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Examination of Auxiliary Information Appended to Address Based Samples in Mixed Mode Studies

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Why use auxiliary sample frame data in multimode ABS studies?

- **Multimode studies are becoming commonly used**
 - However, sample frames tend to provide only one source of contact.
 - For instance, ABS frames typically utilize USPS Computer Delivery Sequence File (DSF) for general population surveys,
 - DSF has very high coverage but does not provide additional information other than addresses
- **Researchers append names utilizing outside sources, such as consumer files, voter files.**
- **The ability to effectively match accurate alternative contact methods (as well as accurate names to address) increases the success of multi-mode studies**
 - However, there is little research on the quality of auxiliary sampling frame data

Research Questions:

- **Many options: Optimal solutions?**

Historically:

- Few vendors
- Few e-mails and low accuracy rates
- Mainly landline phone

Currently:

- Many vendors
- Many e-mails
- Many telephones

- **Which vendor(s) or combination of vendors provides the best information?**

- Best practices and guidelines based on costs (\$) and benefits
- More matches = greater coverage of households (amount of returned data)
- Greater accuracy = higher incidence and lower costs (amount of correct data)

- **Given that vendors provide multiple contact information, can we predict which telephone and e-mails will work?**

Study Design



In this research, we are assessing the accuracy and coverage of vendor appended information to an ABS sample (i.e., to mailing addresses).

Data: Three rounds of AmeriSpeak Omnibus (NORC's probability-based panel)

Methods:

- **Step 1:** We used mailing addresses of the sampled panelists
- **Step 2:** Sent the mailing addresses of sampled panelists to multiple vendors for them to append names, phone numbers, and emails.
- **Step 3:** We then ask panelists to confirm whether these names (through initials), phone numbers, and emails are currently used by them or another person in their household.
 - We asked up to 5 initials, emails, and phone numbers
 - We have asked these in multiple rounds to decrease respondent burden

	Names	Multiple Names/ Record	Phones	LL/Cell Phone Indicator	Multiple Phones	Confidence Metric for Phone	Emails	Multiple Emails
Vendor A			X	X	X	X	X	X
Vendor B	X	X	X	X	X	X	X	X
Vendor C	X	X	X					

Phone numbers and emails are obtained from Vendors A and B

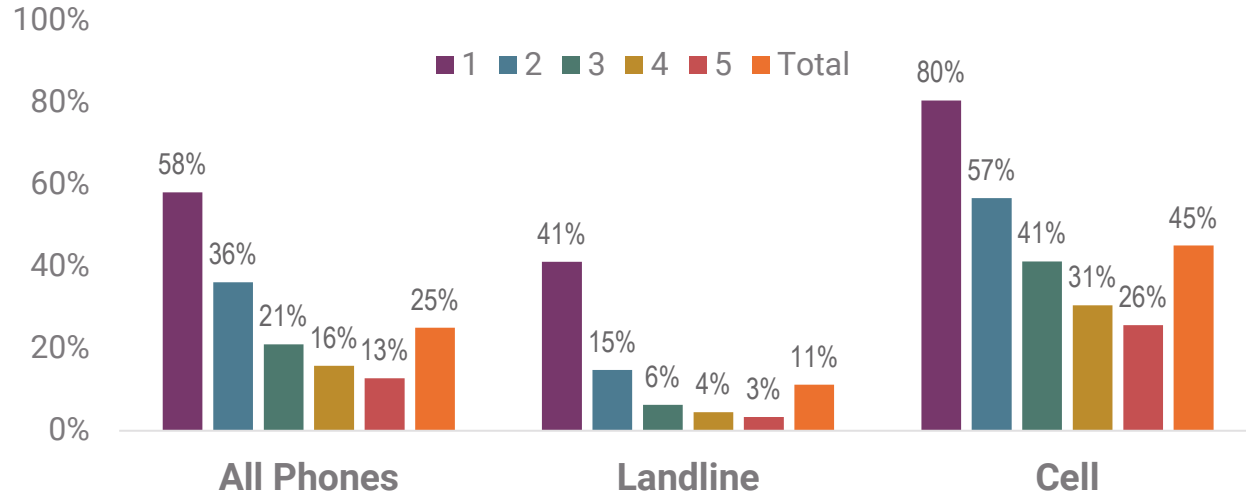
Names are obtained from Vendors B and C

Cost: Vendor A (\$\$\$) > Vendor B > Vendor C

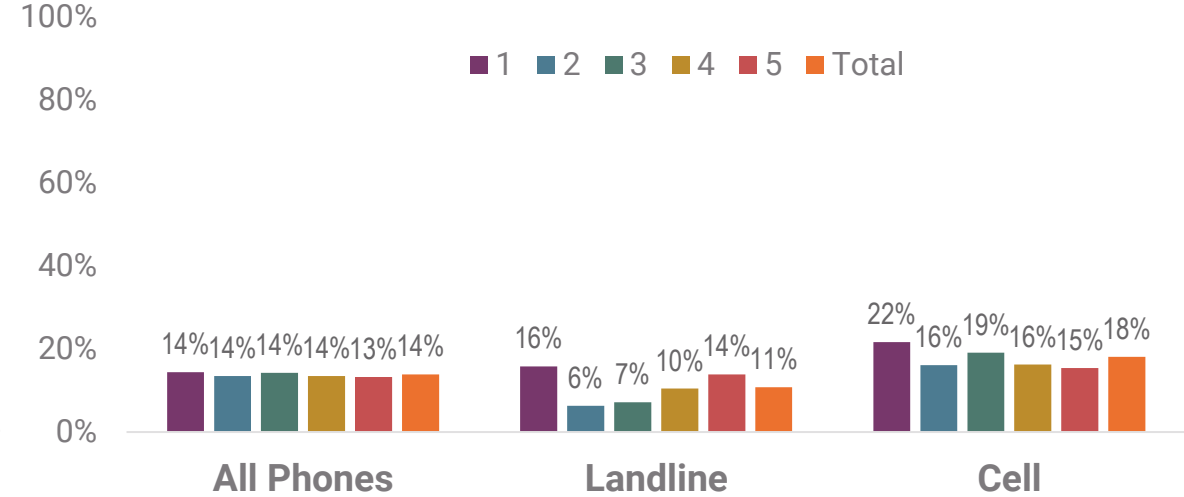
Results



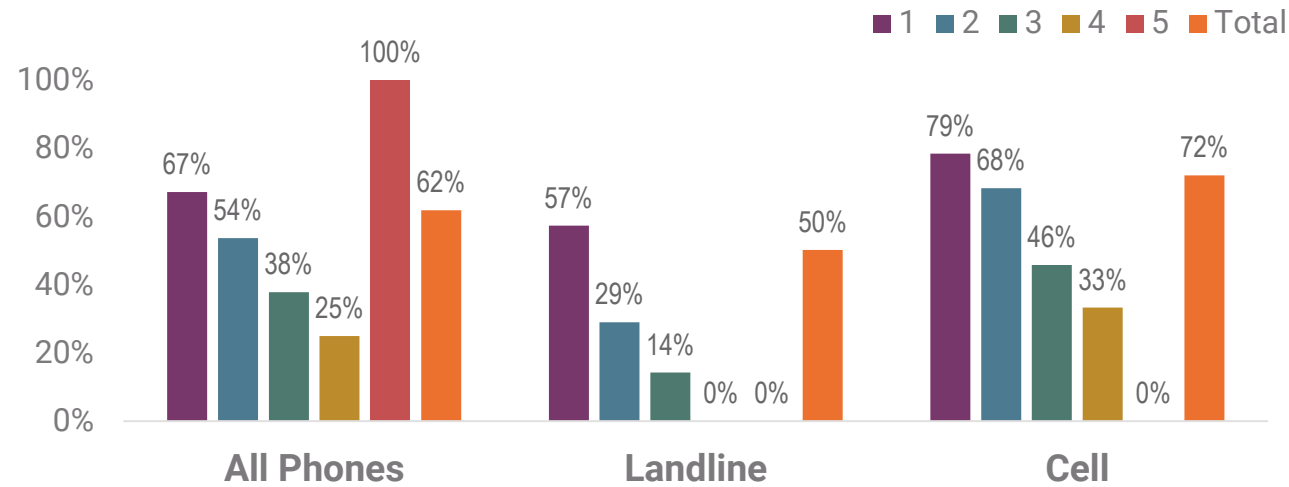
Vendor A - only



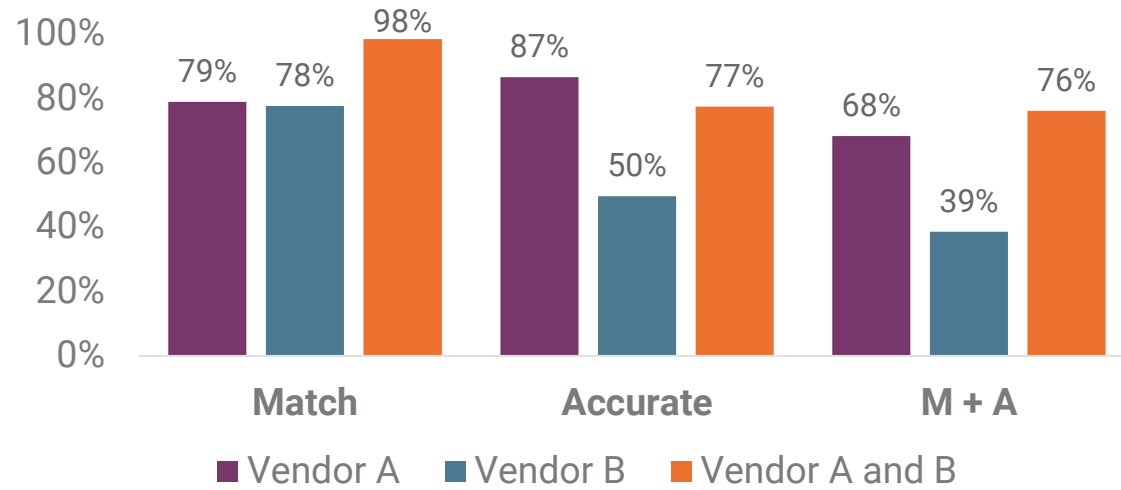
Vendor B - only



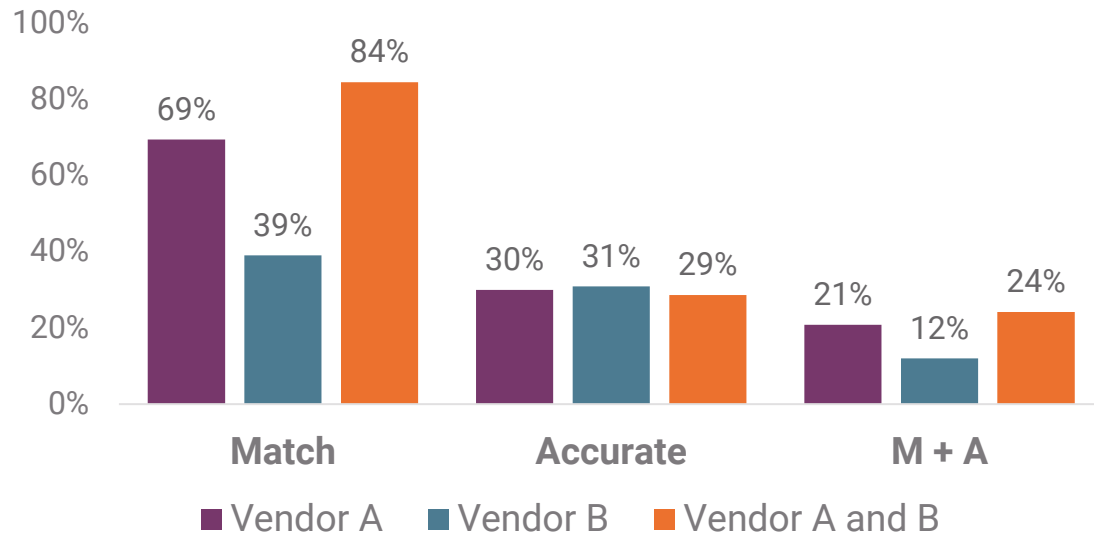
Vendor A and B overlap



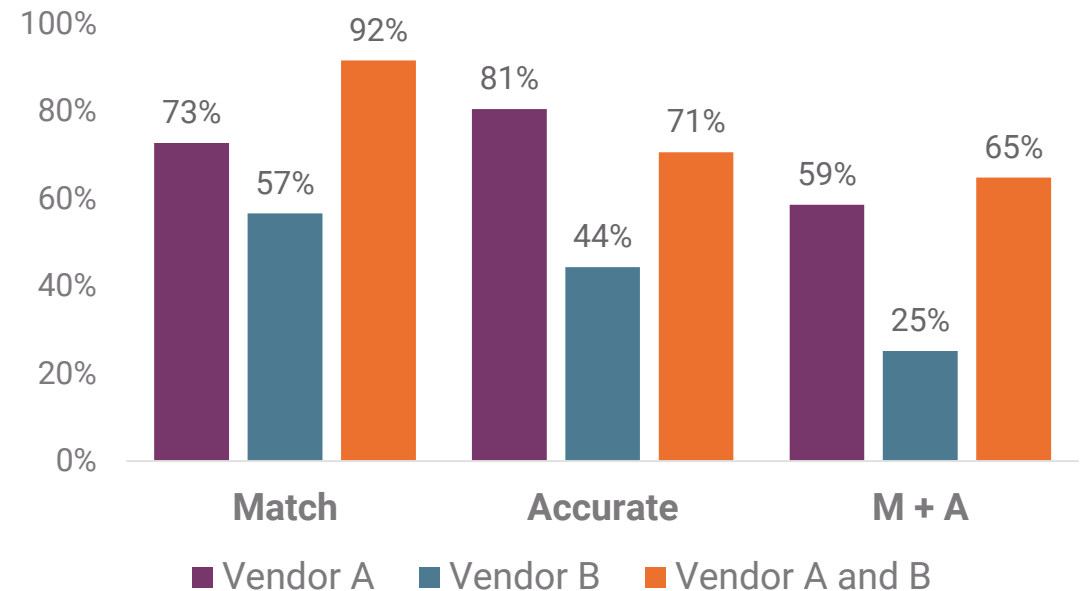
All Phones

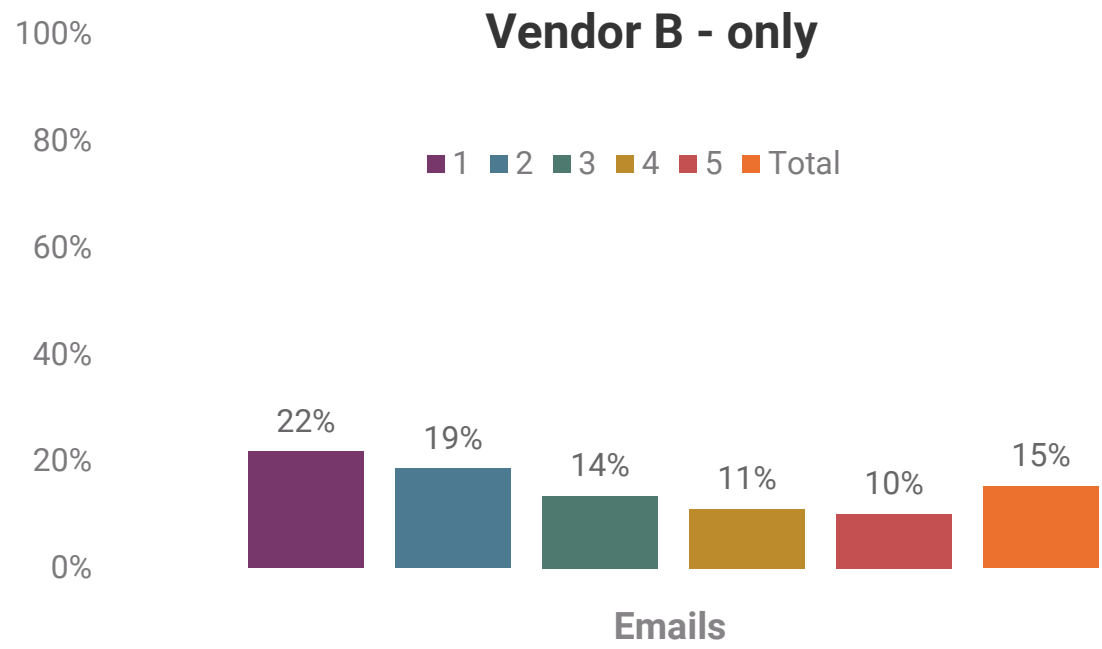
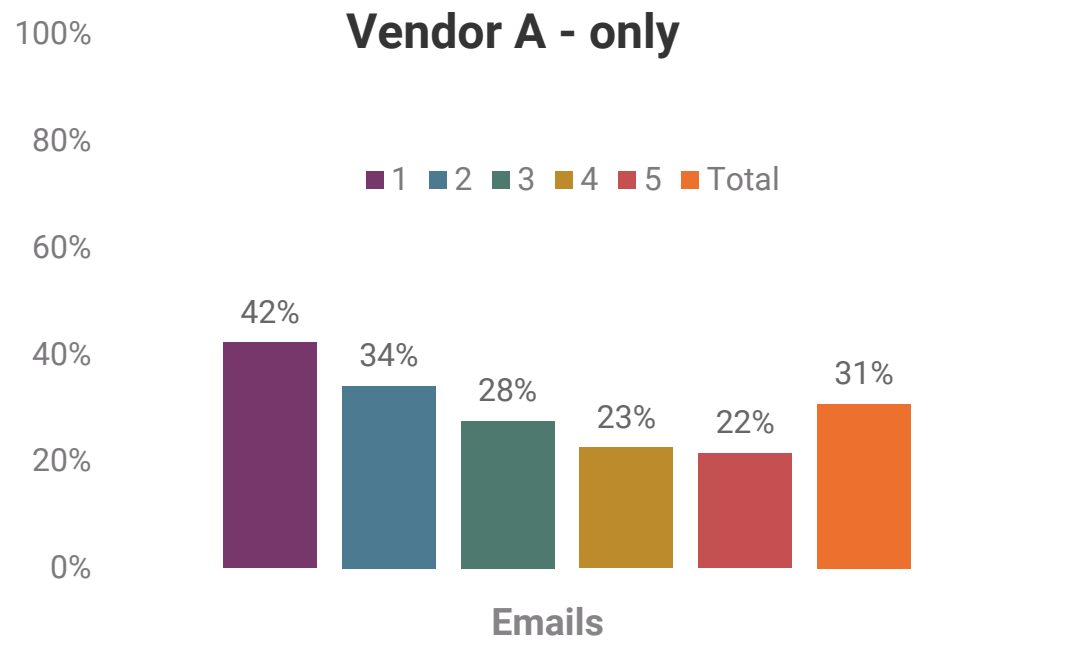


Landlines

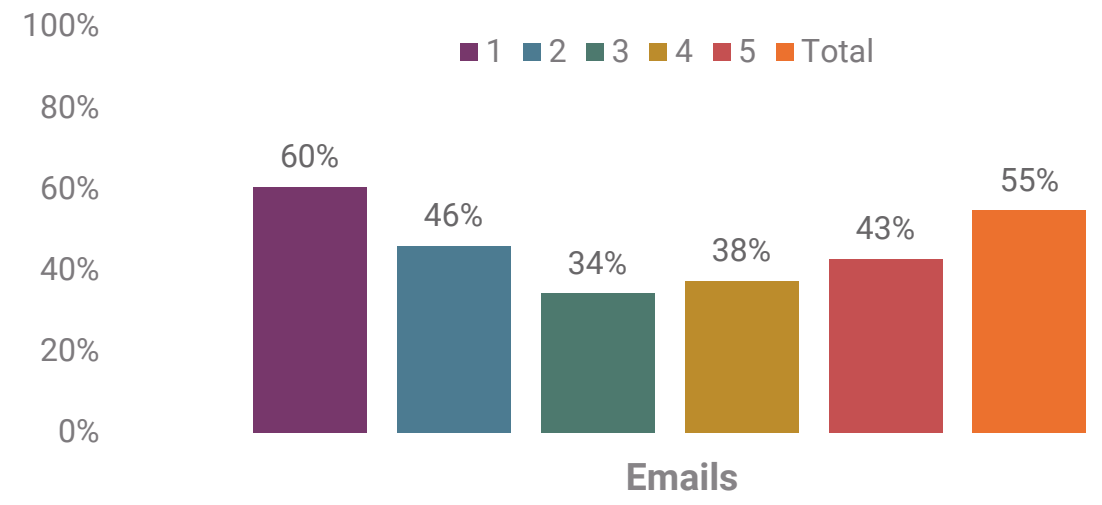


Cellphones

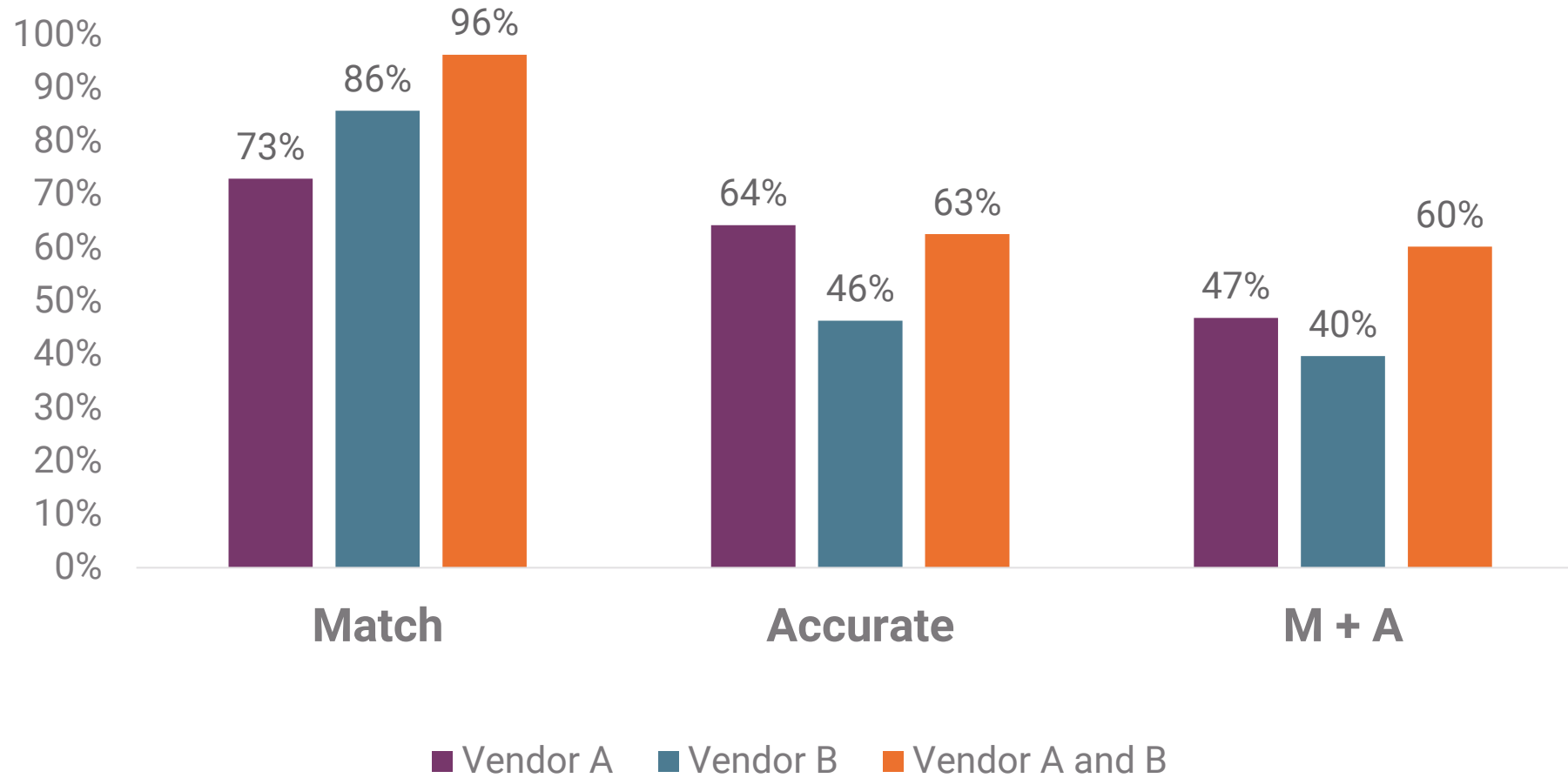




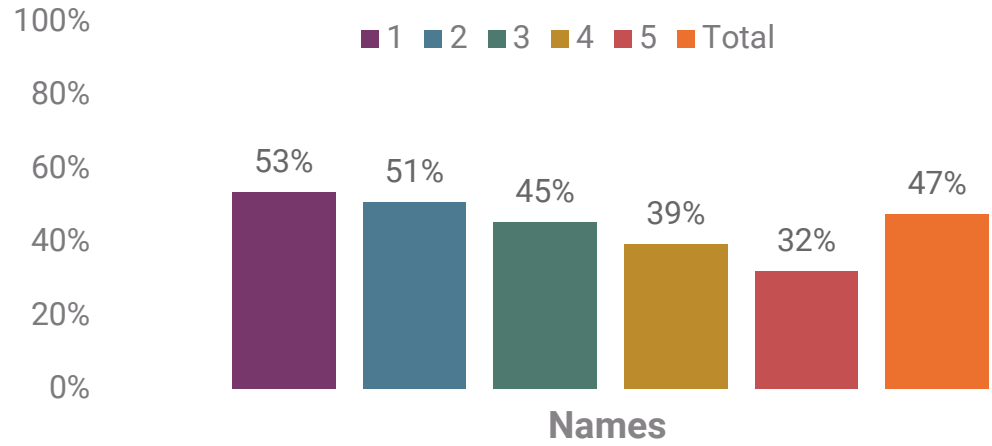
Vendor A and B overlap →



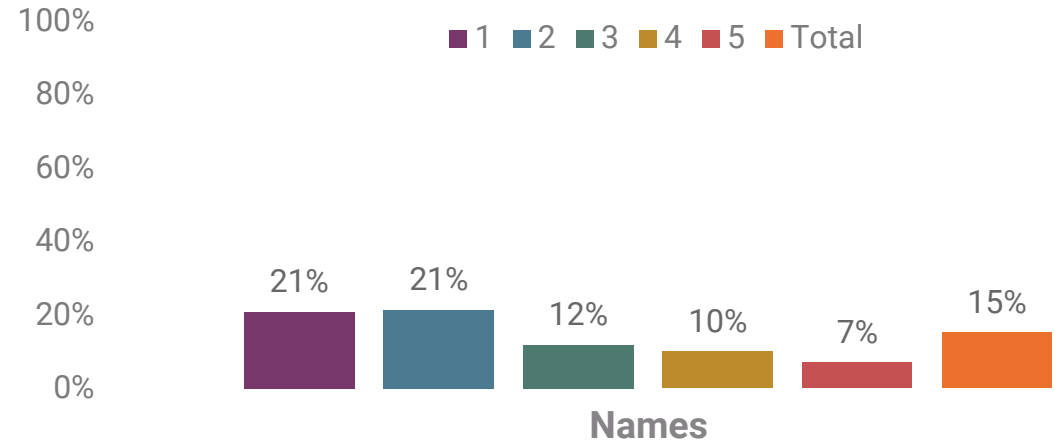
Emails



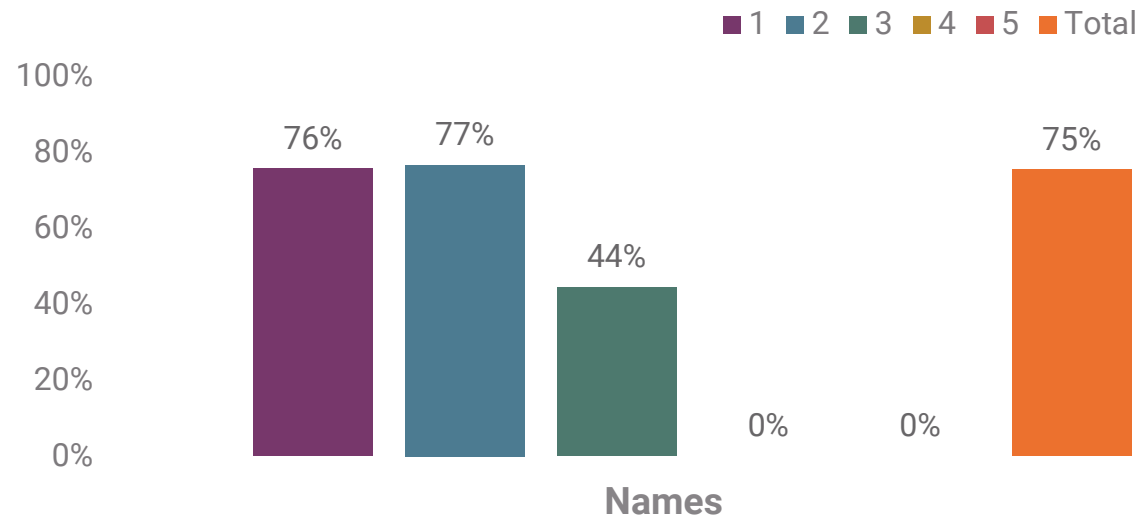
Vendor C - only

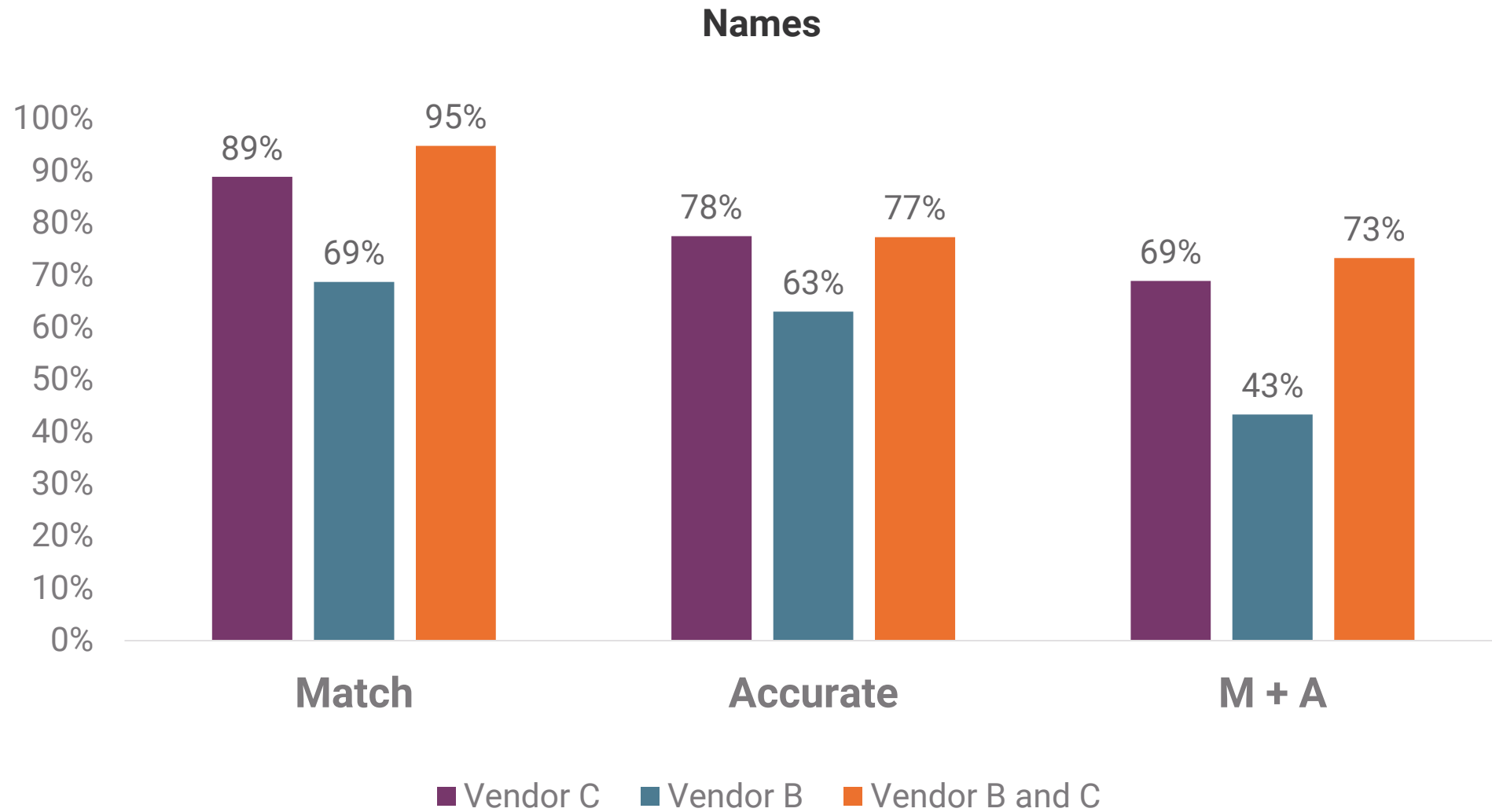


Vendor B - only



Vendor B and C overlap





There are many vendors to pick from...but not all are created equally in terms of cost and quality, nor do all provide names, phones, and/or emails.

PHONES:

- 10 years ago, mostly landlines; now, mostly cellphones
- Up to 5 phones widely available; ~80% match rates (*household level*)
- Only the first landline is worth keeping, and then only modest in accuracy (15-40%)
- 87% (Vendor A); 50% (Vendor B) accuracy rate (*household level*)

EMAILS:

- 1st email 22-42% accurate at the individual level, declining for later emails
- ~80% match rate (*household level*)
- 64% (Vendor A); 46% (Vendor B) accuracy rate (*household level*)

NAMES:

- Are widely available (95% +)
- Accuracy is middling at the individual level (30-50%), more accurate for households (60-80%)
- Vendor C is accurate (78% household); Vendor B OK (63%)

OVERALL HOUSEHOLD MATCH AND ACCURACY COMBINED RATE:

- Phones: 68 / 39 / **76%** - Vendor A / Vendor B / Combined
- Emails: 47 / 40 / **60%** - Vendor A / Vendor B / Combined
- Names: 69 / 43 / **73%** - Vendor B / Vendor C / Combined

Questions?



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Thank you.

Get Your Research Right

