

# GWI Core: Research & methodology

GWI.



# Your step by step guide to how we collect our data



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# Key numbers



47

markets



2.6bn

internet users represented



700,000

interviews per year

100,000

in the US



40,000

profiling data points



4,000

brands

What is GWI Core?

We began our Core study back in 2009 in response to what was a clear need for a harmonized, global survey on how internet behaviors were evolving.

Starting with an annual study in the first year, it became bi-annual throughout 2010, 2011 and 2012 before being run each quarter from the start of 2013 onwards. At the end of 2021, we will have run 44 separate waves of research.

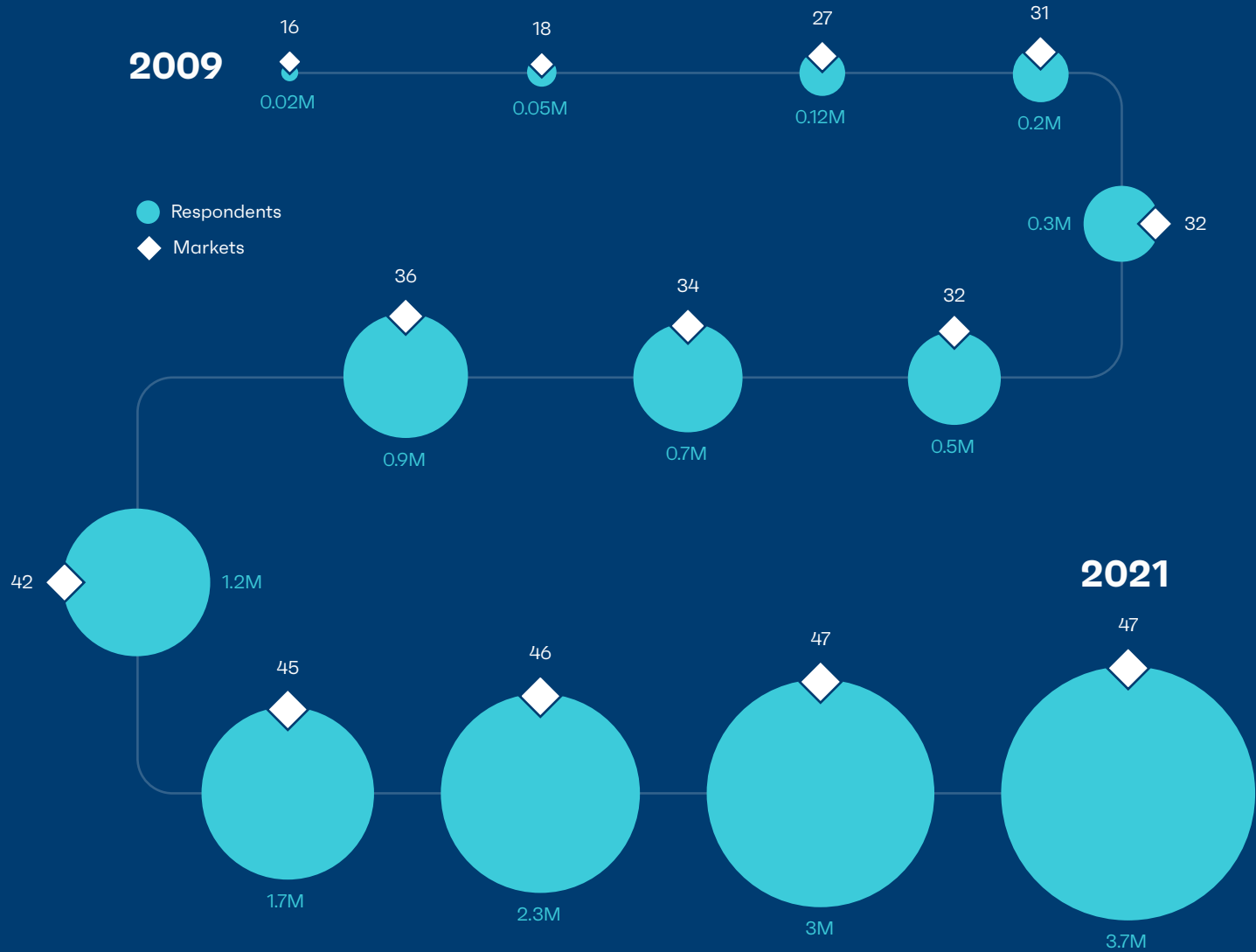
Over time, our country coverage has increased. Beginning with 16 markets in 2009, we were running our harmonized study in 36 countries by the end of 2016. We incorporated 6 new markets in 2017 and 5 more between 2018 and 2020, bringing our total to 47.

Covering 47 markets

Argentina	Indonesia	Russia
Australia	Ireland	Saudi Arabia
Austria	Israel	Singapore
Belgium	Italy	South Africa
Brazil	Japan	South Korea
Canada	Kenya	Spain
China	Malaysia	Sweden
Colombia	Mexico	Switzerland
Denmark	Morocco	Taiwan
Egypt	Netherlands	Thailand
France	New Zealand	Turkey
Germany	Nigeria	UAE
Ghana	Philippines	UK
Greece	Poland	USA
Hong Kong	Portugal	Vietnam
India	Romania	

We offer a co-launch option for new markets. For more information please contact your account manager

Cumulative response count



### Mobile surveys

In 2017, we launched a mobile version of our Core study containing a selection of questions from the full Core study in a format optimised for mobile. This has helped us expand our Core study globally, especially in Africa, where most internet users are mobile-first (and where significant minorities might be mobile-only). The mobile survey is run alongside the full version on other devices, with the results of both being merged together and published as one dataset. In Ghana, Kenya, Morocco and Nigeria, we only run the mobile version of the survey.

We run a mobile version of our Core survey to ensure we’re capturing mobile-first respondents

### Add-Ons

Since 2019, we have launched a number of studies which use GWI Core as their foundation but explore a particular subject area in greater depth. The first of these add-ons was GWI Work, which was launched in 2019. This was followed by GWI Zeitgeist in 2020, and GWI Gaming and GWI Sports in 2021.






For each add-on, we invite eligible respondents from the Core sample to take part in an additional survey. Those who respond and qualify go on to answer a series of questions about their work life, current trends, gaming or sports depending on which study they are participating in.

Because these respondents have also completed the Core survey, datapoints from each add-on can be compared with those from our Core study. This approach allows us to provide a detailed view of the behaviors and attitudes of internet users within a particular category, as well as shedding light on how these behaviors and attitudes intersect with their broader online profile.

















Annual sample size

EMEA		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	UK	2,300	4,000	6,000	4,000	25,000	30,000	30,000	30,000	30,000	33,000	40,000	40,000	40,000
	France	1,000	2,000	3,000	2,000	4,000	4,000	8,000	8,000	9,000	15,000	20,000	20,000	20,000
	Germany	1,000	2,000	3,000	2,000	4,000	4,000	8,000	8,000	9,000	13,000	20,000	20,000	20,000
	Italy	1,000	2,000	3,000	2,000	4,000	4,000	8,000	8,000	9,000	13,000	20,000	20,000	20,000
	Netherlands	750	1,500	2,300	1,500	3,000	3,000	3,000	3,000	5,000	5,000	5,000	5,000	5,000
	Russia	750	1,500	2,800	2,500	5,000	5,000	5,000	5,000	9,000	9,000	11,000	14,000	17,000
	Spain	1,000	2,000	3,000	2,000	4,000	4,000	8,000	8,000	9,000	13,000	20,000	20,000	20,000
	Poland	–	750	2,300	1,500	3,000	3,000	3,000	3,000	5,000	7,000	7,000	8,000	8,000
	Sweden	–	–	1,500	1,500	3,000	3,000	3,000	3,000	5,000	5,000	5,000	7,000	10,000
	Turkey	–	–	1,500	1,500	3,000	3,000	3,000	3,000	6,000	6,000	7,000	8,000	8,000
	Ireland	–	–	–	–	2,000	4,000	4,000	4,000	5,000	5,000	5,000	5,000	5,000
	Belgium	–	–	–	–	–	–	2,000	3,000	5,000	5,000	5,000	5,000	5,000
	Portugal	–	–	–	–	–	–	2,000	3,000	5,000	5,000	5,000	5,000	5,000
	Austria	–	–	–	–	–	–	–	–	1,000	5,000	5,000	5,000	5,000
	Switzerland	–	–	–	–	–	–	–	–	1,000	5,000	5,000	5,000	6,000
	Denmark	–	–	–	–	–	–	–	–	–	3,000	5,000	5,000	6,000
	Romania	–	–	–	–	–	–	–	–	–	1,000	5,000	5,000	5,000
	Greece	–	–	–	–	–	–	–	–	–	–	–	–	5,000














Americas		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	USA	2,000	4,000	6,000	4,000	24,500	30,000	30,000	30,000	63,000	72,000	100,000	100,000	100,000
	Mexico	750	1,500	2,000	1,500	3,000	3,000	3,000	3,000	6,000	10,000	12,000	17,000	17,000
	Canada	1,000	2,000	3,000	2,000	4,000	4,000	4,000	6,000	9,000	9,000	11,000	19,000	19,000
	Brazil	750	1,500	2,500	2,000	4,000	4,000	4,000	4,000	9,000	9,000	12,000	22,000	22,000
	Argentina	–	–	1,500	1,500	3,000	3,000	3,000	3,000	6,000	6,000	6,000	6,000	6,000
	Colombia	–	–	–	–	–	–	–	–	–	4,000	5,000	7,000	10,000

MEA		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Saudi Arabia	–	–	1,500	1,500	3,000	3,000	3,000	3,000	5,000	5,000	6,000	6,000	6,000
	South Africa	–	–	1,500	1,500	3,000	3,000	3,000	3,000	6,000	6,000	6,000	6,000	6,000
	UAE	–	–	–	1,500	3,000	3,000	3,000	3,000	5,000	7,000	7,000	7,000	7,000
	Egypt	–	–	–	–	–	–	–	750	5,000	7,000	7,000	7,000	7,000
	Ghana	–	–	–	–	–	–	–	–	3,000	4,000	4,000	4,000	4,000
	Kenya	–	–	–	–	–	–	–	–	3,000	4,000	4,000	4,000	4,000
	Morocco	–	–	–	–	–	–	–	–	3,000	4,000	4,000	4,000	4,000
	Nigeria	–	–	–	–	–	–	–	–	3,000	4,000	4,000	4,000	4,000
	Israel	–	–	–	–	–	–	–	–	–	4,000	2,500	5,000	6,000

APAC		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Australia	750	1,500	2,000	1,500	3,000	3,000	3,000	3,000	5,000	10,000	1,600	16,000	17,000
	China	1,000	2,000	4,000	4,000	8,000	8,000	13,000	22,000	43,000	61,000	70,000	96,000	96,000
	India	750	1,500	2,500	2,500	5,000	5,000	5,000	6,000	12,000	20,000	35,000	54,000	54,000
	Japan	1,000	1,500	2,300	1,500	3,000	3,000	3,000	4,000	7,000	7,000	8,000	14,000	20,000
	South Korea	750	1,500	2,300	1,500	3,000	3,000	3,000	3,000	5,000	5,000	5,000	6,000	8,000
	Malaysia		750	2,300	1,500	3,000	3,000	3,000	3,000	6,000	6,000	6,000	10,000	15,000
	Hong Kong			2,300	1,500	3,000	3,000	3,000	3,000	5,000	7,000	7,000	7,000	7,000
	Indonesia			2,300	1,500	3,000	3,000	3,000	3,000	7,000	7,000	10,000	20,000	20,000
	Philippines			2,300	1,500	3,000	3,000	3,000	3,000	6,000	6,000	8,000	12,000	12,000
	Singapore			2,300	1,500	3,000	3,000	3,000	3,000	6,000	10,000	10,000	11,000	13,000
	Taiwan				1,500	3,000	3,000	3,000	3,000	5,000	7,000	8,000	9,000	9,000
	Thailand				1,500	3,000	3,000	3,000	3,000	6,000	6,000	10,000	15,000	15,000
	Vietnam				1,500	3,000	3,000	3,000	3,000	6,000	6,000	8,000	10,000	10,000
	New Zealand								750	5,000	5,000	5,000	5,000	5,000



Sample size by quarter

Market			Market		
	Argentina	1,500		Morocco	1,000
	Australia	4,250		Netherlands	1,250
	Austria	1,250		New Zealand	1,250
	Belgium	1,250		Nigeria	1,000
	Brazil	5,500		Philippines	3,000
	Canada	4,750		Poland	2,000
	China	24,000		Portugal	1,250
	Colombia	2,500		Romania	1,250
	Denmark	1,500		Russia	4,250
	Egypt	2,000		Saudi Arabia	1,500
	France	5,000		Singapore	3,250
	Germany	5,000		South Africa	1,500
	Ghana	1,000		South Korea	2,000
	Greece	1,250		Spain	5,000
	Hong Kong	1,750		Sweden	2,500
	India	13,500		Switzerland	1,500
	Indonesia	5,000		Taiwan	2,250
	Ireland	1,250		Thailand	3,750
	Israel	1,500		Turkey	2000
	Italy	5,000		UAE	1,750
	Japan	5,000		UK	10,000
	Kenya	1,000		USA	25,000
	Malaysia	3,750		Vietnam	2,500
	Mexico	4,250			



## Our respondents

To interview internet users at such a vast scale, we work with a number of industry-leading panel providers across our Core markets. These providers manage the relationships with respondents on their respective panels, from the initial recruitment process through to the distribution of invitations to take part in our surveys. In some countries, these partners will also engage further panels to help fulfil our sample needs; practically, that means our respondents are typically sourced from between 2-5 panels in the majority of markets.

Although each provider will have its own systems in place, they will typically invite people to sign up to their

panels via online ads, sponsored posts, online messaging and partnerships with sites. Anyone who expresses an interest will then undergo a joining process, which involves verification of their email address and submission of basic demographic information.

Each time we launch fieldwork, we supply our panel partners with demographic information about the respondents we require in order for our sample to be representative. This involves instructing them on the number of female and male respondents, the number from each age group, the proportion with secondary vs tertiary education, and so on.

## Incentives

Our panel partners offer a variety of incentives to respondents to take part, which can include:

- ✔ Monetary payments/PayPal credit
- ✔ Loyalty points
- ✔ Vouchers
- ✔ Charity donations
- ✔ Competition/sweepstake entry

These incentives are designed to appeal to respondents of all backgrounds, including wealthier segments who might be most motivated by the chance to help good causes. The value of incentives will vary between markets, and sometimes between demographics within a particular country.

We work with a number of industry-leading panel providers to interview a diverse range of high-quality respondents



Sample structure

There are two key points to note about the sample structure for our Core study.

We represent 16-64 year-olds

We don’t interview anyone aged 15 or under for our Core study because parental consent would be needed. In addition, questions would need to be asked in a way which was suitable for younger respondents. However, we do run a separate study, GWI Kids, which looks specifically at internet users aged 8-15.

We don’t interview people aged 65+ because it’s very challenging to find enough people in this age bracket in some markets – particularly emerging markets where internet penetration rates are low and online populations are therefore dominated by younger age groups. As we want our Core study to be representative and harmonized across markets, we therefore set an upper age limit.

We represent online populations


Internet penetration rates vary significantly around the world, from highs

of 90%+ in parts of Europe and North America to lows of around 40% in parts of Africa and Asia. Because of this, the demographic composition of the online population may look very different from one market to the next; this will be reflected in our sample structure.

Where a market has a high internet penetration rate, its online population will be relatively similar to its total population and hence we will see good representation across all age, gender and education breaks.

Where a market has a medium to low internet penetration, its online population can be very different to its total population; broadly speaking, the lower the country’s overall internet penetration rate, the more likely it is that its internet users will be young, urban, affluent and educated. In some Middle Eastern, African and Asian countries, we would also expect a gender-based skew towards males.

Internet penetration estimates

 Argentina	83%	 Morocco	74%
 Australia	91%	 Netherlands	96%
 Austria	91%	 New Zealand	94%
 Belgium	92%	 Nigeria	51%
 Brazil	77%	 Philippines	68%
 Canada	95%	 Poland	83%
 China	66%	 Portugal	79%
 Colombia	69%	 Romania	78%
 Denmark	98%	 Russia	89%
 Egypt	59%	 Saudi Arabia	93%
 France	87%	 Singapore	91%
 Germany	93%	 South Africa	64%
 Ghana	51%	 South Korea	98%
 Greece	80%	 Spain	93%
 Hong Kong	93%	 Sweden	96%
 India	47%	 Switzerland	96%
 Indonesia	49%	 Taiwan	91%
 Ireland	88%	 Thailand	63%
 Israel	90%	 Turkey	80%
 Italy	79%	 UAE	99%
 Japan	94%	 UK	97%
 Kenya	42%	 USA	92%
 Malaysia	86%	 Vietnam	73%
 Mexico	74%		

The above forecast is based on ITU data from 2018 and 2019. Note that these figures are for the total population whereas our Core research is conducted among 16-64s, among whom the internet penetration rate will be higher.

## Quotas

To ensure that our Core sample is representative of each country's online population aged 16-64, we set quotas on age, gender and education. To set these, we conduct thorough research across a range of international and national sources.

At a global level, these include the World Bank, the International Labour Organization, the CIA Factbook and the US Bureau of Labor Statistics; within individual markets, we are typically taking data from national statistics sources, government departments, Eurostat or other credible and robust third-party sources.

In the UAE, we also set quotas on nationality. Meanwhile, in the USA, we set quotas on age, gender, income, region, race and ethnicity. This is to align Core with our GWI USA study, which uses a broader range of quotas. In an ideal world, we would use this system across all Core markets. However, such information about a country's online population is not always readily available.

In the remainder of our Core markets, education is used as a proxy for income. When combined with our age and gender quotas, this provides an accurate view of the composition of the online population, with other key demographics (such as region) falling out naturally.

**We set quotas  
on age, gender  
and education  
to ensure our  
research is  
representative  
of each country's  
online population  
aged 16-64**

Universe size

To explain how we calculate the universe size for each of our Core markets, we can look at the UK as an example. The UN estimates there are 42.48 million people aged 15-64 in the UK. Here you can see this figure broken down by age group, and with the total number of 15 year olds removed ▶

	16-24	25-34	35-44	45-54	55-64
Male	4,104,493	4,480,042	4,242,949	4,608,987	3,748,797
Female	3,932,052	4,473,329	4,290,538	4,739,536	3,860,385

Using data from the Office for National Statistics, we can then find the percentage of each these groups who use the internet (via any device) ▶

	16-24	25-34	35-44	45-54	55-64
Male	100%	100%	100%	99%	99%
Female	100%	100%	100%	99%	99%

By multiplying these two datasets together, we know that over 99% of 16-64s in the UK are internet users. This equates to 42.31m people.

Weighting

After each wave of fieldwork, we then assign a “weight” to every respondent based on their age, gender and education profile. This allows us to calculate approximately how many people are represented by their responses, and to forecast overall audience sizes accordingly.

For example, we might know that a response from a young male aged 16-24 represents 8,000 similar individuals in their market. So, each time that respondent answers positively to a question, the corresponding audience size for that question is increased by 8,000.

\*In Saudi Arabia and the USA, we use additional weighting criteria, such as nationality, race and ethnicity. For more information on this, please contact your account manager.

Number of internet users represented by a GWI Core respondent (000s)

	Argentina	17		Morocco	16
	Australia	4		Netherlands	9
	Austria	4		New Zealand	2
	Belgium	6		Nigeria	66
	Brazil	23		Philippines	17
	Canada	5		Poland	11
	China	28		Portugal	5
	Colombia	11		Romania	9
	Denmark	2		Russia	25
	Egypt	19		Saudi Arabia*	11
	France	8		Singapore	1
	Germany	10		South Africa	20
	Ghana	10		South Korea	18
	Greece	5		Spain	6
	Hong Kong	3		Sweden	2
	India	26		Switzerland	4
	Indonesia	23		Taiwan	7
	Ireland	2		Thailand	9
	Israel	3		Turkey	23
	Italy	7		UAE	3
	Japan	14		UK	4
	Kenya	20		USA*	8
	Malaysia	7		Vietnam	19
	Mexico	16			

# In addition to a wide range of global brands, we compile tailored lists of local brands for each country

## Localization

We place a strong emphasis on ensuring the content of our surveys is consistent across all of the markets we cover. However, there are some cultural and legal exceptions to this:

- ✓ We do not ask under-18s (or under-21s in the US) about alcohol. There are also age-restrictions relating to behaviors such as gambling.
- ✓ In Middle Eastern countries, some options are localized in line with prevailing cultural customs. Examples of this include asking if someone is living with their spouse rather than their partner, or whether they are engaged rather than in a relationship. We also do not ask about pregnancy in the Saudi Arabia, Egypt or the UAE.
- ✓ We only ask about sexual orientation in Australia, New Zealand, North America and in a select number of Western European markets.

- ✓ In most brand questions, respondents are asked about their engagement with a number of local brands in addition to the global ones asked in all markets.

- ✓ Respondents see locally appropriate education stages, based on levels specified in the International Standard Classification of Education (ISCED).

- ✓ Respondents are asked to select monetary values in their own local unit of currency.

We also employ routing to ensure that respondents are not asked questions which would be irrelevant to them. For example, if someone says they do not use any social networks, then they are not asked follow-up questions about this behavior.

























The survey itself is divided into thematic “blocks” of questions. These blocks are rotated on a random basis to ensure sections do not always appear in the same position within the survey.


























### Survey language

All respondents complete the survey in their local language. In most countries we offer one language only but, as per the table below, there are two or three languages available in the following markets: Austria, Belgium, Canada, Egypt, Israel, Malaysia, Morocco, Saudi Arabia, Switzerland, UAE and USA.

To ensure that all text is translated accurately – and with appropriate digital context – we work with an expert translation company. Each quarter, any changes/additions are sent to this company, which then employs local and digitally savvy translators in order to update the survey.

	First language	Second/third language
	Argentina	Latin American Spanish
	Australia	American English
	Austria	Austrian German
	Belgium	Flemish Belgian French
	Brazil	Brazilian Portuguese
	Canada	American English Canadian French
	China	Mandarin
	Colombia	Latin American Spanish
	Denmark	Danish
	Egypt	American English Arabic
	France	French
	Germany	German
	Ghana	American English
	Greece	Greek
	Hong Kong	American English Cantonese
	India	American English Hindi
	Indonesia	Indonesian
	Ireland	American English
	Israel	Arabic Hebrew
	Italy	Italian
	Japan	Japanese
	Kenya	American English
	Malaysia	American English Malay
	Mexico	Latin American Spanish

	First language	Second/third language
	Morocco	Arabic French
	Netherlands	Dutch
	New Zealand	American English
	Nigeria	American English
	Philippines	American English Tagalog
	Poland	Polish
	Portugal	Portuguese
	Romania	Romanian
	Russia	Russian
	Saudi Arabia	American English Arabic
	Singapore	American English
	South Africa	American English
	South Korea	Korean
	Spain	Spanish
	Sweden	Swedish
	Switzerland	French German   Italian
	Taiwan	Taiwanese Mandarin Chinese
	Thailand	Thai
	Turkey	Turkish
	UAE	American English Arabic
	UK	American English
	USA	American English Spanish
	Vietnam	Vietnamese



## Data checks

Before completing one of our surveys, all panelists will have undergone quality checks conducted by their panel. However, we also run stringent testing both during and after fieldwork to ensure a high-quality and robust sample.

These include:

✔ **Checking completion time**

By running high volumes of automatic “test” respondents through the survey, we know approximately how long it should take the “average” person to complete (information which is supplemented by the knowledge we have gained from running similar surveys in previous quarters). Based on this, we have a minimum completion time – if anyone finishes more quickly than this, they are removed.

✔ **Detecting patterned answers**

If a respondent starts answering questions in a certain way, we will review

their answers across the survey and, if they appear to be suspicious, we will remove them.

✔ **Removing straight-liners**

Within our survey, we have a number of “grid” or “list” style questions which invite people to enter a level of agreement across a number of different categories. If someone answers in a uniform fashion throughout a list or grid, they will be flagged as a potential “straight-liner” – someone who might not be answering accurately. If someone does this on just one question in isolation, we will review their answer to see if this response pattern could be plausible or logical (for example, it could be the case that someone genuinely has not used any services within a particular

✔ **Detecting multiple  
“None of the above” answers**

In line with standard research practice, most behavioral questions (e.g. “Have

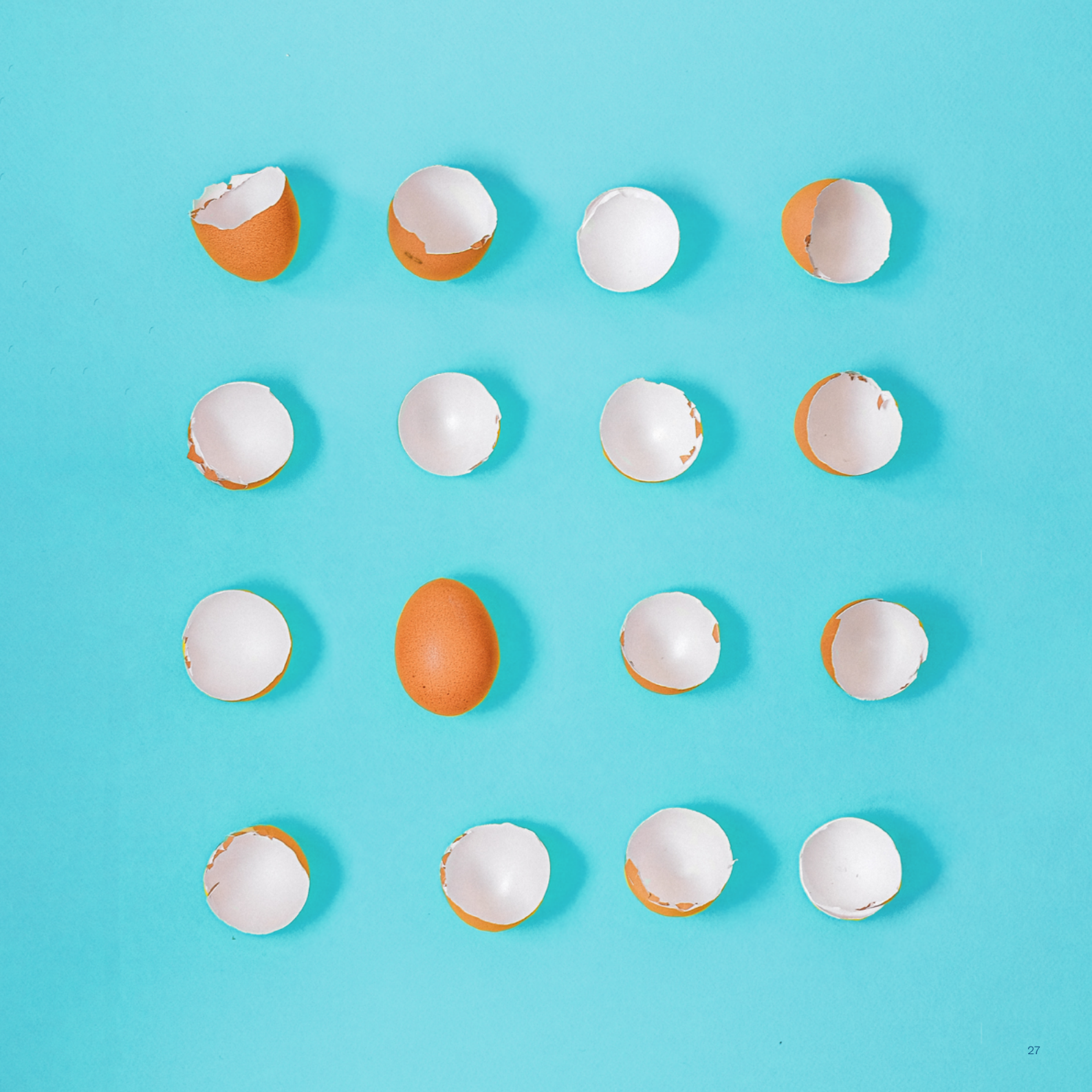
you done the following?”) will include a “none of the above” option at the end. We will monitor how frequently a respondent is selecting this option and remove them if we deem their “none of the above” responses to be excessively high.

✔ **Logic traps**

Our survey contains a number of “logic traps” where poor-quality respondents could contradict themselves. An example of this might be a respondent who says their child’s age is too high to be compatible with their own. Respondents who fail the logic traps are removed.

✔ **2x Rule**

When undertaking our analysis, respondents who are identified as being potentially suspicious on two or more of the criteria outlined above are automatically removed without any further consideration.





## Re-contact

Our Re-contact methodology allows us to interview GWI Core respondents again providing two significant benefits:

- ✓ We can pre-target even difficult to reach audiences based on 40,000 profiling data points
- ✓ We can synchronize the Custom and GWI Core datasets to allow a user access to a huge amount of data

For example, a client wants to Re-contact gamers from our GWI Core panel so they can better understand the role gaming plays in their life. Utilizing both datasets they can understand what motivates them to game (Re-contact) as well as which titles they engage with and how long they spend gaming (GWI Core).



## Measuring digital Impact

Our digital capabilities have all of the benefits of active and passive data collection. Tagged online content allows us to measure the impact of digital advertising and website visits.

- ✓ Measure the effectiveness of online campaigns
- ✓ Incorporate Opportunity To See (OTS) modelling for cross platform campaigns
- ✓ Evaluate online campaign targeting using 40,000 data points from our GWI Core study
- ✓ Understand the profile of a website's visitation audience with the same data points

