

Wait!

Before you go, just a few more questions: Pilot test of a piggyback survey

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Piggyback Surveys

- Leverage existing data collection structure to conduct a second survey
- Can be immediate or follow up
- Can screen on responses to original survey or not
- Shown to be effective in low cost data collection and to reach small target populations



Annual Refiling Survey (ARS)

- **SHORT:** 2 to 3 simple questions
- **HUGE:** 1.2 million establishments per year
- **FAST:** Over 200,000 responses in first 3 weeks



Annual Refiling Survey (ARS) - Details

- ARS EXCLUDES:
 - Establishments with ≤ 3 employees
 - Establishments in low change industries (e.g., cemeteries) are surveyed less frequently
- ARS has TWO web collection systems:
 - Multi-establishment firms or Single-establishment firms
 - System for single-establishment firms is simpler so it was used for this pilot



BLS Piggyback Survey

- Can BLS set up an infrastructure to host Quick Business Surveys (QBS) following the ARS?
- The first pilot test was conducted in 2018 by hosting the Business Research Survey.
- Asked respondents questions about the types of information that they could provide about their business.



Pilot Test Goals

- How many ARS respondents will click through to the QBS?
- How many ARS respondents will complete the QBS?
- Who is the ARS respondent?
- What can the ARS respondent answer questions about?



Pilot Test Goals

- How many...
- How many...
- Who is the...
- What can...

AND....

Can we use modified sampling techniques to get similar results faster?

Can we supplement the ARS sample to get more complete coverage (e.g., small businesses, multi-units)?

Questions for the Business Research Survey

1. What company do you work for?
2. In what department do you work?

Can you answer questions about? (Yes or No)

3. How job openings are advertised?
4. How many job openings you are trying to fill?
5. Total revenue from sales or receipts?
6. Top three revenue producing products?
7. Number of 1099-MISC filed in the last year?
8. Permanent layoffs in the last three months?

Average: 2.4 min

Median: 1.9 min



Tested Two Different Sampling Methods

Proportional Random Sample

1. Establish sampling criteria
2. Pull sample
3. Solicit respondents
4. Wait for response
5. Non-response follow up
6. Wait for response
7. Non-response follow up
8. Etc.

Open-to-All Collection

1. Show QBS invitation screen to all ARS respondents
2. Monitor collection
3. Close collection once target is met



Open-to-All Collection Results

- Goal: Collect 7,000 Responses
 - No stratification by industry or size class in initial test
 - This can be added and tested at a later date
- Goal was met in 3 days of collection
- 69% Click through rate
 - 9,494 ARS responses → 6,549 QBS Responses



Open-to- All Collection Coverage

Quota	Size									
NAICS Sector	1	2	3	4	5	6	7	8	9	Total
11	23	46	19	10	1	1	1			101
21	10	5	4	5	1	1	1	1		28
22	4	2	2	3						11
23	197	205	123	65	23	8	1	1		623
31	25	19	14	16	5	5		2		86
32	17	24	20	14	12	10	6	1		104
33	48	38	46	35	20	15	6	5	1	214
42	146	128	101	54	18	10	3			460
44	119	159	110	52	22	15				477
45	67	57	18	9	4					155
48	57	34	32	19	5	1				148
49	8	12	10	7	1					38
51	58	30	19	12	5					124
52	83	66	44	19	11	3		1		227
53	90	70	38	15	3	6	1			223
54	351	205	105	83	38	14	1		1	798
55	15	7	11	5		2	1			41
56	135	113	73	50	19	13	5	2		410
61	29	30	21	12	8	7	3			110
62	161	184	130	78	33	33	6	5	2	632
71	45	37	20	24	15	3	1			145
72	127	165	210	169	45	10	3			729
81	153	121	63	40	7	4				388
92	2									2
99	258	13	3	1						275
Total	2228	1770	1236	797	296	161	39	18	4	6549

Random Sample Results

- 2,782 ARS respondents selected for QBS (ARS Prompted)
 - ▶ 750 emailed invitation → 44% response rate
 - ▶ 2,032 mailed invitation → 42% response rate
 - ▶ Total 43% response rate
- 7,062 non-ARS respondents selected (QBS-only)
 - ▶ Only used mailed letters (email is only available for ARS)
 - ▶ Total 19% response rate

Proportional Random Sample Results

	Sample Size	Click Through Rate	Response Rate
Total			
ARS-prompted	2,782	46.0%	42.7%
QBS-only	6,538	20.3%	19.2%
Conditional on completing ARS			
ARS-prompted	1,662	76.7%	71.2%
QBS-only	1,526	87.0%	82.2%

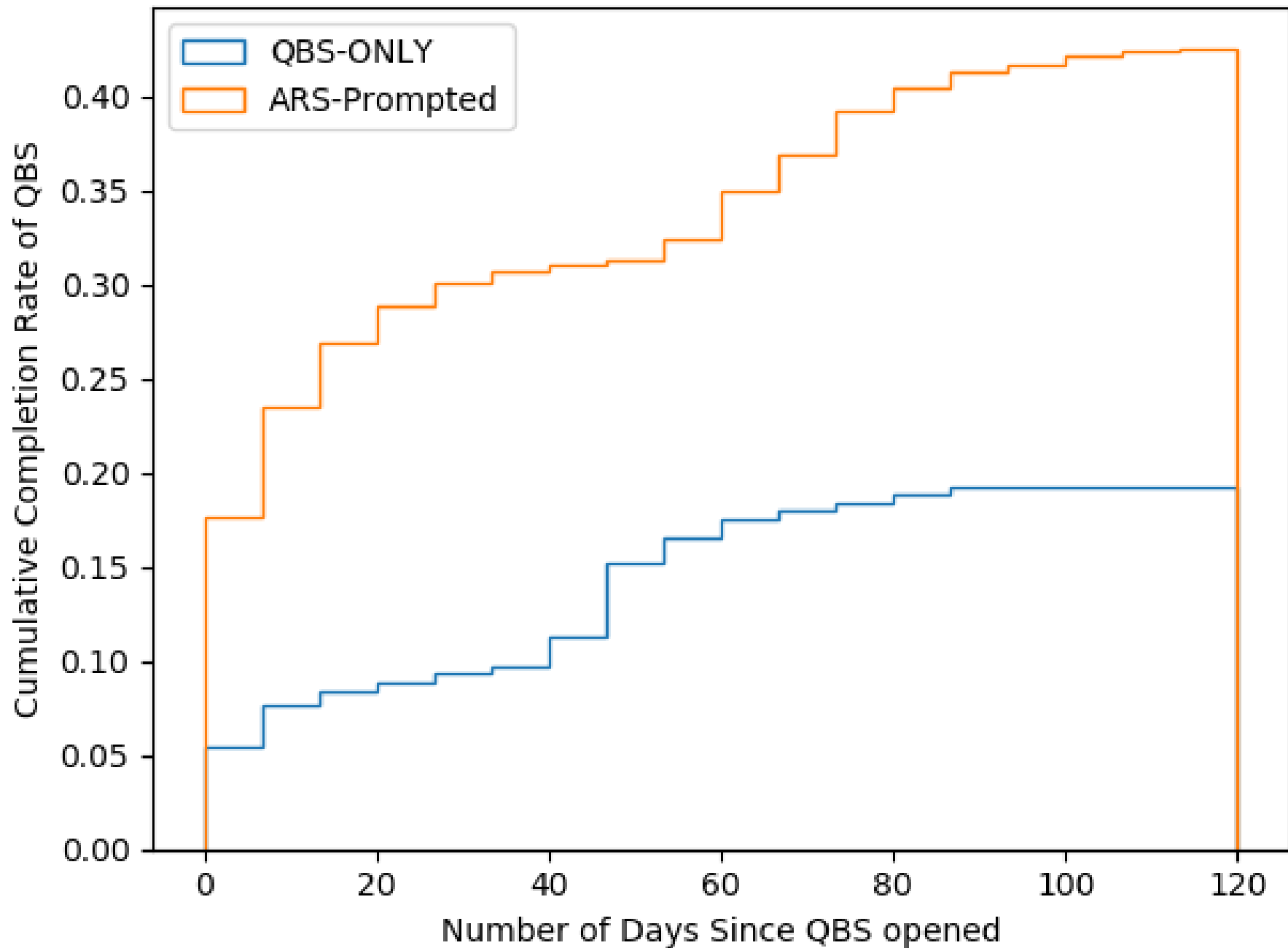
Random Sample Results

First 7 days

	Sample Size	Click Through Rate	Complete RR
ARS-prompted	2,782	19.1%	17.8%
QBS-only	6,538	6.4%	6.0%

ARS 7-day response rate by mail is 10.7%

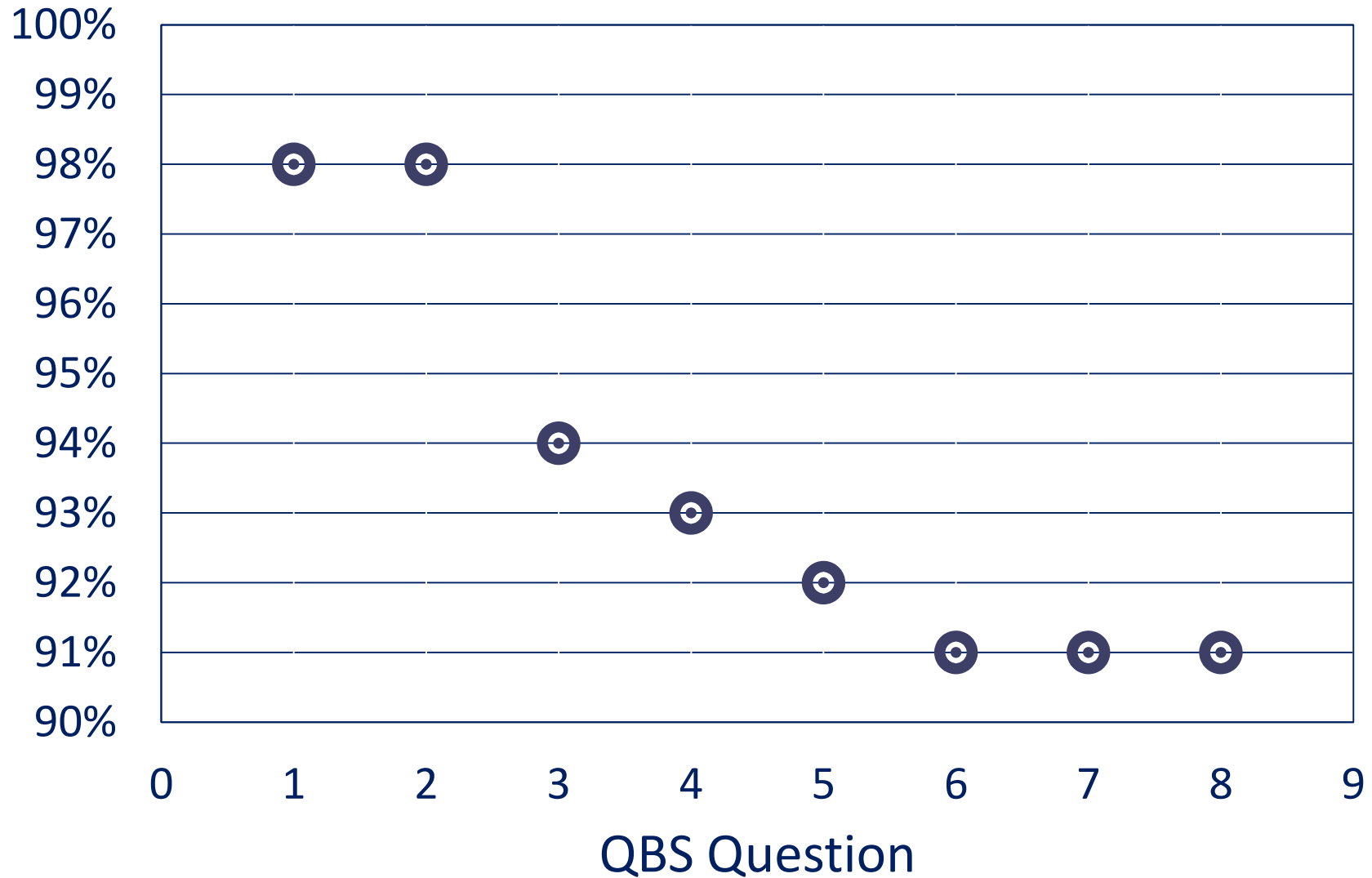
Cumulative QBS Completion Rate Over Time (grouped by week)



Random Sampling Coverage

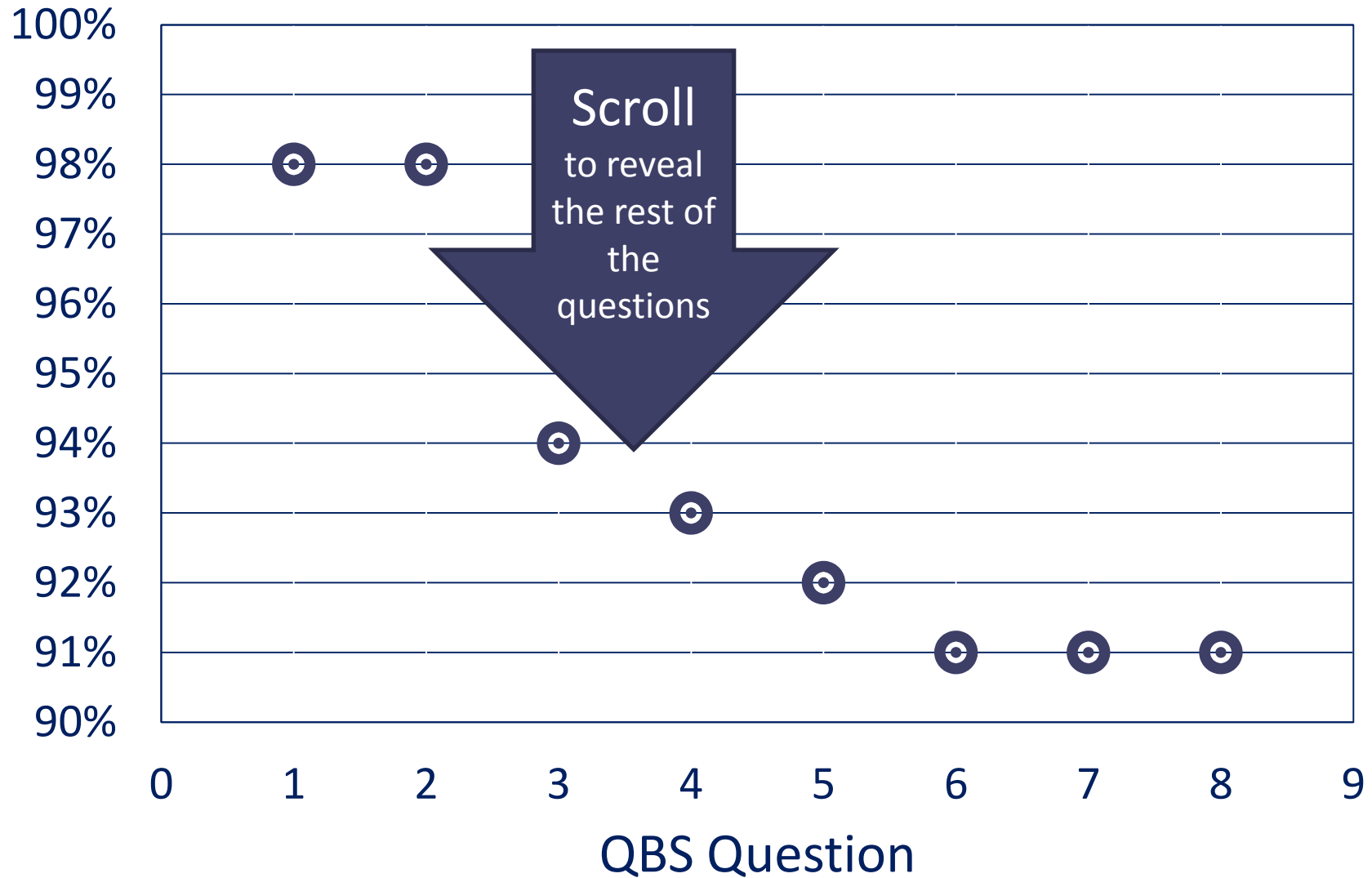
Random	Size									
NAICS	1	2	3	4	5	6	7	8	9	Total
11	10	5	6	2	5	3	5			36
21	7	1	5	3	6	2	5	3	1	33
22	4	4	4	1	7	2	1	2		25
23	80	47	37	20	7	4	2	4	1	202
31	5	5	7	5	6	2	3	4	2	39
32	9	4	8	5	2	4	2	2	1	37
33	17	11	14	13	6	4	3	3	1	72
42	115	33	27	17	3	5	1	2	3	206
44	45	54	32	16	4	3	4	1	1	160
45	27	12	8	3	2		3	3	3	61
48	23	10	9	10	3	2	4	1	4	66
49	2	5	2	3	2	3	1		1	19
51	26	11	6	4	1	2	4		2	56
52	59	34	16	10	5	4	4	2	2	136
53	55	18	7	8	5	3	3	3		102
54	197	63	38	19	8	5	1	5	3	339
55	10	6	7	3	3	4	2	2		37
56	65	24	16	13	7	5	2	2	1	135
61	9	9	7	4	2	5	4	6	4	50
62	85	50	42	33	11	15	3	3	2	244
71	22	10	7	5	3	3	3	5	3	61
72	36	45	56	52	15	5	2	1	2	214
81	47	31	21	10	4	3	4	2	1	123
Total	955	492	382	259	117	88	66	56	38	2453

Item Completion Rates



Of the Rs who started the QBS, 87% completed all 8 questions

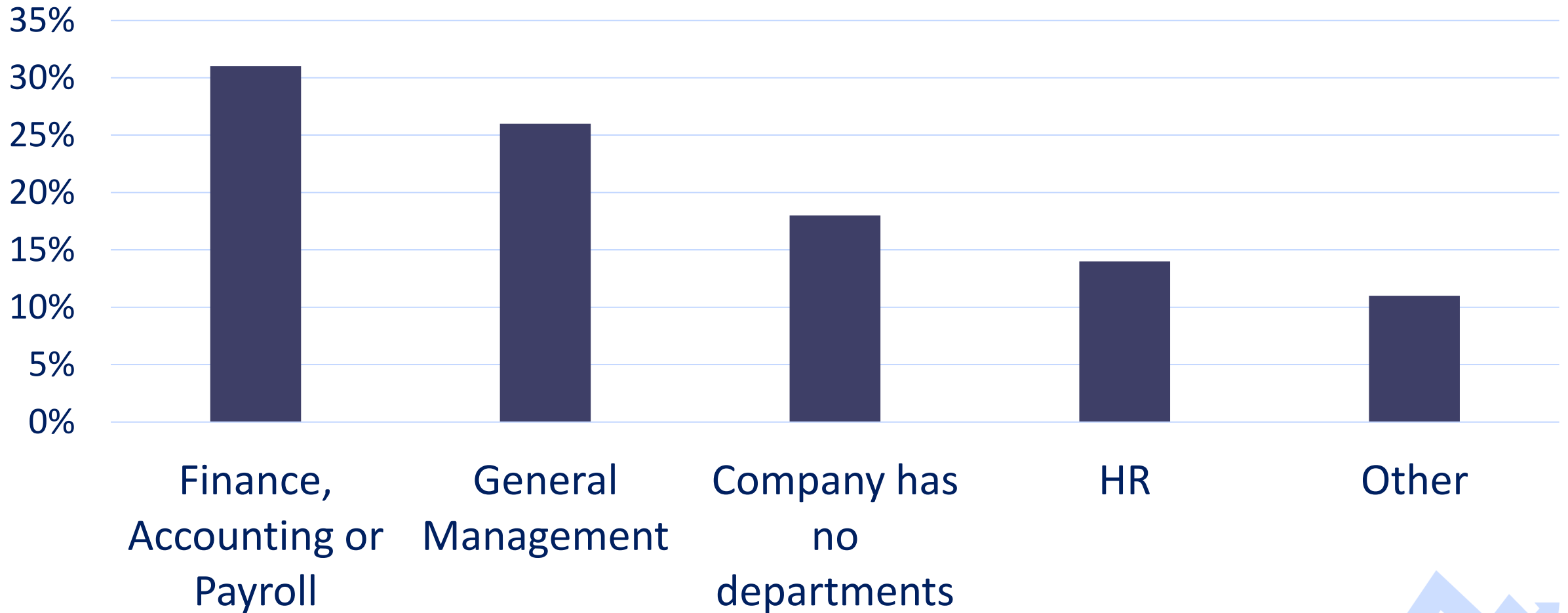
Item Completion Rates



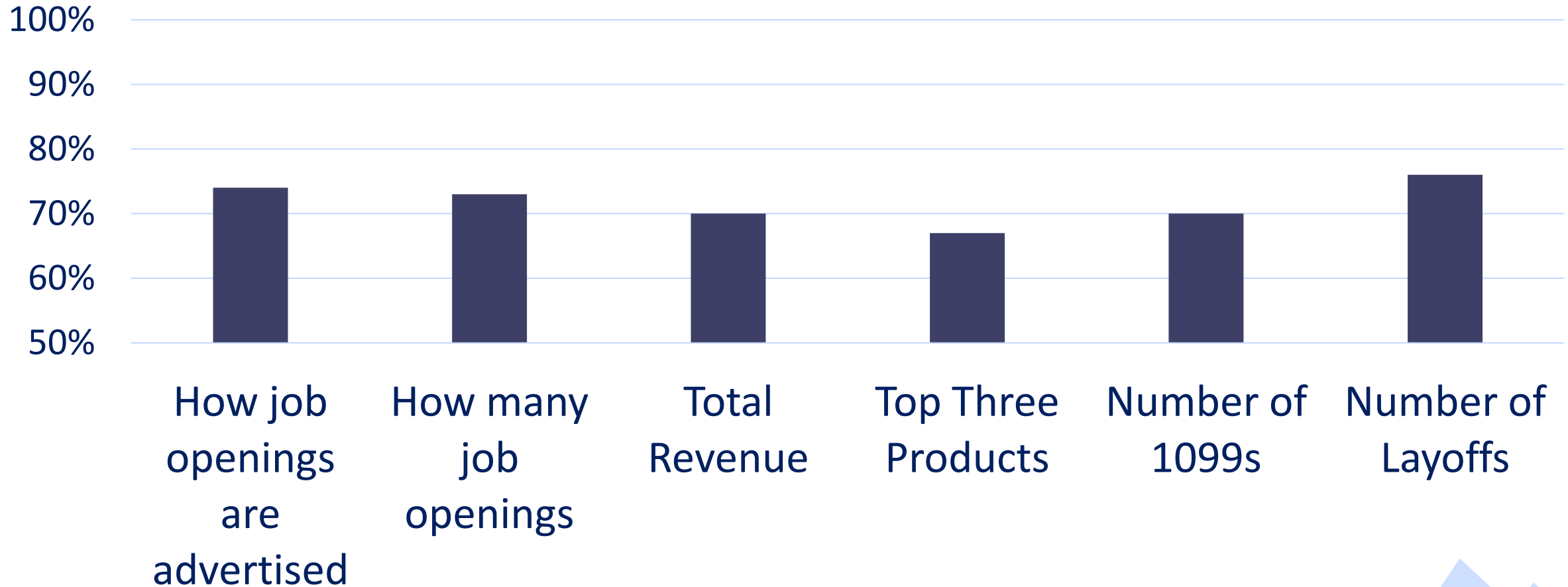
Of the Rs who started the QBS, 87% completed all 8 questions

87% of Rs work in the company sampled

Rest worked in a firm doing accounting, payroll or law *for* that firm



% of Respondents Who Can Report



Pilot Test Findings

- Can we use open-to-all collection to get similar results faster: Yes, but...
- Can we supplement the ARS sample to get more complete coverage: Kind of...
- Click through rates: 46% of ARS respondents (20% of QBS only)
- Completion rates : 43% of ARS respondents (19% of QBS only)
- Who the ARS respondent is
- What the ARS respondent can answer questions about



Limitations → Next Steps

- Collection-for-all method did not include any stratification for industry or size class.
 - ▶ Try again with industry and size quotas
 - ▶ Add randomness to system open times in ARS cycles (early respondents are probably different than late responders)
- QBS-only had a low response rate; need to understand why that is and improve
- 2 minute survey seemed to work, little drop off. Is that enough to collect useful information? Would item response drop if more questions were added?



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