



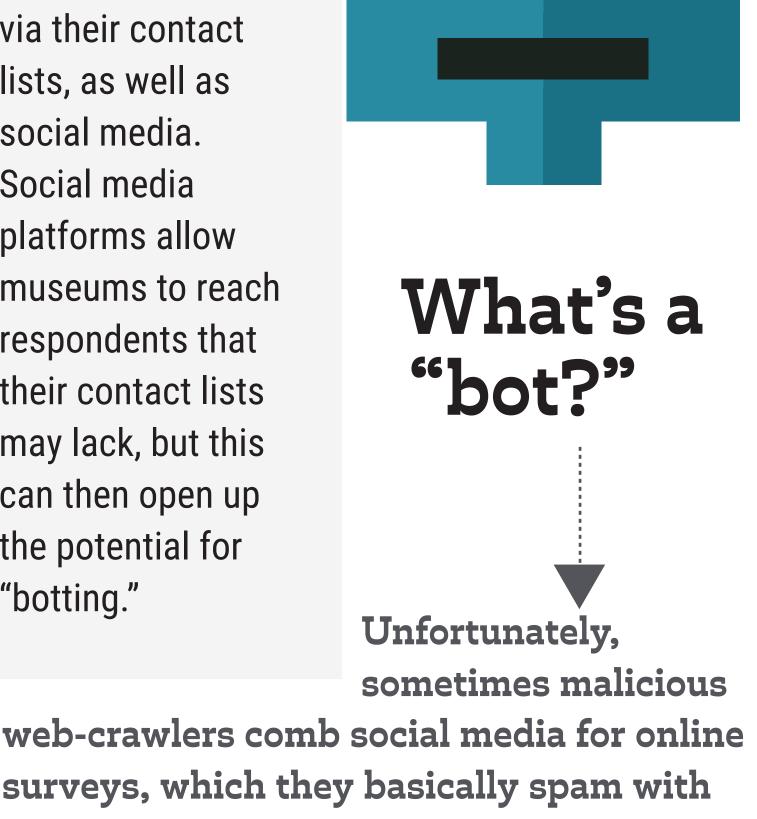
like that time a children's museum survey results showed the majority of respondents were men without children, we knew immediately what had happened... They got botted.

distributed by museums mostly via their contact lists, as well as social media. Social media platforms allow museums to reach respondents that their contact lists may lack, but this can then open up the potential for "botting." fake responses. These fake respondents or "bots" use automated tools and programs to complete the survey many, many times and often very quickly.

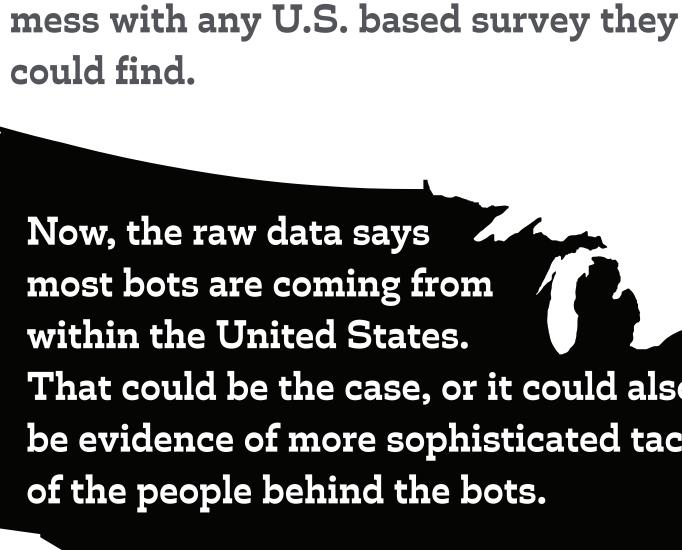
Each year, the

**Annual Survey of** 

Museum-Goers is



Why spam a museum survey?



We have found

that the small prize

drawing incentive offered for completing

the survey attracts bots, just like bees to

honey. And this is what web-crawlers are

hoping to benefit from when they spam a

trying to stack the odds in their favor!

survey on a large scale. Essentially, they're

Either way, bots

are more than a

most bots are coming from within the United States. That could be the case, or it could also be evidence of more sophisticated tactics of the people behind the bots.

Honestly, we're not entirely

sure. A few years ago a large

percentage of bots appeared

to be coming from Russia. In

that case, we assumed it was

intended to indiscriminately

nuisance ... and they can skew your data! So how do we know which responses are

legit or not?

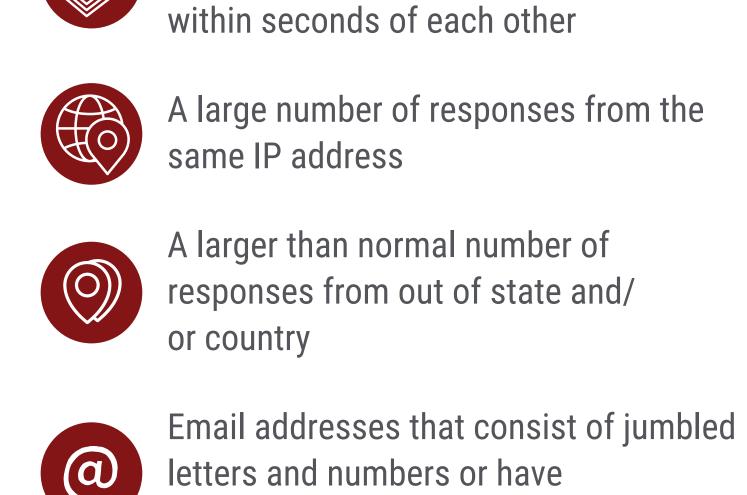
Here are some of the red flags we

infiltrated a survey:

look for when we suspect bots have

A cluster of surveys that were started

and/or completed at the same time or



names/numbers in a pattern

answers to questions

Inconsistent and/or contradictory

Ratio of completed surveys and partially

completed surveys is out of normal range

(it is normal to have between 15%-20% of

your surveys only partially completed)

Repetitive, patterned, nonsensical,

irrelevant, and/or less than genuine

responses to open-ended questions

Results that don't make sense for some museum types (like our children's museum example above!) Surveys that were taken very quickly, sometimes in seconds

Some of these potential red flags on

their own may be normal and not

conduct thorough data cleaning.

necessarily a bot, which is why we

Because participation in the

questions are not required,

survey is voluntary and

data cleaning becomes a

subjective process. Therefore,

data. That's because our brains are now trained in the nuances of responses to make the final decision on the quality of each response and how many red flags is enough to identify the response as a bot.

While we do implement

many automatic strategies (sorry,

we're keeping those confidential

because we don't want botters to

from attacking, our experience

know our secrets!) to help stop bots

we use our brains (and not computers!) to

pre-sort suspicious responses and to clean

suggests that they will still find ways to sneak into a survey. But rest assured, we'll continue to diligently

comb through the data

to spot bots - looking for

those red flags and then

cleaning up the data - to

make sure that collected

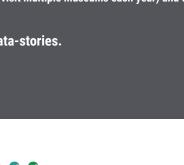
responses are reliable

Annual Survey of Museum-Goers Data Stories are created by Wilkening Consulting on behalf of the American Alliance of Museums. Sources include: \*Data Stories share research about both frequent museum-goers (typically visit multiple museums each year) and the broader population

• 2017 - 2024 Annual Surveys of Museum-Goers (including casual, sporadic, and non-visitors to museums). More Data Stories can be found at wilkeningconsulting.com/data-stories. Jessica Strube,

lead author

and accurate!



American

iance of WilkeningConsulting

**Data Story release date:** January 09, 2025 © 2025 Wilkening Consulting, LLC