Addressing Data Quality

Maintaining the Highest Quality Standards in Online Market Research

In the digital age, data accuracy and authenticity is key. Ipsos' quality systems offer a multi-layer protection, constantly monitored and updated, to guarantee the highest quality standards in online market research . A dedicated Panel Health team keeps a vigilant eye on the ongoing health of our panels, fine-tuning systems, and ensuring that only the most accurate data flows through. Our approach focuses on three main areas.

1. Panelists

We constantly verify the authenticity and credibility of our respondents and of the data they provide. During surveys, our real-time advanced systems detect bot-like behavior and similarities between different accounts. Ipsos' vetting process for external sample suppliers is rigorous. By actively benchmarking and managing partnerships, only the most reliable sources are allowed to contribute to our surveys.

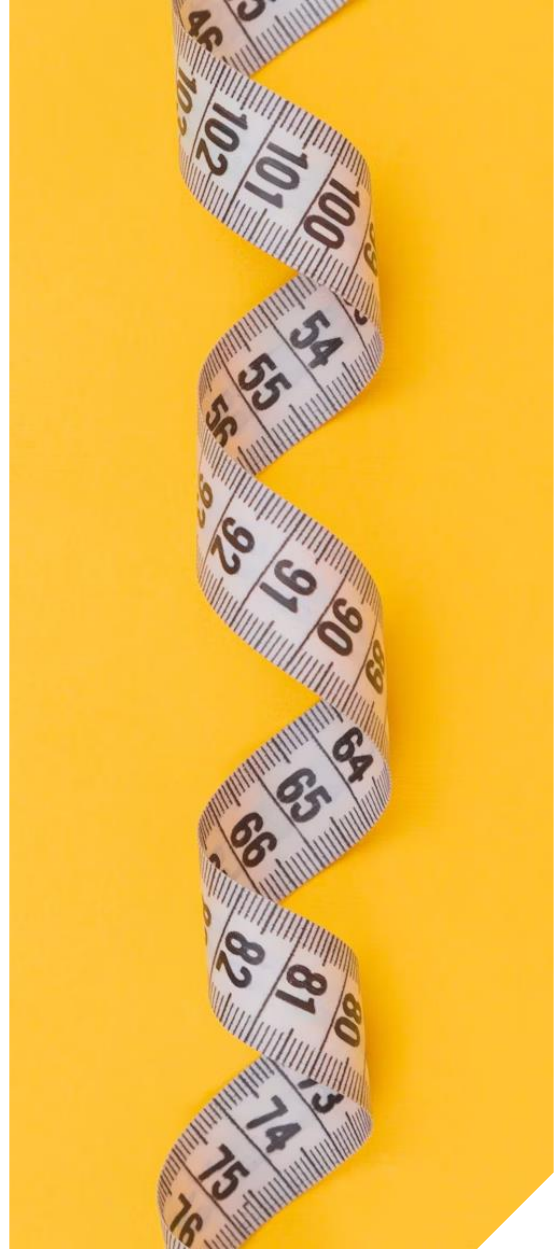
2. Devices

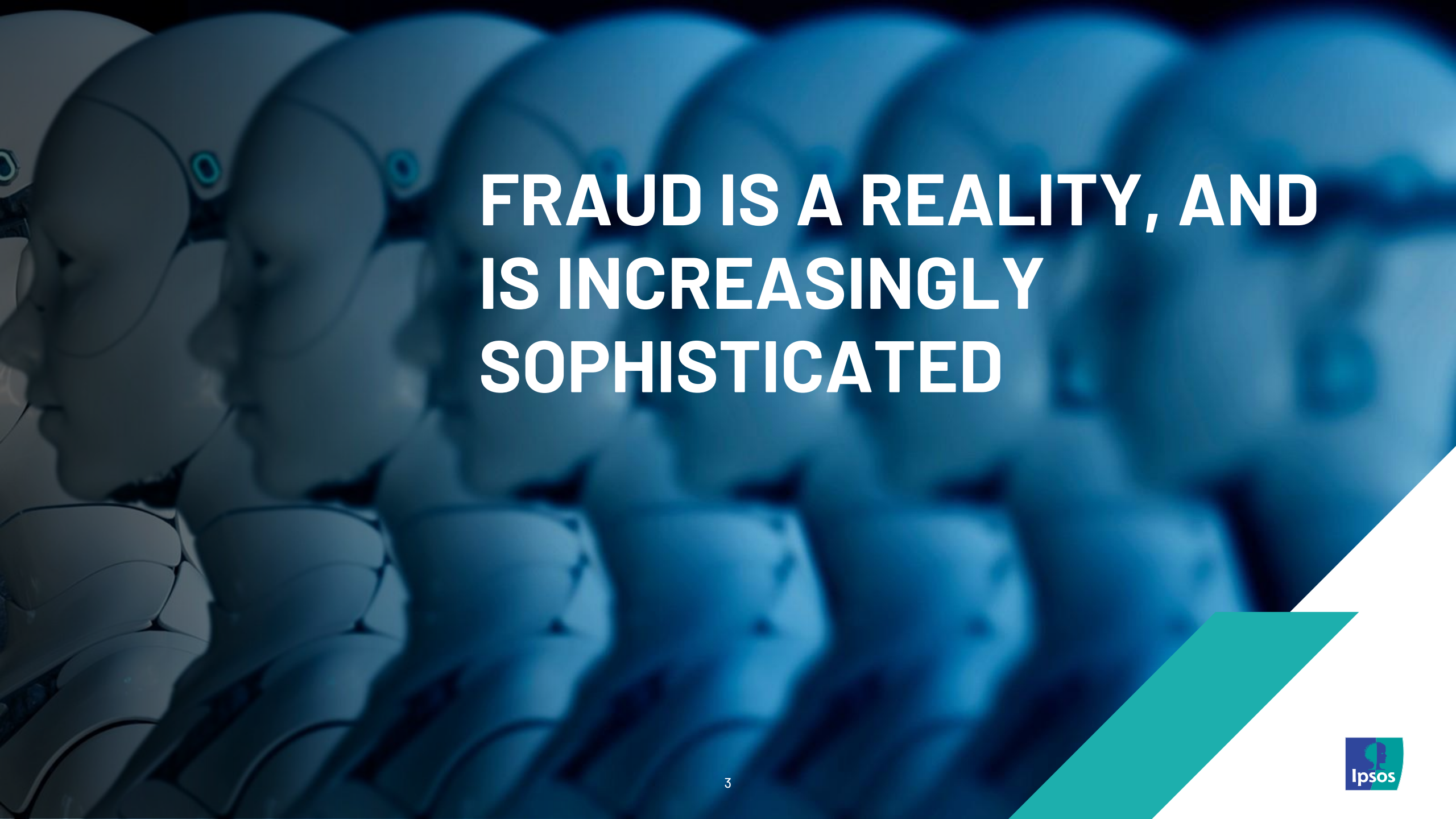
Through our advanced digital fingerprinting technology, we ensure every device has an indelible identity, at both the panel level (to avoid the creation of multiple accounts) and study level (to block people from accessing the same survey through different sources).

3. Responses

A tool Ipsos utilizes to protect against fraud is the questionnaire itself: we design certain questions to ensure we can identify respondents who may be providing false or misleading questions. Our AI algorithms detect genuine human engagement vs. AI-generated responses, especially on open-ended questions.

This is how we ensure that every byte of data is the unaltered voice of a genuine respondent. In the following section we outline the approach in more detail.





FRAUD IS A REALITY, AND IS INCREASINGLY SOPHISTICATED

FRAUD – A NEW REALITY GLOBALLY

Different types of fraudulent activities are increasing across **ALL industries, and ALL markets**.

small-scale misrepresentation

"out of country"

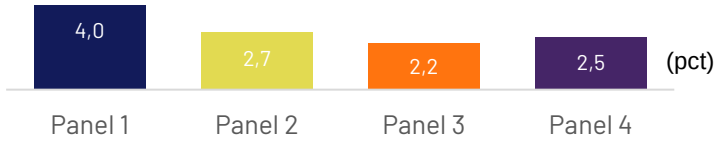
large-scale fraud using technology

But not all studies are exposed to the same amount of risk. **Understanding and managing risk is critical.**

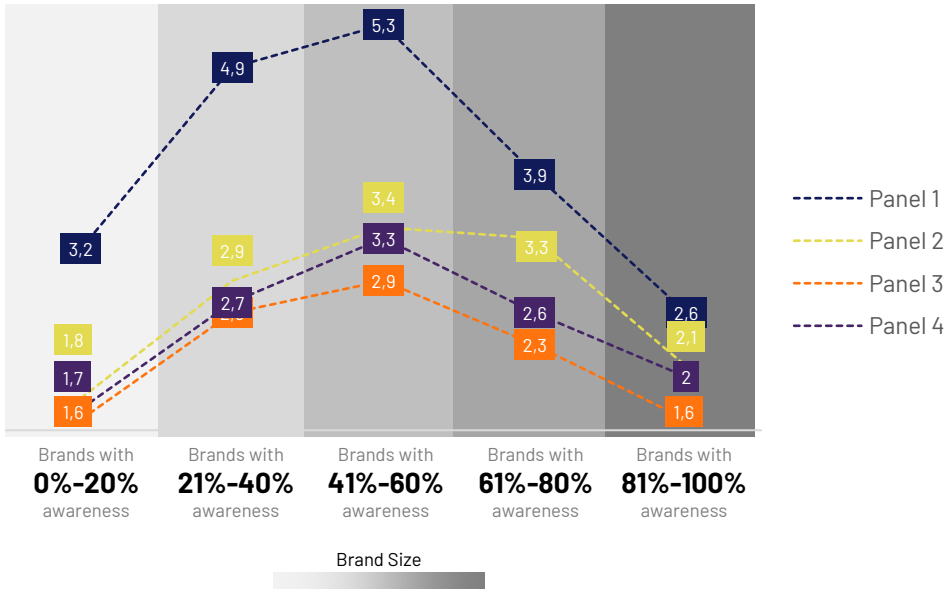
All panels are not the same

- Although we have our own high quality Ipsos panel we also work with trusted partners to help fulfil sample requirements
- We know from analysis of our own tracking data that data quality is not the same across different panel partners
- We analysed variance in brand awareness between tracking waves. Our assumption was that there should be low variation between waves since brand awareness is not a volatile measure
- The variation is smallest for large and small brands and higher in the middle. Brands with around 50% aided awareness see more variance every wave (on average) than brands around 90% or 10% aided awareness
- **Most interestingly though, our analysis shows that there is a big difference between panel partners, the variation is a lot higher for some partners – the implication being that some are much better at quality control than others**

Average diff in pct between waves on awareness per Panel



Average diff in pct between waves on awareness per Panel and Brand size



Strict measures to ensure both quality of sample and survey integrity

- Different types of fraudulent activities are increasing across all **industries**, and all **markets**.
- Research fraud exists when a small subset of respondents lie and misrepresent themselves or create synthetic identities to secure incentives.
- Market research fraud attacks are often initiated in other industries, using both technology and human. Traditional systems -- built specifically for the market research ecosystem -- are increasingly overwhelmed.
- Ipsos has adopted a multi-layered approach that includes a range of new technologies that are not limited to the market research industry to fight against fraud.
  All tools will be constantly updated to address new forms of fraud. Our objective is to fight fraudulent pressure through increased automation and real-time detection in all respondent interactions.
- A further tool to protect against fraud is the questionnaire, via the use of hidden traps.

Our automated systems currently guard against

Robotic responses

Meaningless responses generated through the use of automated scripts to generate large numbers of responses with no human effort.

Duplicate responses

Attempts by fraudulent individuals or click farms to increase their opportunities for reward through multiple accounts or multiple survey attempts.

Unengaged responses

Low quality responses generated by fraudulent respondents not answering questions meaningfully or genuine respondents distracted or bored when taking a survey

Our quality tools systems provide respondents that are

Real

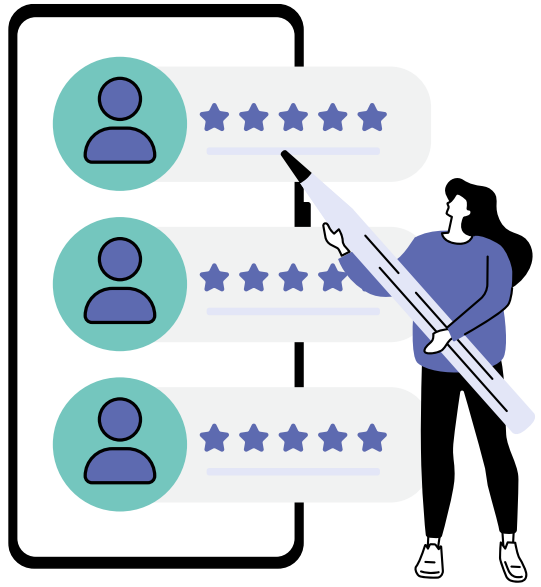
They are human, not a bot

Unique

They can take the same survey / join the panel only once

Engaged

They give thoughtful survey answers



What information do we use to guard against fraud and disengagement?

Source

Information we gather about our own panelists and the suppliers we work with

VIA

Ipsos Panels:

- Honey pots
- SMS verification, suspect phone blocking
- Detection of bot-like behaviour
- Detection of account similarities
- Tracked performance of individual panellists (panellist score)

External Supplier:

- Strict vetting process for partners
- Benchmarking of different partners to understand evolution
- Guidelines for blend composition
- Tracked performance of vendors (supplier score, removal rates)

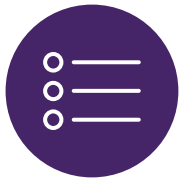
Device

Information we read about the survey device

VIA

Digital fingerprinting technology with TruValidate:

- Device check
- De-duplication check



Response

Information provided in survey responses

VIA

DataGuard automated systems:

- Robotic response detection
- Data pattern recognition (similarity, under- or over-clicking etc.)
- Speeding and straightlining

Panel requitement flow

Panel Sign-up Form

SIGN UP

FAIL
This email address is registered with an account in our database

Device Check & De-duplication

TruValidate

Fraud Check | Digital Fingerprint

FAIL
This device is associated with fraud or has been used to register for an account in the past

Multi-Factor Authentication

Email Confirmation | SMS Confirmation

FAIL
Could not authenticate email or phone number

Profiling Survey

Demos | Open-end

Data Guard

Bot Detection | Pattern Recognition

FAIL
The response pattern is suspicious, or a bot was detected

Panel Registration Complete

WELCOME

Please Note:
A Panel Health team actively monitors the ongoing health and composition of panels to ensure ongoing quality.

Survey flow

Survey Invite Clicks

Panel | External Supply

Fraud Check

TruValidate

Fraud Check | Block List

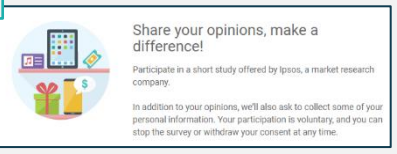
FAIL
This device is associated with fraud or user has been blocked from entering the sample

TruValidate

Deduplication of respondents in surveys

RETURNED
This device has answered this survey and is returned to the router

Survey



Data Guard

Bot Detection | Pattern Recognition | Straight Lining | Speed

REMOVE
Response pattern indicates poor quality or a bot answering the survey

Survey Complete

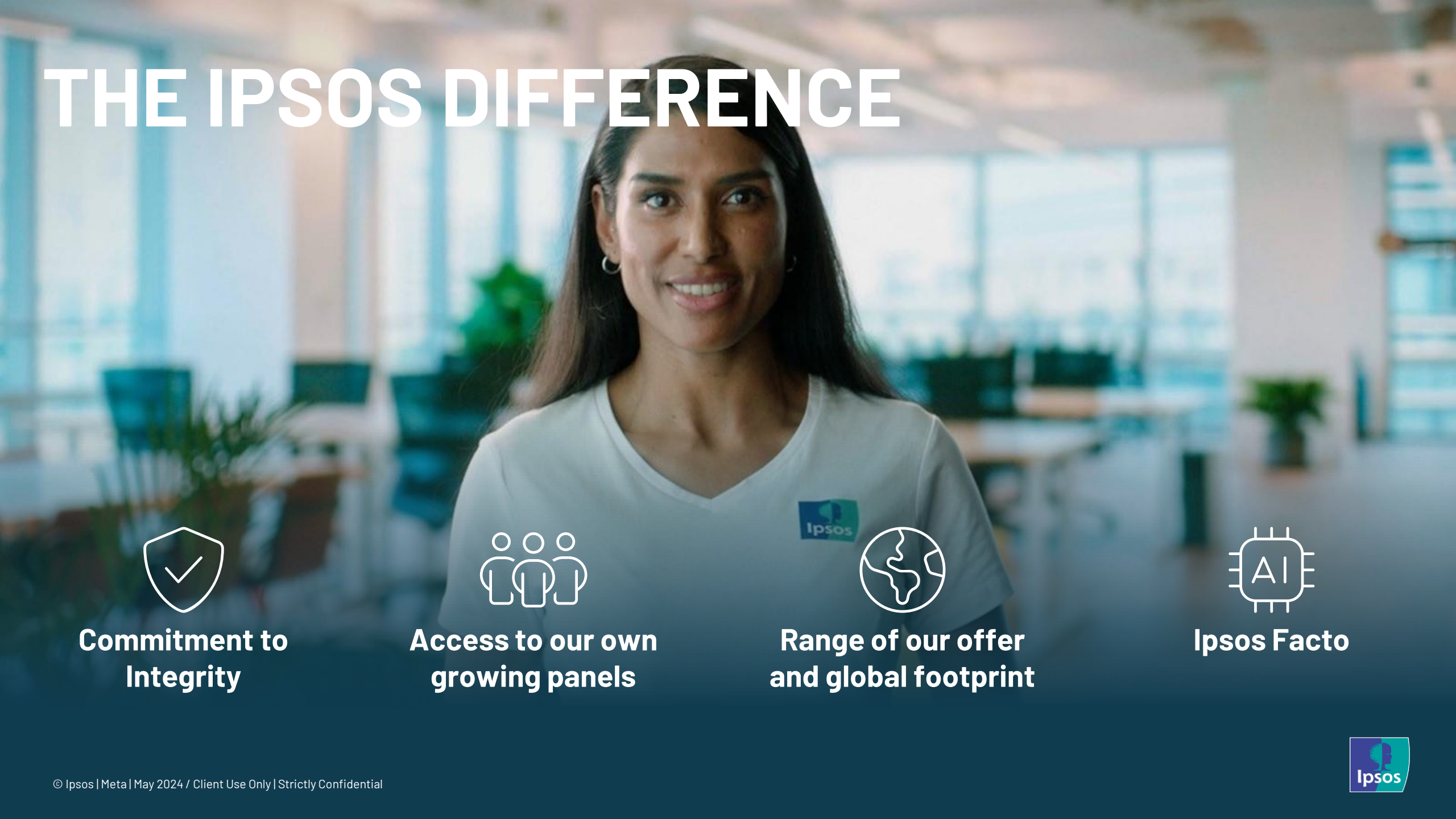
THANK YOU

Please Note:
Survey design is critical to fighting against fraud, and **disengagement**: online surveys are competing with other activities and distractions, which impacts the quality of responses. Keep surveys blinded, simple and short

Automated tools checklist – a snapshot

	Panel registration	In-survey	
Multi-Factor authentication via SMS code	X		Real
Detection/blocking of high-risk or disposable phone numbers	X		
Removal of disposable email domains	X		
Blocklisting of duplicate/similar email addresses and high risk domains	X		
IP address risk assessment	X	X	
Country Geo-IP country validation	X	X	
Mismatch between Geo-IP and device settings	X	X	
Access attempts from two countries in one day	X	X	
Device detection avoidance	X	X	
TOR network use	X	X	
TruValidate client network fraud evidence	X	X	
Data pattern recognition	X	X	
Bot detection with open end analysis via Dataguard	X	X	
Batch detection		X	
Honey pot questions		X	
Duplicate accounts detection	X		Unique
Duplicate device checks through digital fingerprinting	X	X	
Duplicate devices identification through cookies	X	X	
Speeding detection		X	Engaged
Straight-lining detection		X	
Questionnaire logic checks	X	By design	
Standarized coherence checks		X	

THE IPSOS DIFFERENCE



Commitment to Integrity

Access to our own growing panels

Range of our offer and global footprint

Ipsos Facto

THANK YOU