the end of the beginning.

Sir Winston Churchill,
Speech in November 1942

Questions & Answers



Thanks for your time and participation today!

To replay this webcast (available within 24 hours):

Go to www.maritz.com/Trusting-Data or
Go to www.MarketingPower.com/webcasts

For copies of today's presentation:

Go to: www.maritz.com/Trusting-Data

To contact today's speaker:

Wally Balden

Wally.balden@maritz.com

To receive a copy of the

Maritz Research Forum Quarterly eNewsletter

see www.maritzresearch.com

To contact the AMA:

Marla Chupack

mchupack@ama.org



Proprietary and Confidential

