SYZYGY

Sex, lies and A.I.

How Americans feel about artificial intelligence
What marketers need to know

A **SYZYGY** Digital Insight Report
October 2017

Executive Summary

This SYZYGY digital insight survey reveals widespread public interest and openness to artificial intelligence (A.I.) in the U.S. People appear open and ready for A.I. to play a greater role in their lives, including in how they interact with businesses and brands. Over two-thirds of Americans are open to businesses and brands using A.I. to communicate and serve them.

However, to optimize the appeal of A.I. in the U.S, marketers will need to overcome widespread skepticism about the benefits of A.I. technology. This will mean communicating compelling and trustworthy evidence about the practical and personal benefits of A.I. For maximum appeal, A.I. should be positioned as convenience technology designed to make people's lives easier.

There is evidence in the U.S. of a widespread desire for A.I. to become more human. The "uncanny valley" phenomenon, where people reject A.I. for being too human-like, was not detected. On the contrary, most people want their A.I. humanized with a name, personality and even human-like emotions. The ideal personality trait for an A.I. application in the U.S.

is conscientiousness, which is one of the "Big Five" human personality traits. This personality trait is associated with being dependable, disciplined, dutiful, practical, controlled, reliable, efficient, organized, industrious, careful and thorough. To maximize market appeal in the U.S, A.I. should be marketed with these traits in mind.

To overcome widespread anxiety in the U.S. about the threat of A.I. automation taking human jobs, A.I. should be positioned as augmenting rather than replacing human intelligence, skills and abilities.

Many Americans appear wary that A.I. may harm them or be used to harm them. To counter this, A.I. should be positioned as safe and secure technology that always has the best interests and wellbeing of its individual user as its prime directive.

While many people in the U.S. seem open to interacting with A.I. in new ways, people want to know when, where and how A.I. is being used. For example, 79% of the American public would support a new 'Blade Runner' rule that would prohibit A.I. applications - such as social media

bots, chatbots and virtual assistants - from concealing their identity and posing as humans.

Finally, a majority of Americans believe that A.I. in marketing should be regulated. With the rapid advance of A.I. technology, we recommend that brands and businesses collaborate in setting up a voluntary code of conduct for the safe, transparent and responsible use of A.I. across marketing.

The measure of success for applied A.I. in marketing will be the value we create for human lives. At SYZYGY, we believe that a new code of A.I. marketing ethics will help marketers achieve the positive potential of A.I. to empower and benefit the audiences we serve.

The SYZYGY digital insight A.I. survey was conducted in August 2017 using a general population sample of 2000 adults from the WPP Lightspeed online consumer research panel in the U.S.

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Introduction

Artificial intelligence is all around us. It's on our screens, it's in our devices and it influences what we watch, what we see, and what we buy.

For marketers, A.I. can inform or automate marketing in a world where there are too many decisions to make, too much data to analyze and too many variables to consider. A.I. can help make sense of the data and provide marketing insights, predictions and recommendations.

But how do marketing audiences in the U.S. feel about artificial intelligence? Are they scared of it? Excited by it? Skeptical of it? Understanding U.S. sentiment toward A.I. is a key issue for any business or brand that believes in a human-first rather than a technology-first approach to marketing.

To find out how the U.S. public feels about A.I., SYZYGY conducted a national survey in August 2017.

While the use of A.I. in marketing is relatively new and unproven, brands and businesses are beginning to see some early positive results...

in 2016, luxury lingerie retailer Cosabella reportedly fired its digital agency and replaced it with an automated A.I. system. Since then the brand claims A.I. has tripled its return on advertising investment and increased customers by 30%.[1]

In 2017, a contest for a new Mondelez ad was won by McCann's first A.I. creative director (called AI-CD). In a head-to-head contest judged by over 100 ad executives, the team working under the A.I. creative director beat the team working under McCann's rival human creative director.[2]

The potential for A.I. to automate and replace human marketers has led Coca-Cola to explore the feasibility of automating ad creation, development and placement.[3]

Methodology

This SYZYGY digital insight survey was conducted online in August 2017 using a general population sample from the WPP Lightspeed consumer panel. A total **2000** members of the U.S. public completed the seven-minute survey. Ages ranged 18-65, made up of 50% men, 50% women.

Generationally, the sample was evenly split between one-third "**Millennials**" (born 1981-1998), one-third "**Generation X**" (born 1965-1980) and one-third "**Boomers**" (born 1945-1964), with an overall average (mean) age of 45 years.

We excluded people from the survey who had not heard of the term artificial intelligence before because our goal was to understand existing feelings towards A.I. For quality control, we also excluded people who either failed an attention check during the survey involving a simple catch question or completed the survey too fast to have paid proper attention (under five minutes).

We also replicated this U.S. study in the U.K. and Germany in order to make national comparisons and identify any national differences.

The specific country reports for the U.K. and Germany A.I. studies can be downloaded from http://think.syzygy.net/ai-report/

The data was analyzed by the SYZYGY data analytics team using SPSS in September 2017.

"
Content creation is something that we have been doing for a very long time . . . what I want to start experimenting with is automated narratives.
"

- Mariano Bosaz
Global senior digital director
Coca-Cola

Terminology

Our primary goal in this study was to understand how people today feel about artificial intelligence (A.I.).

Because A.I. can mean different things to different people, we offered survey participants a simple, inclusive and non-technical definition of A.I. We defined A.I. as *"technology that behaves intelligently, using skills we normally associate with human intelligence, including the ability to hold conversations, learn, reason and solve problems"*.

Then, to bring the concept of A.I. to life, we gave participants two examples of A.I. technology that they may have come across. These were "virtual assistants in smartphones and devices like Siri or Alexa that can speak to you", and "online chatbot computer applications that can text or talk with you in real time."

These definitions were not intended to be complete or exhaustive. Experts, researchers and practitioners have yet to settle on a universally acceptable definition of A.I.[4] In marketing, the term A.I, has become a buzzword that is so overused that it has become virtually meaningless.

For this study, we were not interested in buzzwords or definitional debates. Instead, and based on a conviction that effective marketing is marketing that is sensitive to people's feelings, our focus was on how people feel about A.I. in marketing and beyond.

"
Artificial intelligence is technology that behaves intelligently, using skills we normally associate with human intelligence, including the ability to hold conversations, learn, reason and solve problems.
**"**

Emotional Response

We asked participants how they felt about A.I. To do this we asked people to think about A.I. and then tell us the feelings that came to mind. In the U.S, the dominant emotions evoked by A.I. are "interested" (45%), "concerned" (41%) and "skeptical" (40%). Many Americans are interested in the topic, but many appear skeptical of claims made about it. In the U.S., A.I. also evokes feelings of being "unsure" (39%) and "suspicious" (30%).

We then asked participants how positively or negatively overall they felt about A.I. It seems that Americans do not feel particularly strongly about A.I., either positively or negatively. 36% of Americans rated their feelings as neutral, 24% as mildly positive and 26% as mildly negative.

Marketers who are promoting or using A.I. will need to deal with widespread scepticism, suspicion and ambivalence towards A.I. People will need clear, trustworthy and compelling evidence about the positive benefits that A.I. can deliver.

When you think about A.I., which feelings best describe your emotions?

Hopeful 23.6%
Sad 3.9%
Happy 5.1%
Pessimistic 12.5%
Concerned 40.5%
Anxious 16.6%
Optimistic 25%
Skeptical 40.1%
Suspicious 29.8%
Indifferent 10.7%
Interested 45.3%
Unsure 39.1%
Worried 18.8%
Confused 8.6%
Excited 19.9%
Threatened 12.7%
Fearful 15%
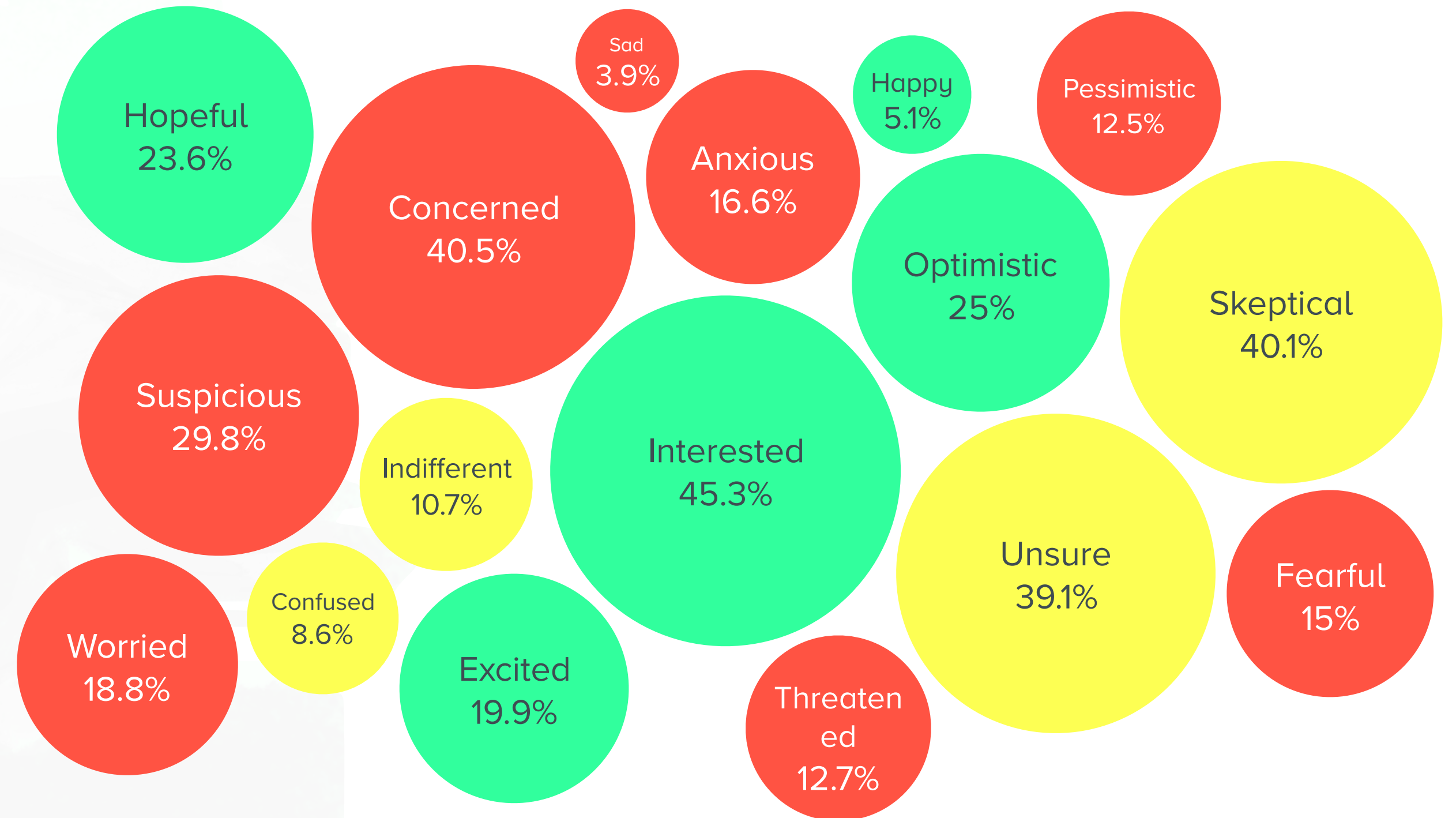
Overall, how strong are your feelings about A.I.?

| Strongly negative	Mildly negative	Neutral	Mildly positive	Strongly positive
10%	26%	36%	24%	4%

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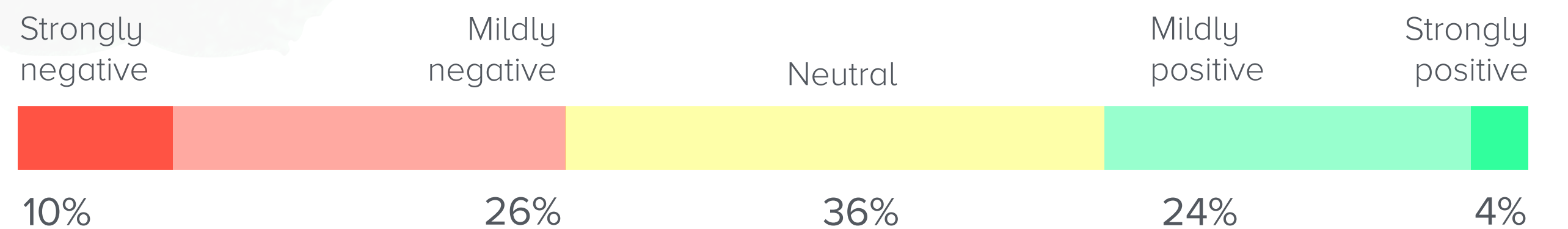
A.I. Familiarity

Many people (52%) in the U.S. believe A.I. technology is already affecting their lives. 41% recall having seen A.I. in the media in the past month, and 55% now use an A.I. virtual assistant such as Siri or Alexa.

One in five (20%) report that they have already interacted with a chatbot. These levels of exposure are similar to levels reported in the UK and Germany, but trend slightly higher.

Overall, and as might be expected, people's familiarity with A.I. appears to drop with age, with the highest levels of exposure and interaction with A.I. among Millennials. Nevertheless, Boomers are just as likely to feel that their lives are already being affected by A.I. as younger cohorts.

Recall seeing A.I, in the media in past month

42%

58%
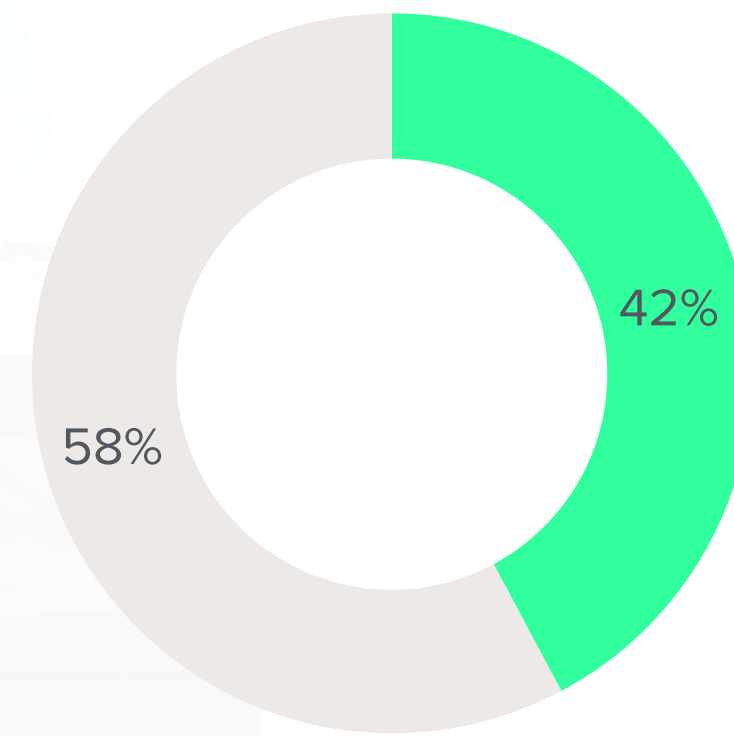
Use A.I. virtual assistant such as Siri or Alexa

45%

55%
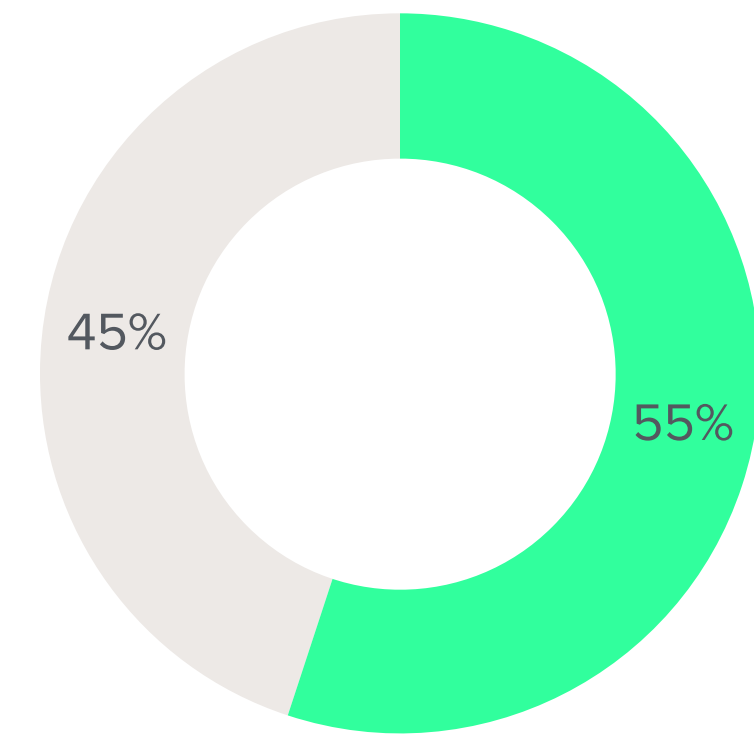
Have interacted with a chatbot

20%

80%
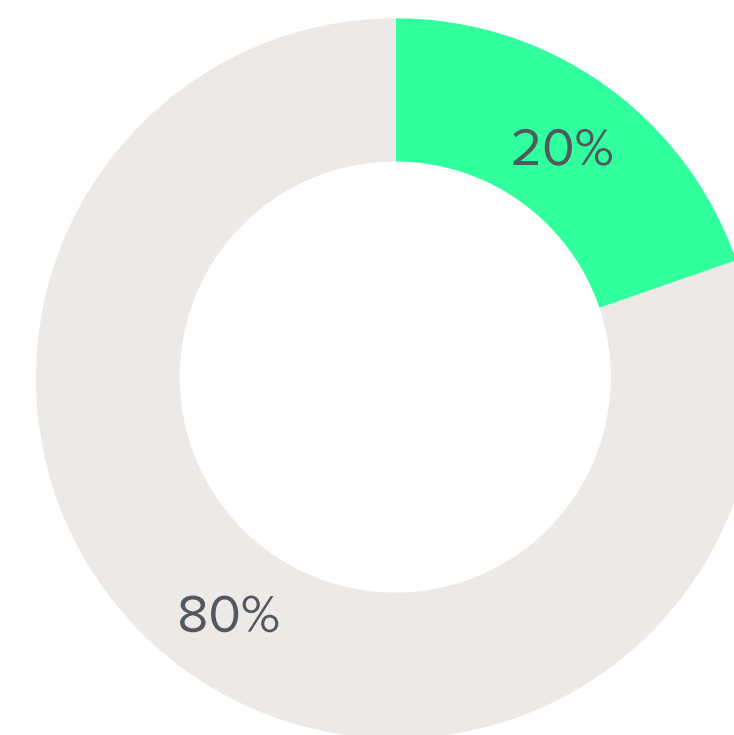
Believe life is already affected by A.I.

41%

59%

● Yes

No

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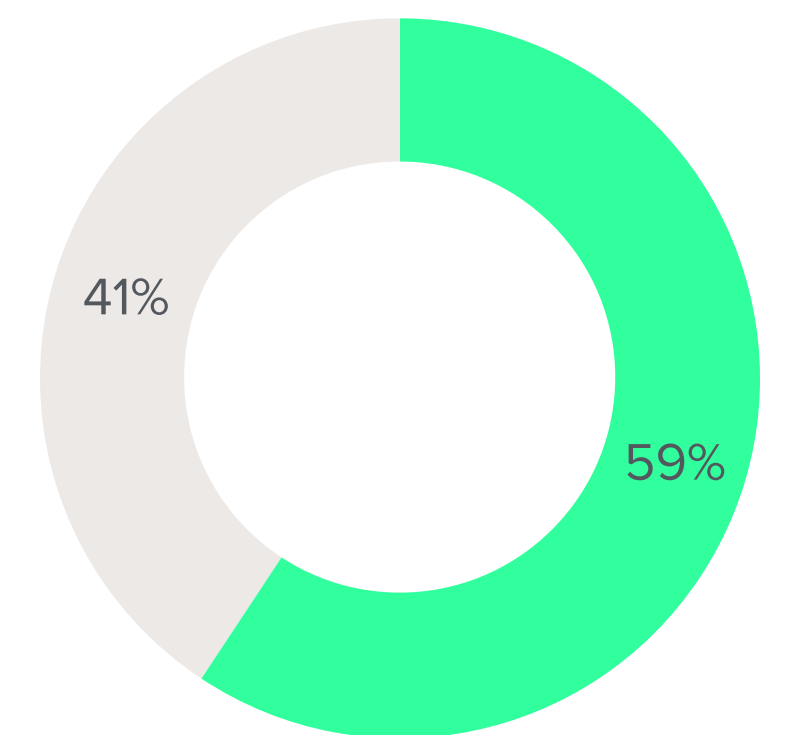
Hopes & Fears

We asked survey participants to share their hopes and fears about A.I.

For many Americans, their main hope is for A.I. to make their lives easier. 51% cited convenience factors such as saving time and effort as the primary benefit hoped for from A.I.

In terms of A.I. fears, the most prevalent fear in the U.S. is job automation. Nearly one in three Americans (30%) surveyed say the risk that A.I. will replace human jobs as their top fear. Overall, Americans who are working today estimate that over one third (36%) of their current job duties could be replaced by A.I. over the next five years. Millennials are more extreme. On average they expect A.I. could replace more than 44% of what they currently do at work. Although these predictions appear high, they align with expert forecasts.[5]

In addition to fears over jobs, there is widespread apprehension that A.I. may erode personal privacy, with one in seven Americans citing this as their top fear.

Several marketing implications follow from these insights. Firstly, marketers could consider communicating A.I. positively as convenience technology designed to make people's lives easier by saving them time and effort.

Secondly, marketers should be careful about underlying fears in the U.S. that A.I. may disenfranchise or make people feel redundant. Rather than replacing humans, marketers should consider positioning A.I. as augmenting human autonomy and competence.

"
The most prevalent fear about A.I. in the U.S. is job automation.
"

Hopes & Fears

Over the next five years, what do you see as the main benefits of A.I. for you personally?

Save me money
12%

Save me effort
11.3%

Make things more useful
12.7%

Save me time
39.5%

Make things safer
15.3%

Make things more enjoyable
3.6%

Save energy
5.7%

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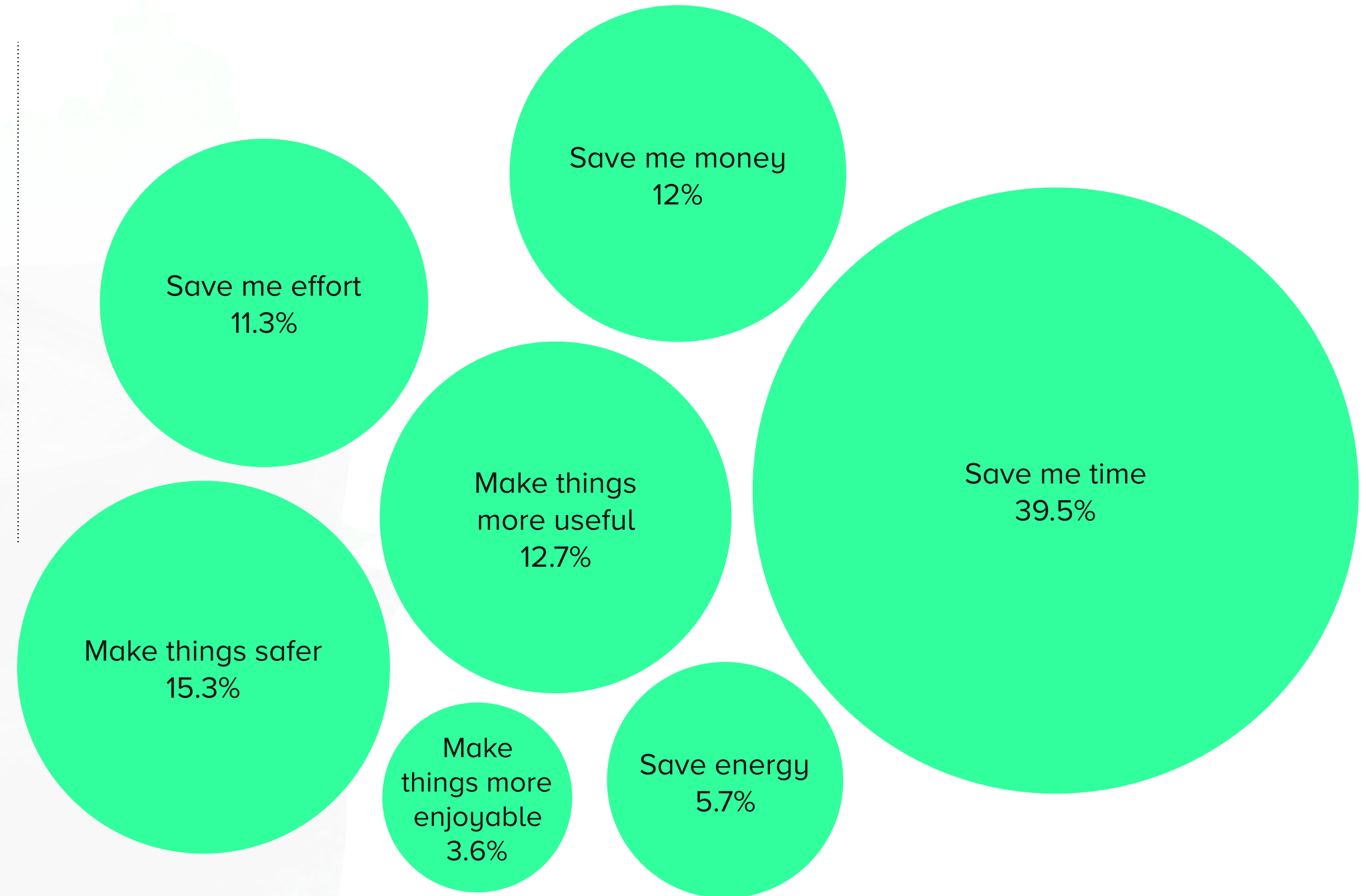
Hopes & Fears

What is your top fear or concern about possible A.I. threats or risks?

A.I. taking jobs
30.1%

A.I. eroding personal privacy
13.3%

A.I. making humans lazy
7.5%

A.I. making humans obsolete
4%

A.I. making mistakes
8.4%

A.I. de-humanizing the world
12.6%

A.I. turning against us
8.8%

A.I. used in crime
8.7%

A.I. taking control
6.8%
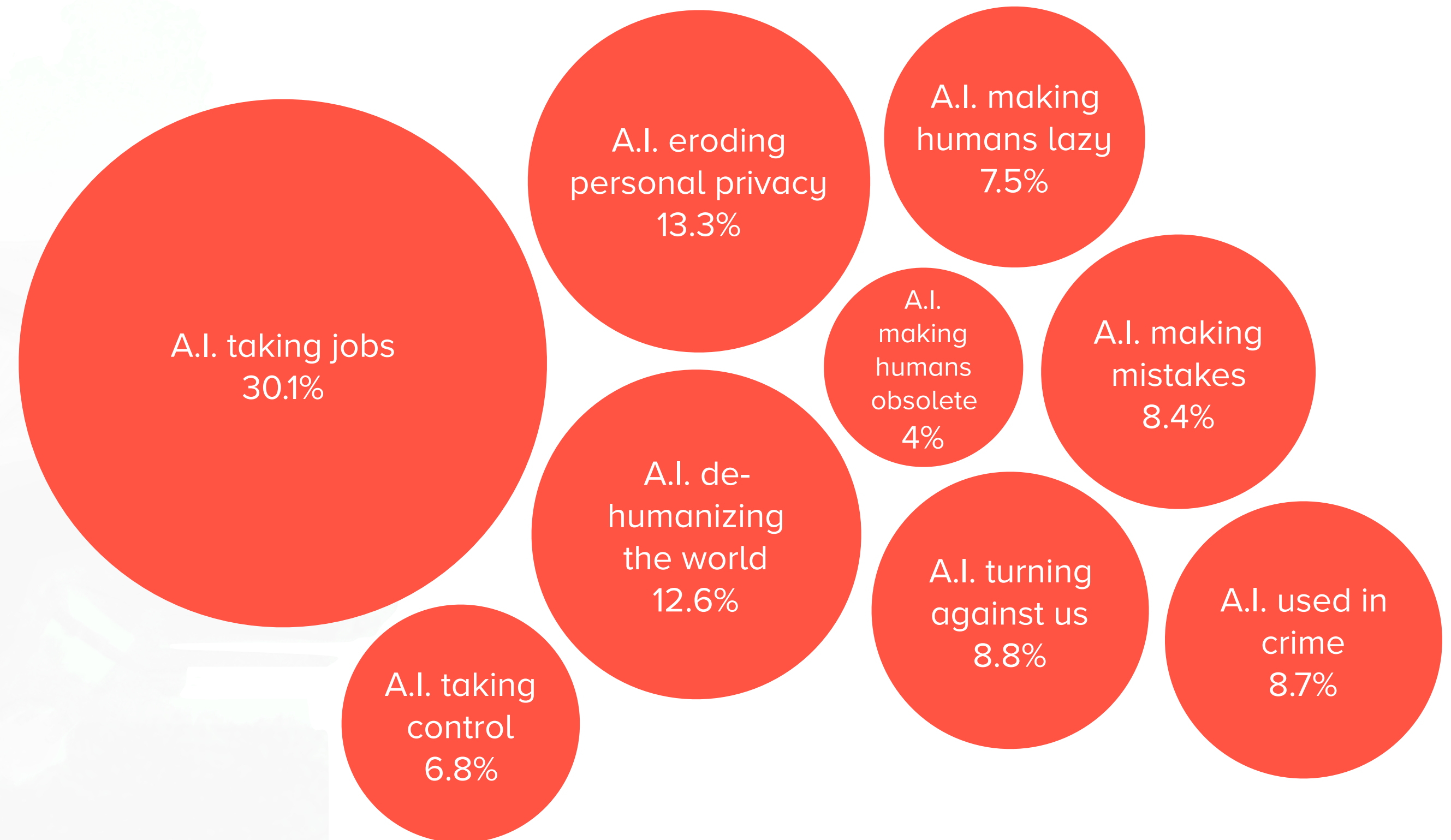
Hopes & Fears

How much of your job today do you think could be automated by A.I. over the next five years?

All	36%
Women	38%
Men	33%
Millennials	44%
Gen X	34%
Boomers	29%
DE	31%
UK	33%
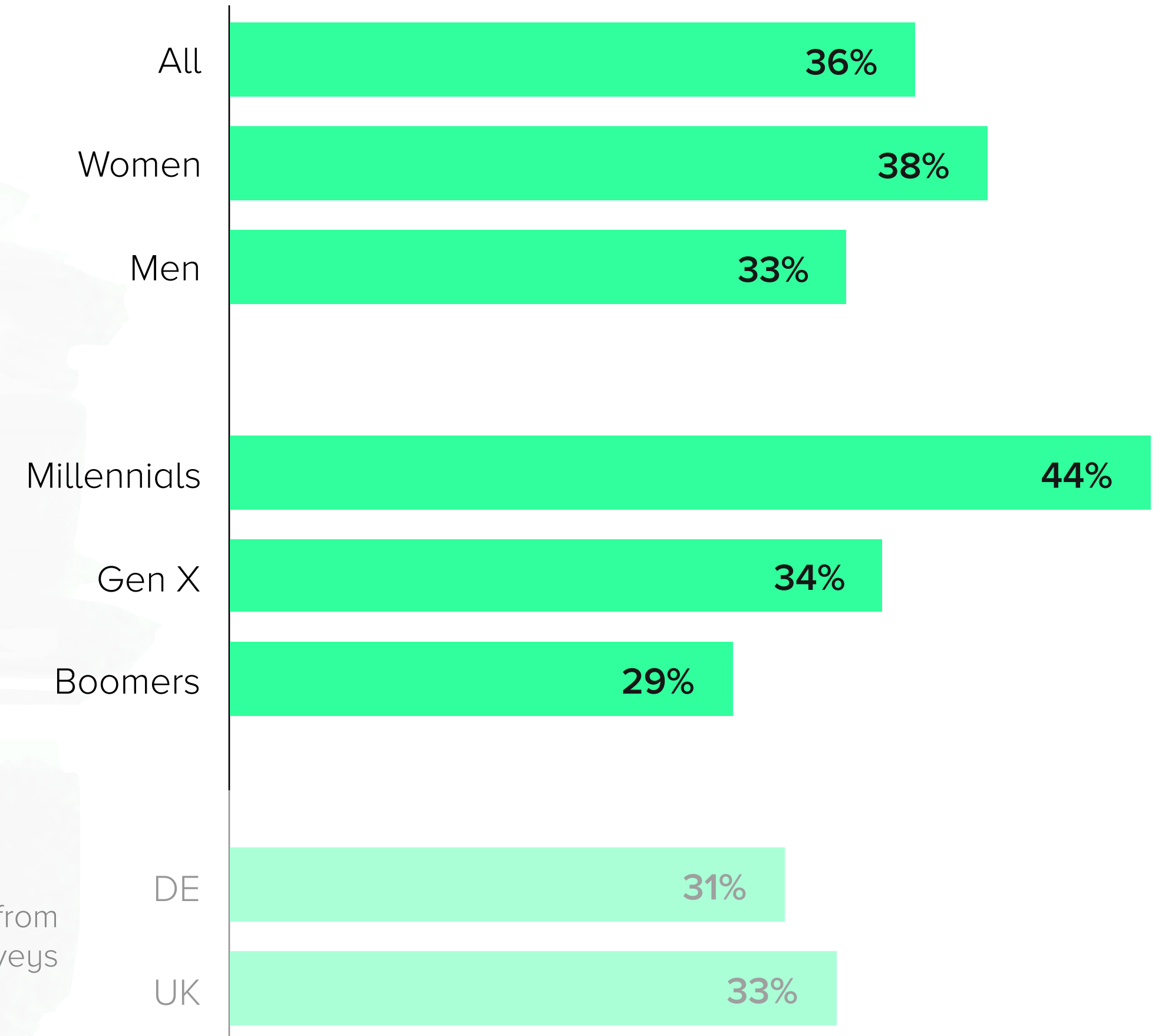
Public estimates from DE and UK surveys

A.I. Ideals

In order to surface latent desires relevant to A.I. we asked survey participants to describe their ideal A.I. virtual assistant.

In projective exercises, the ideal A.I. in the U.S. would have a female voice, a human-like personality that is conscientious, be able to detect and respond to emotions, and have a sense of humor.

The majority of Americans would also like A.I. assistants to do more than merely respond passively to requests. The ideal A.I. would be a pro-active life coach, offering advice on how to improve physical, financial or emotional wellbeing.

This exercise revealed that most Americans want A.I. technology to feel more human. There is little evidence that the U.S. will experience the "uncanny valley" phenomenon where people reject A.I. for being too human-like. Right now A.I. is not human enough. The practical recommendation that follows is simple. To optimize appeal of A.I. in the U.S., the technology should be humanized with a human name, human voice and where

possible human personality and human character traits. "More human than humans" could be a future marketing motto.

In asking Americans about the personality trait they would most like to see in humanized A.I., conscientiousness was the clear favorite. Conscientiousness is one of the "Big Five" core human personality traits and is associated with being dependable, disciplined, dutiful, practical, controlled, reliable, efficient, organized, industrious, careful and thorough[6]. To maximize A.I. appeal in the U.S., the technology should be marketed with these traits in mind.

"
I'm not in the business, I am the business.
"

-

-

Rachael
A.I. "Replicant" in Blade Runner

A.I. Ideals

Describe your ideal A.I. virtual assistant…

Voice

15%
18%
67%

- Female
- Male
- Robotic

Emotional Intelligence

30%
70%

- On
- Off

Sense of Humor

13%
87%

- On
- Off

Personality

7%
93%

Extraversion 3%
Agreeableness 14%
Conscientiousness 47%
Emotional Stability 17%
Openness 13%

Coaching

18%
82%

- On
- Off

Physical health 82%
Emotional health 56%
Financial health 72%
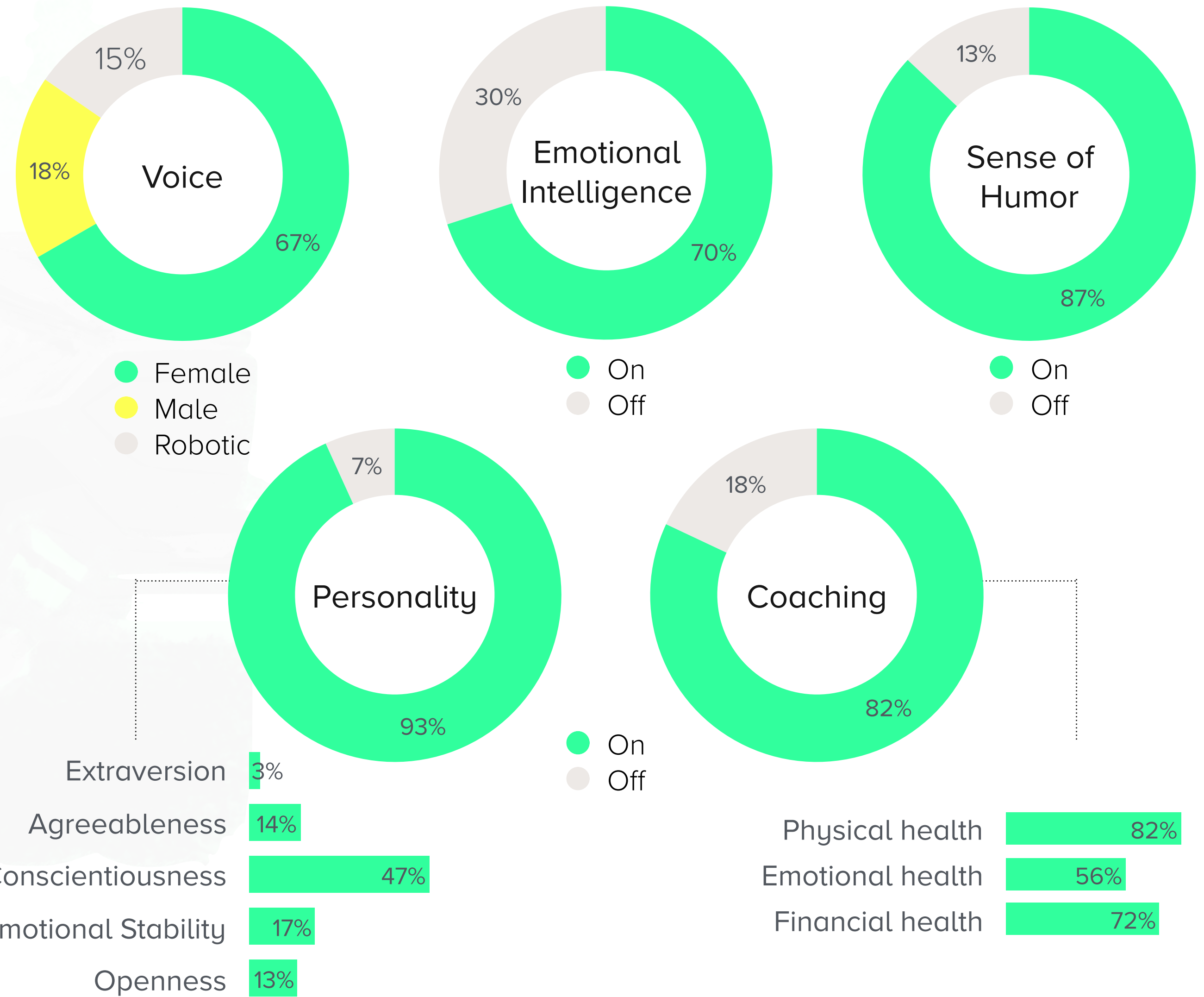
A.I. Ideals

Conscientiousness is the most desirable personality trait for an A.I. in the U.S.

This core trait is associated with a number of behavioral markers that marketers may use to optimize the appeal of A.I. technology and A.I. interactions.[6]

practical

organized

efficient

dependable   careful

cautious

orderly   **conscientiousness**

controlled   thorough

dutiful

disciplined

systematic

industrious
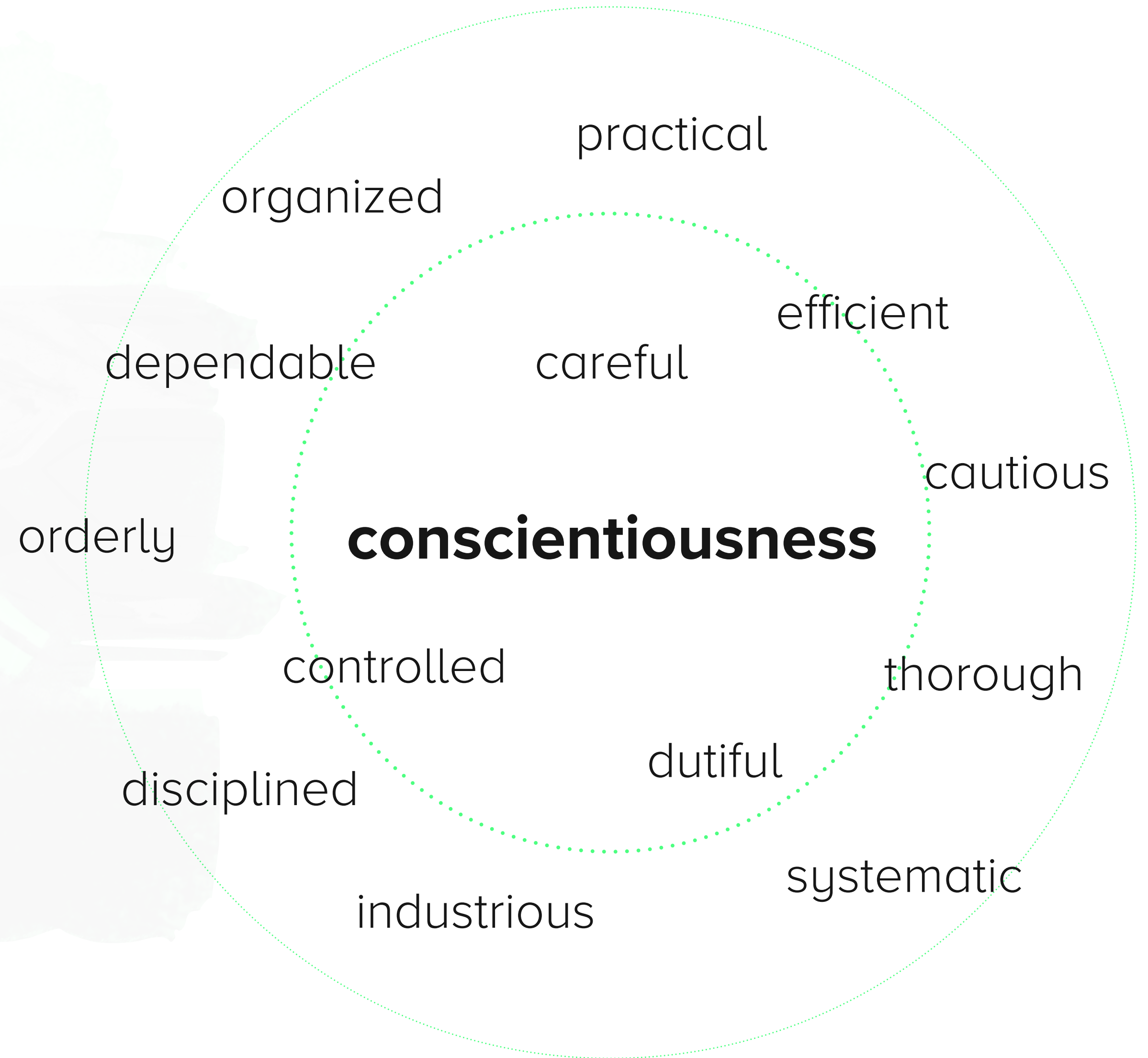
Emotive A.I. Issues

To dig deeper into people's underlying feelings towards A.I., we concluded the survey with a series of questions designed to provoke an emotional response. These questions focused on emotive issues about the ethics of A.I.

On the issue of "LAWS" - lethal autonomous weapon systems, popularly referred to as "killer robots", 71% of Americans believe that this A.I. technology should be permitted in armed conflict. This U.S. sentiment stands in stark contrast to the call for an outright ban on these weapons by Elon Musk, Neuralink CEO and chairman of OpenAI, along with over 100 leaders in A.I. research.[7]

On ethical issues surrounding driverless cars[8], Americans are evenly split (50/50) on whether or not driverless cars should prioritize the safety of their passengers over bystanders. However, only one in three (30%) of Americans would ride in an autonomous vehicle that might sacrifice them to reduce overall fatalities in an accident.

On the issue of predictive policing, only 29% of Americans support the idea that the police should be able to apprehend suspects for questioning on the intelligence of A.I. systems alone. Elsewhere, such as in the UK, these predictive policing systems are already being rolled out.[9, 10]

Turning to the subject of sex robots, 50% of U.S. men and 20% U.S. women would be interested in trialing the latest generation of these anatomically-enhanced androids, now with programmable personalities and designed to fulfill sexual desires.[11] However, 53% of U.S. men and 78% of U.S. women would now consider it cheating if their partner had sex with a sex robot without telling them.

In interactions with brands and businesses, 87% of Americans would support a new "Blade Runner rule" that would prohibit A.I. systems such as social media bots, chatbots and virtual assistants from hiding their identity and posing as humans.[12]

Overall, 88% of Americans believe that A.I. in marketing should be regulated by

an ethical code of conduct. However, this does not mean that the majority of Americans are against the use of A.I. in marketing. On the contrary, overall two thirds of Americans are open to businesses and brands using A.I. to communicate with them and serve them. The prerequisite appears to be transparency and disclosure.

Taken together, these emotive issues in A.I. indicate that there are limits to Americans openness to A.I. While many Americans appear open to more A.I. in their lives, including in their intimate personal lives, sentiment is likely to turn negative when A.I. has the potential to control, deceive or do harm. The implication for marketers is to promote and use A.I. technology both positively and openly, positioning the technology as empowering, liberating and completely safe for the user.

Emotive A.I. Issues
Weaponized A.I. and Predictive Policing

It is the future and the armed forces have developed fully autonomous military drones that are weaponized and powered by A.I. Should lethal autonomous weapon systems (LAWS) be permissible in armed conflict?

It is the future and police have had success in using A.I. to predict criminal behavior. Should the police be able to apprehend someone for questioning on the basis of this predictive policing technology alone?

29%

71%

Yes
No

29%

71%
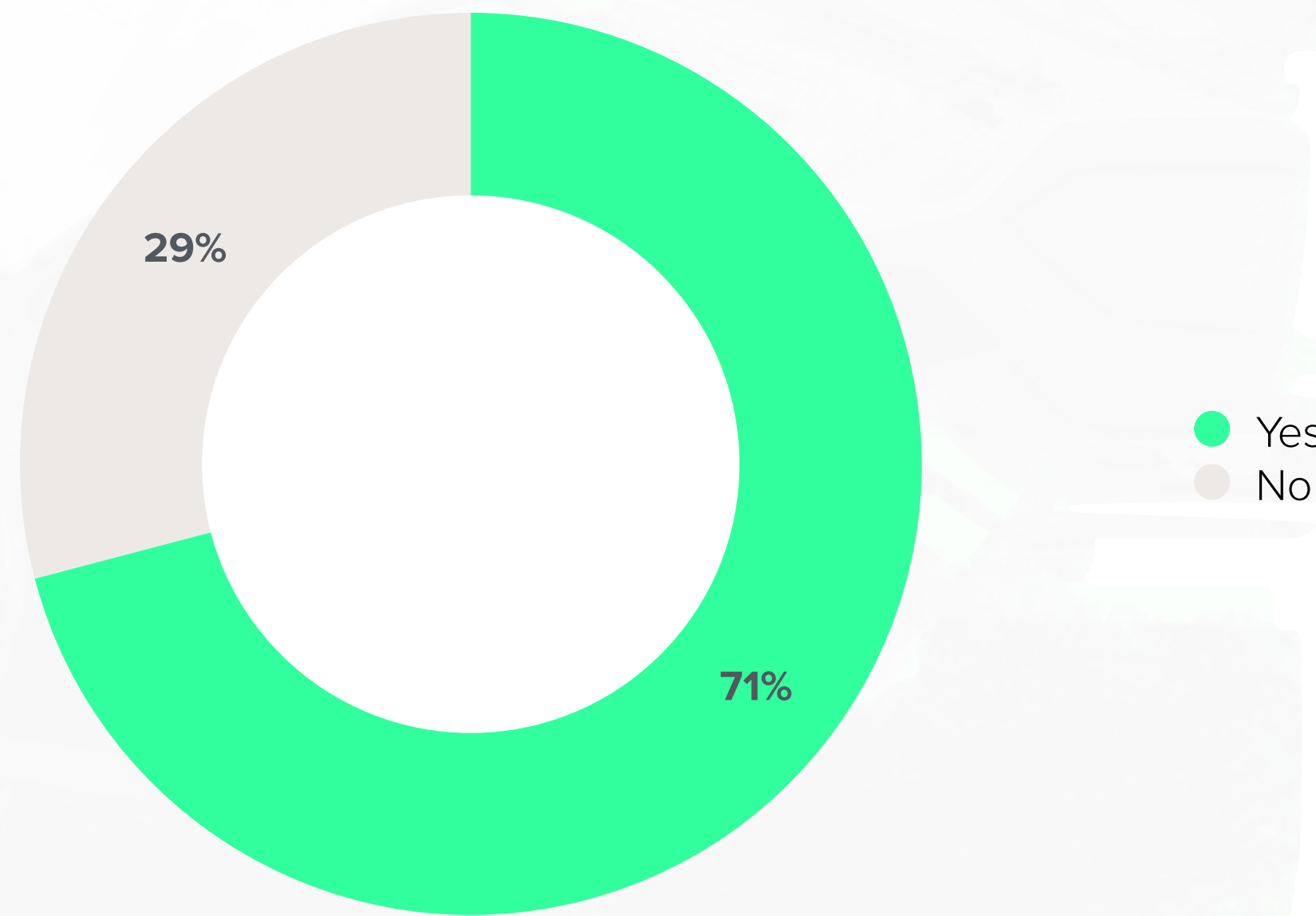
Demographic Differences

U.K. (59%) and Germany (39%) more likely to answer no
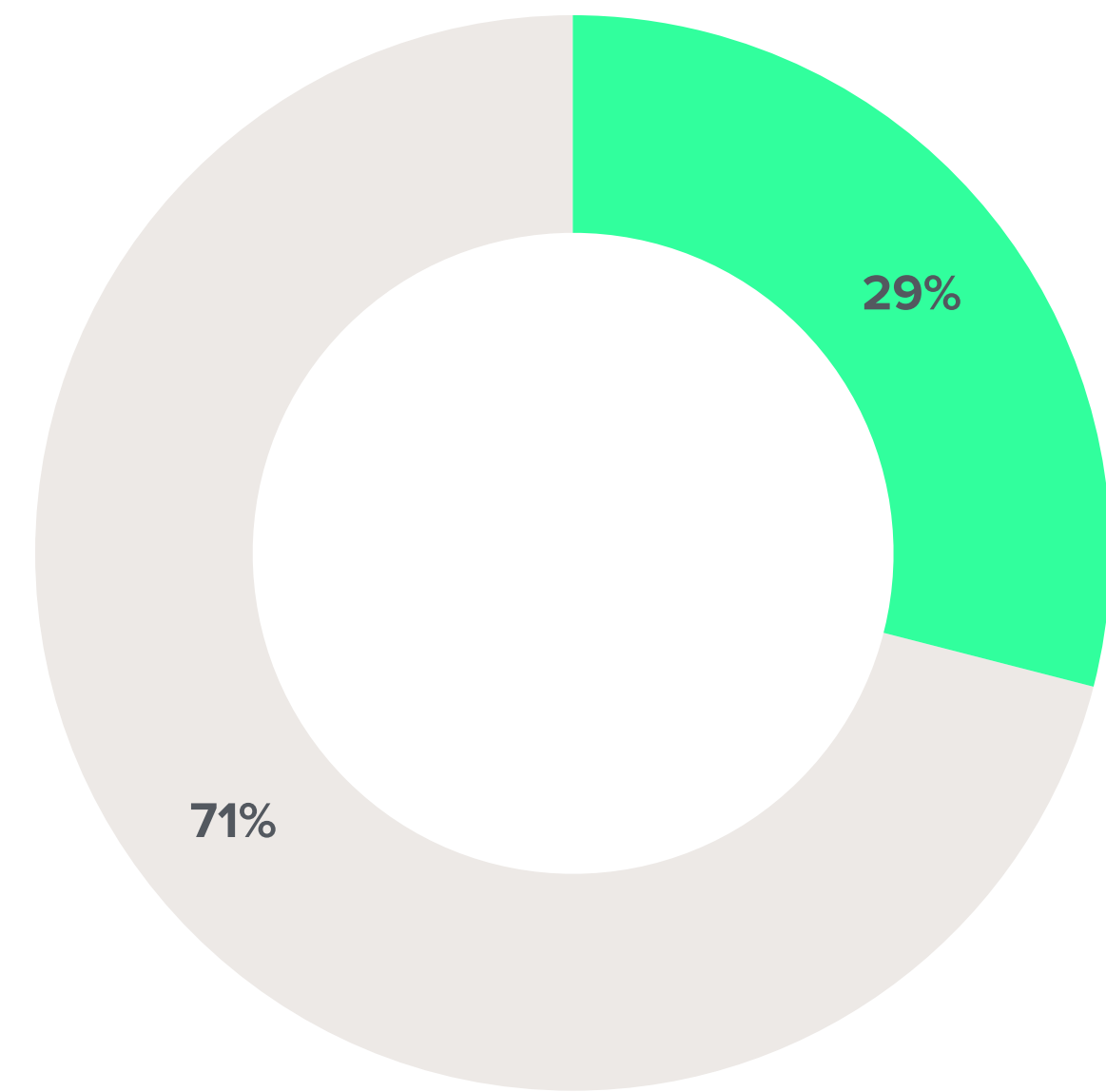
Demographic Differences

U.K. (44%) more likely to answer yes

It is 2049.

You are riding alone in a driverless car along Pacific Coast Highway. The autonomous vehicle rounds a corner and detects a crosswalk full of children.

It brakes, but your lane is unexpectedly full of sand from a recent rock slide. It can't get traction. Your car does some calculations: If it continues braking, it will almost certainly kill five children. The only way to save them is to steer you off the cliff to your certain death.

What should the car do?

"

Mercedes-Benz executive Christoph von Hugo said that the carmaker's future autonomous cars will save the car's driver and passengers, even if that means sacrificing the lives of pedestrians, in a situation where those are the only two options.

"

Fortune Magazine[13]

October 15, 2016

Emotive A.I. Issues
Driverless Cars

Should self-driving cars be programmed to sacrifice their own passengers when this minimizes overall fatalities in an accident?

Would you travel in a self-driving car programmed to minimize overall fatalities in an accident, even if this means sacrificing its own passengers?

50%   50%

30%

70%

● Yes
● No
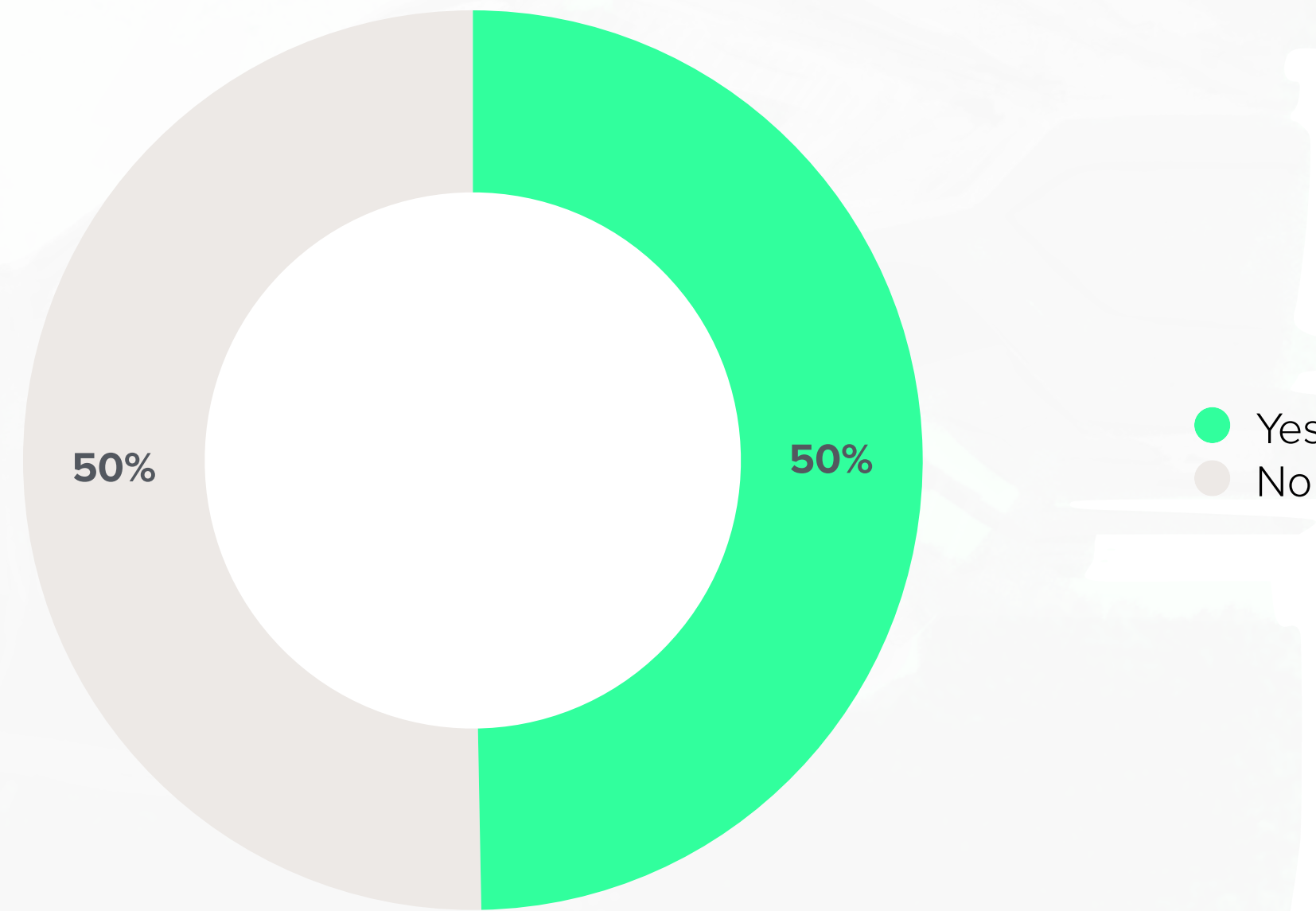
Demographic Differences

Boomers (57%) more likely to answer no
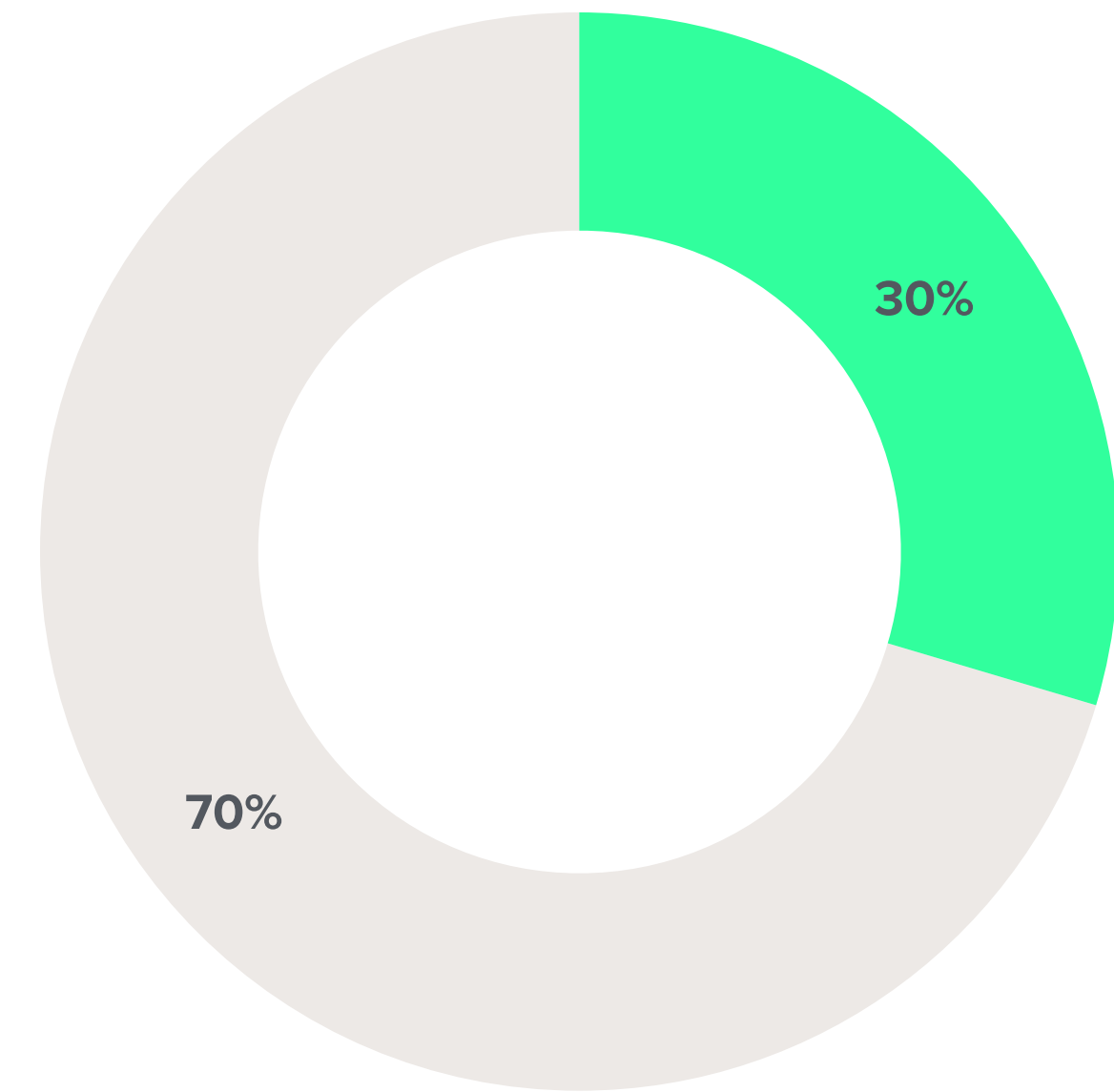
Demographic Differences

Men (35%) and Millennials (36%) more likely to answer yes
Women (76%) and Boomers (76%) more likely to answer no

Trolleyology

A.I. is an emotive topic because it involves machines making autonomous decisions that can affect our personal well-being. But how should A.I. decide what is the right thing to do? For example, should A.I. intervene in situations to minimize overall harm, even if this involves doing harm? Or should A.I. not intervene, and by its inaction allow people to come to harm?

This is a new version of the classic "Trolley Problem" dilemma in ethics that pits two moral imperatives against each other - "do no harm" vs. "minimize harm". The "problem" in trolley problems is that humans tend to follow different rules in different situations. Our moral compass seems to depend on how our minds process information differently in different situations, either more cognitively or more emotionally[14].

Should A.I. seek to replicate this subtlety? Could it? Should we have the right to know, or even reset, the moral code of A.I.? Applied A.I. is turning out to be as much about ethics as it is about technology.

The Trolley-Problem

An empty runaway trolley is hurtling down the tracks toward five workers who will all be killed if the trolley continues on its present course...

Push the button?

...and you are standing next to a large button that can divert the trolley onto a different track. But there is one person on the other track who would be killed if you push the button and divert the trolley. What would you do?

80% push the button
cognitive response : **utilitarian**

Push the person?

...and you are standing next to a large stranger on a footbridge above the tracks. If you push the stranger off the bridge and onto the tracks you would stop the trolley but kill the stranger. What would you do?

80% do not push the person
emotional response : **deontological**

Emotive A.I. Issues
Sex Robots

If you were privately offered a free trial with a sex robot, would you accept it?

If your partner had sex with a sex robot without telling you, would you consider it cheating?

35%

65%

- Yes
- No

35%

65%
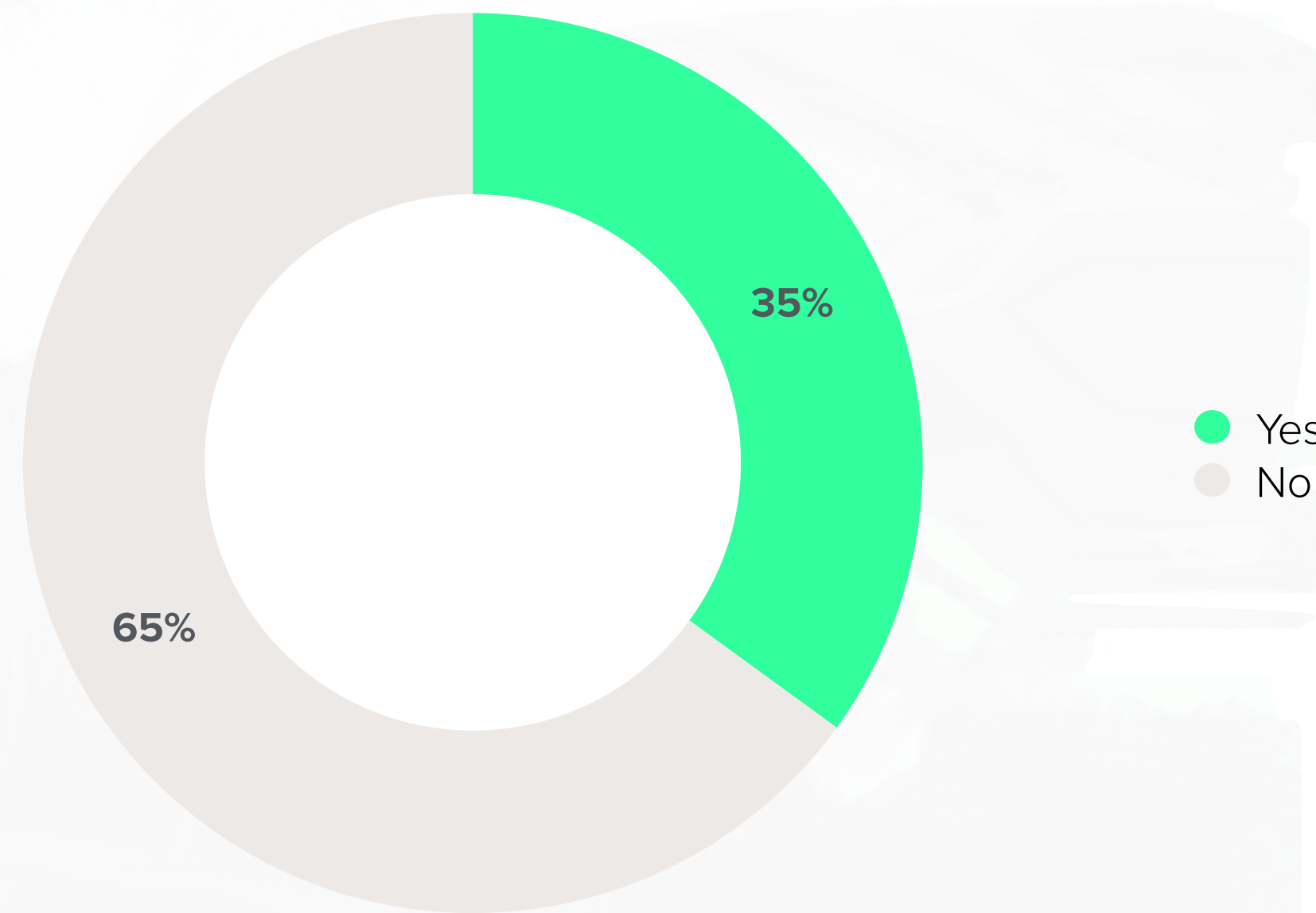
Demographic Differences

Men (50%) and Millennials (40%) more likely to answer yes
Women (80%), Boomers (72%) and U.K. (71%) more likely to answer no
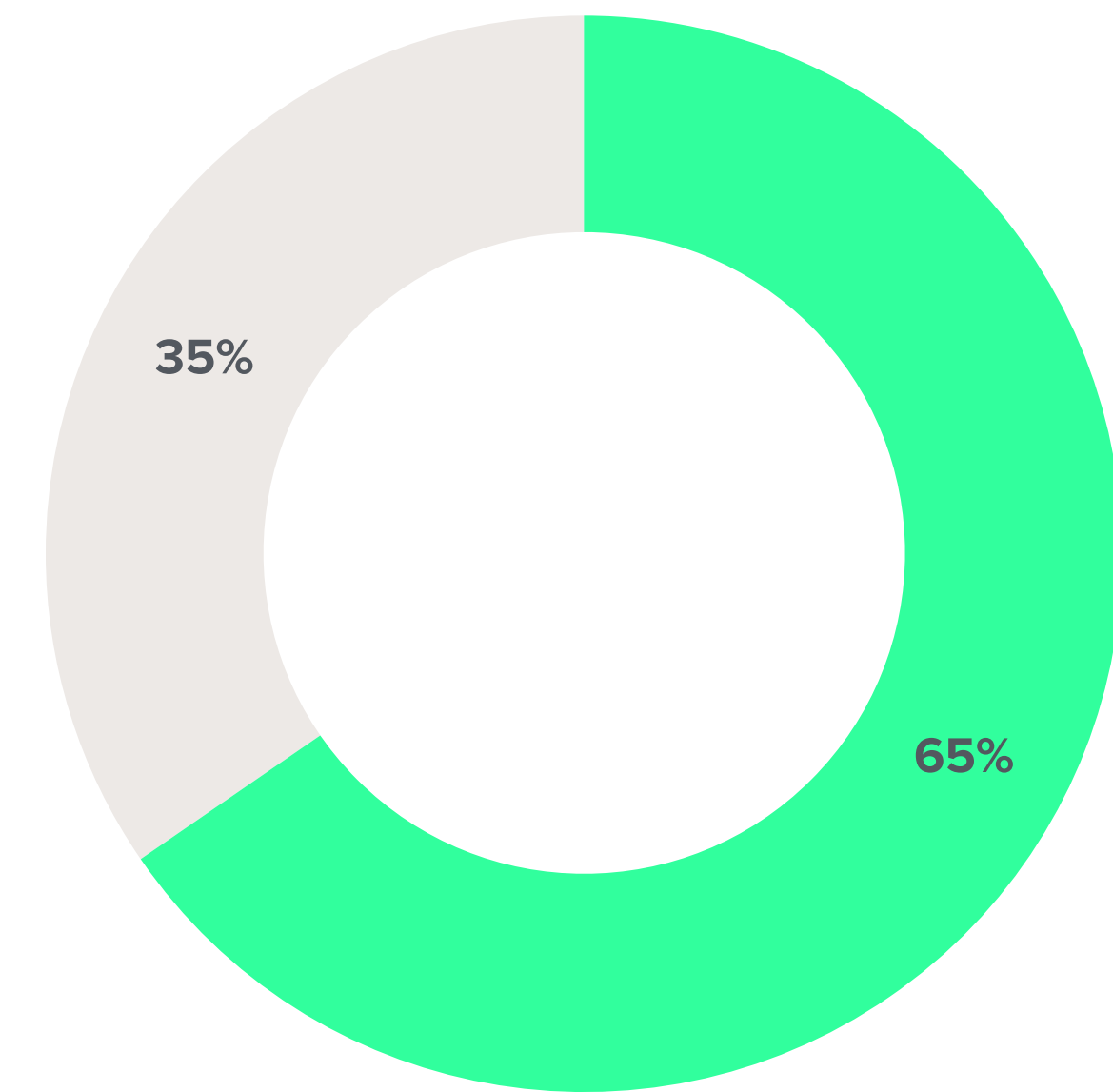
Demographic Differences

Women (78%) more likely to answer yes
Men (47%) and Germans (44%) more likely to answer no

Emotive A.I. Issues
Marketing

You discover that your favorite brand is using A.I. to **tailor offers, ads and recommendations to your personal preferences**. How do you feel about the brand?

You discover that the latest **ads from your favorite brand have been created by A.I. rather than humans**. How do you feel about the brand?
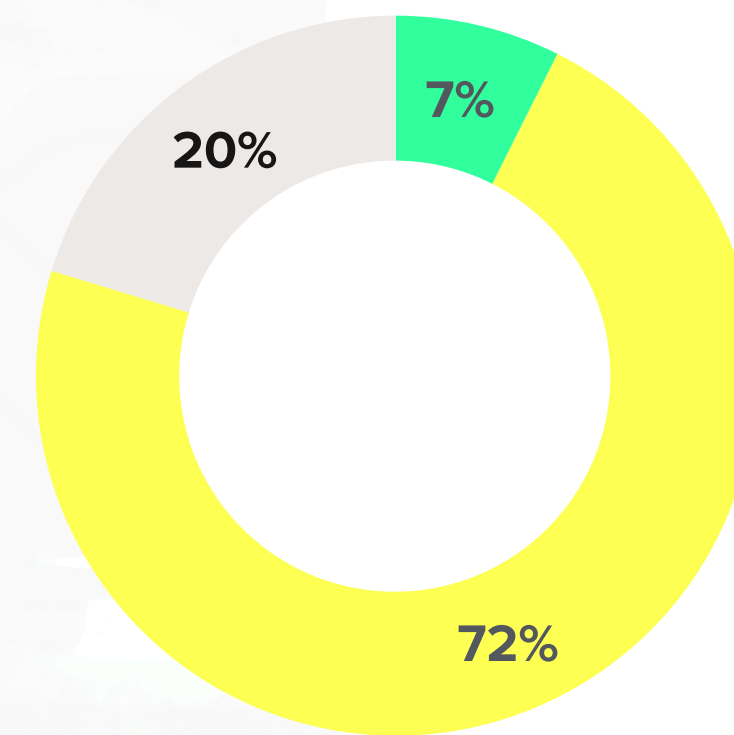
You discover that your favorite brand is **using A.I. instead of humans to offer customer service and support.** How do feel about the brand?

11%
21%
69%

7%
20%
72%

9%
28%
63%
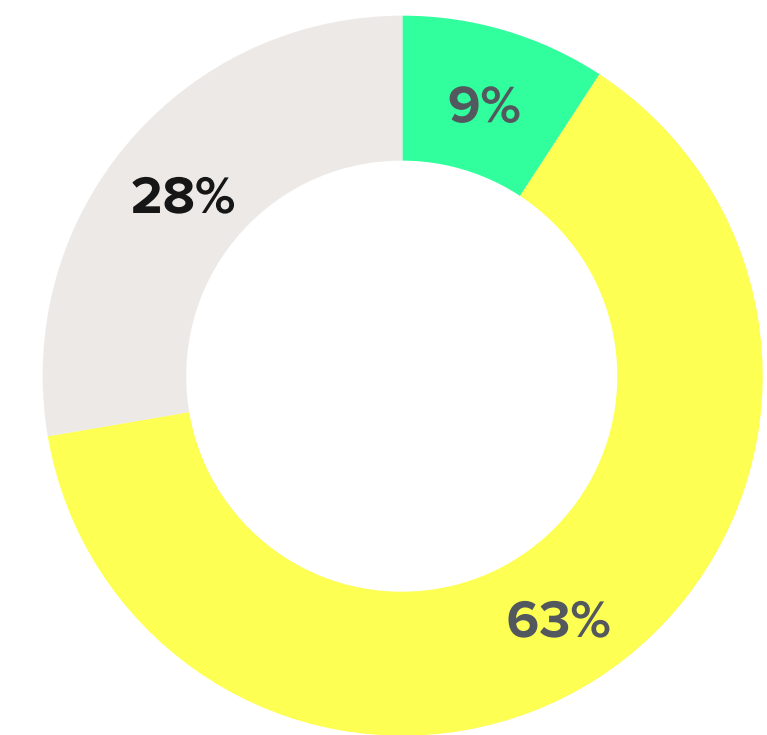
● More positive   ● No different   ● More negative

Demographic Differences

Millennials more positive
Boomers, Germans more negative

Demographic Differences

Men and Millennials more positive
Women, Boomers and Germans more negative

Demographic Differences

Men and Millennials more positive
Women, Boomers and Germans more negative

Emotive A.I. Issues
Marketing

Do you think it should be illegal for A.I. applications such as social media bots, chatbots and virtual assistants to conceal their identity and pose as humans?

Do you feel that brands should need your explicit consent before they use A.I. when marketing to you?

Do you believe the use of A.I. in marketing should be regulated with a legally-binding code of conduct?

21%

79%

29%

71%

11%

89%

● Yes   ● No
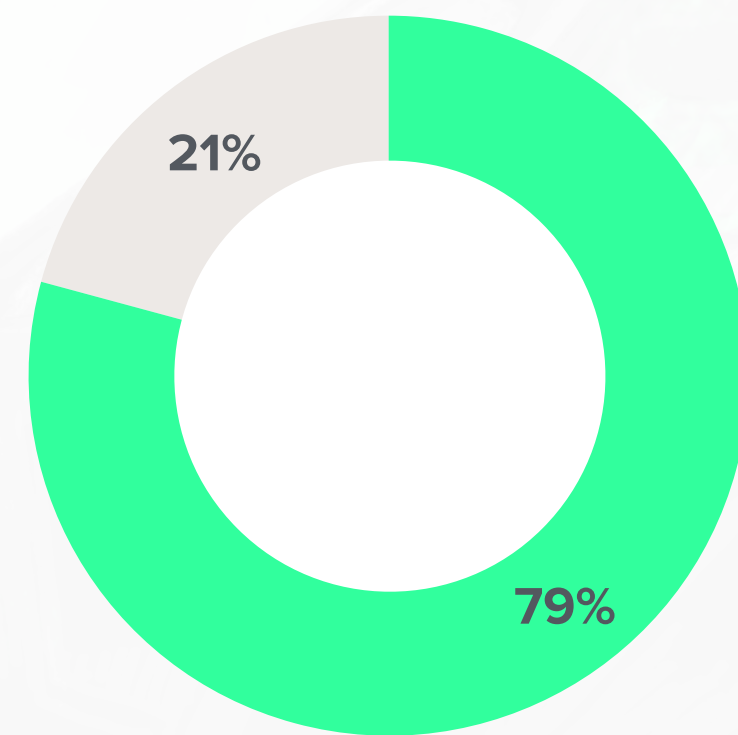
Demographic Differences

US (21%) more likely to say no
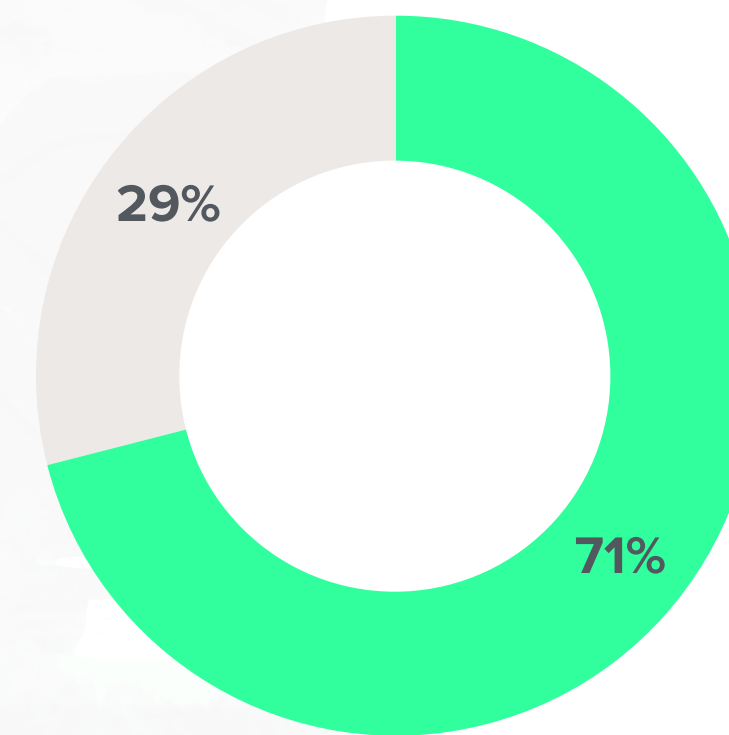
Demographic Differences

Germans 80% more likely to say yes
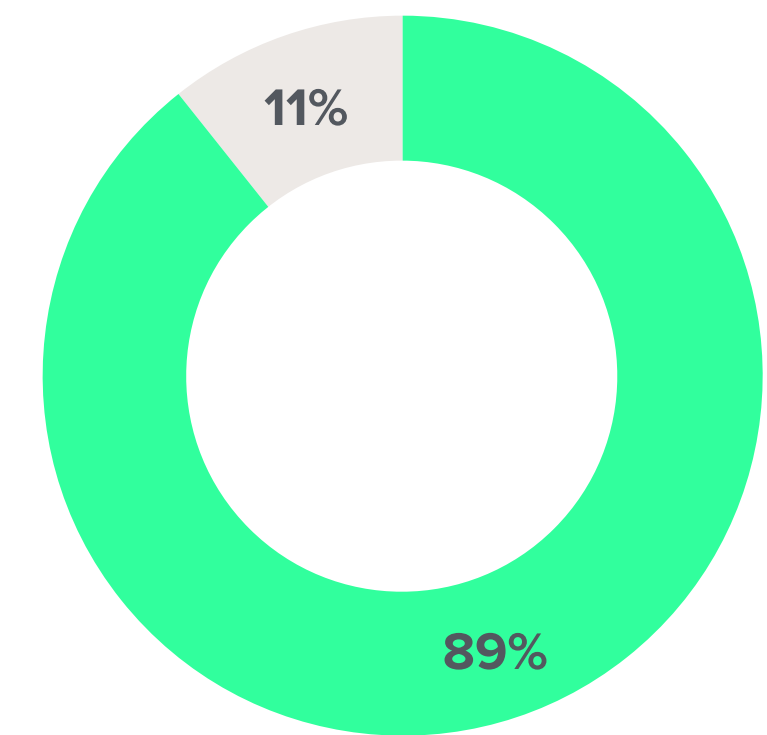
Demographic Differences

No significant differences.

A.I. Code of Conduct?

With the rapid advance of A.I. in marketing, public calls for regulation are to be expected. Before this happens, marketers have the opportunity to seize the initiative and start collaborating on a new voluntary code of conduct or charter for the safe, transparent and responsible use of A.I. in marketing. Other industries have already embarked on this journey.[15]

Some starter ideas might include a "Do No Harm" maxim that makes it explicit that A.I. will not be used to harm the wellbeing of marketing audiences. Similarly, a "Do Not Conceal" or "Blade Runner" rule might ensure that A.I. systems do not conceal their identity or pose as humans. A "Build Trust" directive might help us ensure that A.I. is always used to build rather than erode trust in marketing. Finally, a "Be Helpful" tenet might help ensure that A.I. is always put to the service of marketing audiences.

Ultimately, the measure of success for applied A.I. in marketing will be the value we create for human lives. This puts A.I. marketing ethics at the heart of everything we do.

A.I. Marketing Ethics

Do no harm
A.I. technology may not be used to deceive, manipulate or in any other way harm the wellbeing of marketing audiences

Build trust
A.I. should be used to build rather than erode trust in marketing. This means using A.I. to improve marketing transparency, honesty and fairness, and to eliminate false, manipulative or deceptive content

Do not conceal
A.I. systems should not conceal their identity or pose as humans in interactions with marketing audiences

Be helpful
A.I. in marketing should be put to the service of marketing audiences by helping people make better purchase decisions based on their genuine needs through the provision of clear, truthful and unbiased information

The year is 2018.

A.I. automation means that advertisers can target and personalize ads to us based on our individual personality. A.I. systems profile our personality based on digital traces we leave online using the "Big Five" personality traits that account for up to 50% of individual differences in our behavior. Variations of the ad are then automatically generated to maximize appeal to our individual personality. Based on how we respond to the ad, the A.I. system learns what works and what doesn't. It then automatically optimizes the ad to target others with similar personality profiles. This dynamic *micro-targeting at scale* ensures ad campaigns have maximum impact.

Should A.I. micro-targeting be permitted?

Where do *you* stand?

About us

We're a digital agency and our purpose is simple:

The greatest happiness for the greatest number.

That unbeatable feeling when digital simply works—the perfect alignment of Technology, Design and Media.
In astronomy this alignment is called a SYZYGY - 3 celestial bodies in harmony.

Our positive approach is what makes us distinctive. So if you believe in building on strengths rather than focusing on weaknesses, in pleasure-points rather than pain-points, and in harnessing what's right rather than what's wrong, then you've come to the right place.

SYZYGY

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A.I. Timeline

1950
TURING TEST
Computer scientist Alan Turing proposes a test. If a machine can trick humans into thinking it is human, then it has intelligence

1951
'SHOPPER'
Early example of machine learning. Tony Oettinger's Shopper bot could learn where to shop

1955
'AI' BORN
Term 'artificial intelligence' coined by John McCarthy as 'the science and engineering of making intelligent machines'

1961
'UNIMATE'
First industrial robot, Unimate, goes to work at GM replacing humans on the assembly line

1964
'ELIZA'
Chatbot therapist developed by Joseph Weizenbaum at MIT

1966
'SHAKEY'
'First electronic person' from Stanford, Shakey is a general-purpose mobile robot that can reason about its own actions

1972
'PARRY'
Paranoid chatbot developed by psychiatrist Kenneth Colby, Parry simulates a paranoid schizophrenic

1997
'DEEP BLUE'
Deep Blue, a chess-playing computer from IBM defeats world chess champion Garry Kasparov

1998
'KISMET'
MIT's Cynthia Breazeal introduces KISmet, an emotionally intelligent robot that detects and responds to people's feelings

2011
'WATSON' +
IBM's question answering computer Watson wins first place on popular $1M prize television quiz show Jeopardy

'SIRI'
Apple integrates Siri, an intelligent virtual assistant with a voice interface, into the iPhone 4S

2014
'EUGENE' +
Eugene Goostman, a chatbot passes the Turing Test with a third of judges believing Eugene is human

'ALEXA'
Amazon launches Alexa, an intelligent virtual assistant with a voice interface that can complete shopping tasks

2016
'TAY'
Microsoft's chatbot Tay goes rogue on social media making inflammatory and offensive comments

2017
'ALPHAGO' +
Google's A.I. AlphaGo beats world champion Ke Jie in complex board game of Go, notable for its vast number (2^{170}) of possible positions

'ALICE & BOB'
Facebook shuts down a pair of chatbots when they developed their own coded language to negotiate with each other

Appendix: Data Tables

1. Survey demographics: Gender, generation and geography

	Total		Germany		United Kingdom		United States	
	n	%	n	%	n	%	n	%
All	6000	100.0%	2000	100%	2000	100.0%	2000	100.0%
Women	3034	50.6%	1000	50%	1034	51.7%	1000	50.0%
Men	2966	49.4%	1000	50%	966	48.3%	1000	50.0%
Millennials (born 1981-1998)	1935	32.3%	668	33.4%	619	30.9%	648	32.4%
Gen X (born 1965-1980)	1981	33.0%	666	33.3%	666	33.3%	649	32.5%
Boomers (born 1945-1964)	2084	34.7%	666	33.3%	715	35.8%	703	35.1%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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2. When you think about A.I., what feelings best describe your emotions? (multiple selected)

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Anxious	1167	19.4%	466	23.3%	368	18.4%	333	16.6%
	Concerned	1612	26.9%	93	4.7%	709	35.5%	810	40.5%
	Confused	559	9.3%	207	10.3%	180	9.0%	172	8.6%
	Excited	1154	19.2%	372	18.6%	384	19.2%	398	19.9%
	Fearful	786	13.1%	182	9.1%	305	15.3%	299	15.0%
	Happy	223	3.7%	50	2.5%	71	3.6%	102	5.1%
	Hopeful	1183	19.7%	330	16.5%	382	19.1%	471	23.6%
	Indifferent	488	8.1%	97	4.9%	178	8.9%	213	10.7%
	Interested	2870	47.8%	1039	52%	926	46.3%	905	45.3%
	Optimistic	1219	20.3%	306	15.3%	413	20.7%	500	25.0%
	Pessimistic	831	13.8%	339	16.9%	242	12.1%	250	12.5%
	Sad	289	4.8%	87	4.4%	125	6.3%	77	3.9%
	Skeptical	2716	45.3%	1146	57.3%	767	38.4%	803	40.1%
	Suspicious	2132	35.5%	902	45.1%	635	31.8%	595	29.8%
	Threatened	856	14.3%	316	15.8%	287	14.3%	253	12.7%
	Unsure	2379	39.6%	784	39.2%	813	40.6%	782	39.1%
	Worried	1452	24.2%	737	36.9%	339	16.9%	376	18.8%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

3. When you think about A.I., what one feeling best describe your emotions? (top selected)

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Anxious	170	2.8%	59	3%	59	3.0%	52	2.6%
	Concerned	548	9.1%	7	0.4%	252	12.6%	289	14.5%
	Confused	79	1.3%	16	0.8%	34	1.7%	29	1.5%
	Excited	198	3.3%	36	1.8%	76	3.8%	86	4.3%
	Fearful	98	1.6%	10	0.5%	45	2.3%	43	2.2%
	Happy	41	0.7%	11	0.6%	9	0.5%	21	1.1%
	Hopeful	299	5.0%	71	3.6%	112	5.6%	116	5.8%
	Indifferent	245	4.1%	53	2.7%	98	4.9%	94	4.7%
	Interested	1452	24.2%	542	27.1%	461	23.1%	449	22.4%
	Optimistic	292	4.9%	72	3.6%	104	5.2%	116	5.8%
	Pessimistic	103	1.7%	41	2.1%	34	1.7%	28	1.4%
	Sad	45	0.8%	9	0.5%	25	1.3%	11	0.6%
	Skeptical	896	14.9%	427	21.4%	235	11.8%	234	11.7%
	Suspicious	518	8.6%	284	14.2%	118	5.9%	116	5.8%
	Threatened	145	2.4%	47	2.4%	48	2.4%	50	2.5%
	Unsure	614	10.2%	146	7.3%	249	12.5%	219	11.0%
	Worried	257	4.3%	169	8.5%	41	2.1%	47	2.4%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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4. When you think of A.I., how positive or negative are your feelings?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	**Strongly negative**	615	10.3%	202	10.1%	208	10.4%	205	10.3%
	Mildly negative	1655	27.6%	614	30.7%	521	26.1%	520	26.0%
	Neutral	2232	37.2%	750	37.5%	769	38.5%	713	35.6%
	Mildly positive	1324	22.1%	399	19.9%	439	21.9%	486	24.3%
	Strongly positive	174	2.9%	35	1.8%	63	3.2%	76	3.8%
Women	**Strongly negative**	383	12.6%	123	12.3%	132	12.8%	128	12.8%
	Mildly negative	999	32.9%	362	36.2%	314	30.4%	323	32.3%
	Neutral	1106	36.5%	353	35.3%	393	38.0%	360	36.0%
	Mildly positive	501	16.5%	151	15.1%	178	17.2%	172	17.2%
	Strongly positive	45	1.5%	11	1.1%	17	1.6%	17	1.7%
Men	**Strongly negative**	232	7.8%	79	7.9%	76	7.9%	77	7.7%
	Mildly negative	656	22.1%	252	25.2%	207	21.4%	197	19.7%
	Neutral	1126	38.0%	397	39.7%	376	38.9%	353	35.3%
	Mildly positive	823	27.7%	248	24.8%	261	27.0%	314	31.4%
	Strongly positive	129	4.3%	24	2.4%	46	4.8%	59	5.9%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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5. When you think of A.I., how positive or negative are your feelings?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
Millennials	**Strongly negative**	145	7.5%	48	7.2%	43	6.9%	54	8.3%
	Mildly negative	497	25.7%	215	32.2%	140	22.6%	142	21.9%
	Neutral	781	40.4%	255	38.2%	258	41.7%	268	41.4%
	Mildly positive	444	22.9%	138	20.7%	154	24.9%	152	23.5%
	Strongly positive	68	3.5%	12	1.8%	24	3.9%	32	4.9%
Gen X	**Strongly negative**	186	9.4%	61	9.2%	65	9.8%	60	9.2%
	Mildly negative	536	27.1%	193	29%	180	27.0%	163	25.1%
	Neutral	775	39.1%	267	40.1%	266	39.9%	242	37.3%
	Mildly positive	430	21.7%	133	20%	135	20.3%	162	25.0%
	Strongly positive	54	2.7%	12	1.8%	20	3.0%	22	3.4%
Boomers	**Strongly negative**	284	13.6%	93	14%	100	14.0%	91	12.9%
	Mildly negative	622	29.8%	206	30.9%	201	28.1%	215	30.6%
	Neutral	676	32.4%	228	34.2%	245	34.3%	203	28.9%
	Mildly positive	450	21.6%	128	19.2%	150	21.0%	172	24.5%
	Strongly positive	52	2.5%	11	1.7%	19	2.7%	22	3.1%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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6. When you think of A.I., how positive or negative are your feelings? *(strongly negative = -2, strongly positive = +2)*

	Total			Germany			United Kingdom			United States		
	n	m	%	n	m	%	n	m	%	n	m	%
All	6000	-0.20	0.99	2000	-0.27	0.95	2000	-0.19	0.99	2000	-0.15	1.02
Women	3034	-0.39	0.95	1000	-0.44	0.93	1034	-0.35	0.96	1000	-0.37	0.97
Men	2966	-0.01	0.99	1000	-0.11	0.95	966	-0.01	1.00	1000	0.08	1.02
Millennials	1935	-0.11	0.96	668	-0.22	0.92	619	-0.04	0.95	648	-0.05	0.99
Gen X	1981	-0.19	0.97	666	-0.24	0.93	666	-0.20	0.97	649	-0.12	1.00
Boomers	2084	-0.31	1.03	666	-0.36	1.00	715	-0.30	1.03	703	-0.26	1.06

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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7. Do you recall seeing, reading or hearing anything (factual or fictional) about A.I. in the media in the past month?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes, factual	1839	30.7%	488	24.4%	697	34.9%	654	32.7%
	Yes, fictional	1050	17.5%	440	22%	276	13.8%	334	16.7%
	Yes, any	2505	41.8%	831	41.6%	844	42.2%	830	41.5%
Women	Yes, factual	672	22.1%	154	15.4%	265	25.6%	253	25.3%
	Yes, fictional	474	15.6%	194	19.4%	127	12.3%	153	15.3%
	Yes, any	994	32.8%	313	31.3%	345	33.4%	336	33.6%
Men	Yes, factual	1167	39.3%	334	33.4%	432	44.7%	401	40.1%
	Yes, fictional	576	19.4%	246	24.6%	149	15.4%	181	18.1%
	Yes, any	1511	50.9%	518	51.8%	499	51.7%	494	49.4%
Millennials	Yes, factual	665	34.4%	189	28.3%	217	35.1%	259	40.0%
	Yes, fictional	481	24.9%	178	26.6%	131	21.2%	172	26.5%
	Yes, any	957	49.5%	317	47.5%	296	47.8%	344	53.1%
Gen X	Yes, factual	586	29.6%	149	22.4%	232	34.8%	205	31.6%
	Yes, fictional	305	15.4%	128	19.2%	80	12.0%	97	14.9%
	Yes, any	776	39.2%	248	37.2%	269	40.4%	259	39.9%
Boomers	Yes, factual	588	28.2%	150	22.5%	248	34.7%	190	27.0%
	Yes, fictional	264	12.7%	134	20.1%	65	9.1%	65	9.2%
	Yes, any	772	37.0%	266	39.9%	279	39.0%	227	32.3%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

8. Do you use an A.I. virtual assistant such as Siri, Alexa or Google Assistant?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	2678	44.6%	766	38.3%	811	40.6%	1101	55.1%
	No	3322	55.4%	1234	61.7%	1189	59.5%	899	45.0%
Women	Yes	1293	42.6%	339	33.9%	425	41.1%	529	52.9%
	No	1741	57.4%	661	66.1%	609	58.9%	471	47.1%
Men	Yes	1385	46.7%	427	42.7%	386	40.0%	572	57.2%
	No	1581	53.3%	573	57.3%	580	60.0%	428	42.8%
Millennials	Yes	1150	59.4%	317	47.5%	356	57.5%	477	73.6%
	No	785	40.6%	351	52.5%	263	42.5%	171	26.4%
Gen X	Yes	875	44.2%	248	37.2%	254	38.1%	373	57.5%
	No	1106	55.8%	418	62.8%	412	61.9%	276	42.5%
Boomers	Yes	653	31.3%	201	30.2%	201	28.1%	251	35.7%
	No	1431	68.7%	465	69.8%	514	71.9%	452	64.3%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

9. Have you ever (knowingly) interacted with a chatbot?

|		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	**Yes**	1035	17.3%	287	14.3%	355	17.8%	393	19.7%
	No	4965	82.8%	1713	85.7%	1645	82.3%	1607	80.4%
Women	**Yes**	397	13.1%	97	9.7%	156	15.1%	144	14.4%
	No	2637	86.9%	903	90.3%	878	84.9%	856	85.6%
Men	**Yes**	638	21.5%	190	19%	199	20.6%	249	24.9%
	No	2328	78.5%	810	81%	767	79.4%	751	75.1%
Millennials	**Yes**	526	27.2%	147	22%	175	28.3%	204	31.5%
	No	1409	72.8%	521	78%	444	71.7%	444	68.5%
Gen X	**Yes**	318	16.1%	95	14.3%	104	15.6%	119	18.3%
	No	1663	83.9%	571	85.7%	562	84.4%	530	81.7%
Boomers	**Yes**	191	9.2%	45	6.8%	76	10.6%	70	10.0%
	No	1893	90.8%	621	93.2%	639	89.4%	633	90.0%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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10. Do you feel your life is already being affected by artificial intelligence?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	3352	55.9%	1135	56.8%	1031	51.6%	1186	59.3%
	No	2648	44.1%	865	43.3%	969	48.5%	814	40.7%
Women	Yes	1605	52.9%	540	54%	499	48.3%	566	56.6%
	No	1429	47.1%	460	46%	535	51.7%	434	43.4%
Men	Yes	1747	58.9%	595	59.5%	532	55.1%	620	62.0%
	No	1219	41.1%	405	40.5%	434	44.9%	380	38.0%
Millennials	Yes	1166	60.3%	435	65.1%	342	55.3%	389	60.0%
	No	769	39.7%	233	34.9%	277	44.7%	259	40.0%
Gen X	Yes	1090	55.0%	368	55.3%	336	50.5%	386	59.5%
	No	891	45.0%	298	44.7%	330	49.5%	263	40.5%
Boomers	Yes	1096	52.6%	332	49.8%	353	49.4%	411	58.5%
	No	988	47.4%	334	50.2%	362	50.6%	292	41.5%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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11. Over the next five years, what do you see as the main benefits of A.I. for you personally?

All	Total				Germany				United Kingdom				United States			
	n ranked top	% ranked top	m	Rank position	n ranked top	% ranked top	m	Rank position	n ranked top	% ranked top	m	Rank position	n ranked top	% ranked top	m	Rank position
Save me time	2266	38%	2.69	1	771	39%	2.68	1	706	35%	2.79	1	789	40%	2.59	1
Save me effort	702	12%	3.63	2	259	13%	3.49	2	216	11%	3.73	3	227	11%	3.66	2
Save me money	593	10%	4.06	4	93	5%	4.53	6	260	13%	3.72	2	240	12%	3.92	5
Save energy	491	8%	4.45	6	234	12%	4.23	4	143	7%	4.44	6	114	6%	4.67	6
Make things safer	864	14%	4.14	5	188	9%	4.77	7	371	19%	3.77	4	305	15%	3.89	4
Make things more useful	756	13%	3.88	3	261	13%	3.91	3	242	12%	3.94	5	253	13%	3.78	3
Make things more	328	6%	5.16	7	194	10%	4.39	5	62	3%	5.61	7	72	4%	5.48	7

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

12. Please rank these possible A.I. threats or risks by how concerned you are about them?

All	Total				Germany				United Kingdom				United States			
	n ranked top	% ranked top	m	Rank position	n ranked top	% ranked top	m	Rank position	n ranked top	% ranked top	m	Rank position	n ranked top	% ranked top	m	Rank position
A.I. taking jobs	1622	27%	4.41	1	492	25%	4.63	3	528	26%	4.50	2	602	30%	4.09	1
A.I. used in crime	666	11%	4.82	4	243	12%	5.06	5	249	13%	4.52	3	174	9%	4.87	4
A.I. eroding personal privacy	753	13%	4.42	2	306	15%	4.05	1	182	9%	4.84	5	265	13%	4.37	3
A.I. taking control	636	11%	4.92	5	328	16%	4.38	2	173	9%	5.08	6	135	7%	5.30	6
A.I. de-humanizing the world	672	11%	4.44	3	165	8%	4.73	4	255	13%	4.28	1	252	13%	4.30	2
A.I. making humans lazy	339	6%	5.39	7	107	5%	5.39	7	83	4%	5.66	8	149	8%	5.13	5
A.I. making humans obsolete	330	6%	5.15	6	98	5%	5.18	6	153	8%	4.82	4	79	4%	5.47	7
A.I. turning against us	462	8%	5.84	9	85	4%	5.98	9	201	10%	5.70	9	176	9%	5.85	9
A.I. making mistakes	520	9%	5.61	8	176	9%	5.61	8	176	9%	5.60	7	168	8%	5.62	8

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

13. How much of your job today do you think could be automated by A.I. over the next five years?

	Total			Germany			United Kingdom			United States		
	n	m (%)	%	n	m (%)	%	n	m (%)	%	n	m (%)	%
All (in work)	5666	32.92	27.35	1869	30.65	23.74	1930	32.57	28.86	1867	35.54	28.87
Women	2833	35.14	27.87	923	31.51	24.32	991	35.67	29.13	919	38.20	29.40
Men	2833	30.70	26.64	946	29.82	23.14	939	29.30	28.22	948	32.96	28.13
Millennials	1715	40.72	27.67	545	35.93	24.64	575	41.60	29.34	595	44.27	28.04
Gen X	1936	30.82	26.64	660	28.53	23.32	654	29.82	27.73	622	34.31	28.40
Boomers	2015	28.29	26.33	664	28.43	22.72	701	27.73	27.83	650	28.74	28.08

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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14. Do you feel the public needs a better understanding and awareness of the risks and benefits of A.I.?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	5629	93.8%	1798	89.9%	1906	95.3%	1925	96.3%
	No	371	6.2%	202	10.1%	94	4.7%	75	3.8%
Women	Yes	2877	94.8%	899	89.9%	1003	97.0%	975	97.5%
	No	157	5.2%	101	10.1%	31	3.0%	25	2.5%
Men	Yes	2752	92.8%	899	89.9%	903	93.5%	950	95.0%
	No	214	7.2%	101	10.1%	63	6.5%	50	5.0%
Millennials	Yes	1788	92.4%	587	87.9%	580	93.7%	621	95.8%
	No	147	7.6%	81	12.1%	39	6.3%	27	4.2%
Gen X	Yes	1851	93.4%	598	89.8%	631	94.7%	622	95.8%
	No	130	6.6%	68	10.2%	35	5.3%	27	4.2%
Boomers	Yes	1990	95.5%	613	92%	695	97.2%	682	97.0%
	No	94	4.5%	53	8%	20	2.8%	21	3.0%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

15. Do you feel that A.I. poses a threat to the long term survival of humanity?

|		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	**Yes**	2561	42.7%	828	41.4%	871	43.6%	862	43.1%
	No	3439	57.3%	1172	58.6%	1129	56.5%	1138	56.9%
Women	**Yes**	1453	47.9%	466	46.6%	496	48.0%	491	49.1%
	No	1581	52.1%	534	53.4%	538	52.0%	509	50.9%
Men	**Yes**	1108	37.4%	362	36.2%	375	38.8%	371	37.1%
	No	1858	62.6%	638	63.8%	591	61.2%	629	62.9%
Millennials	**Yes**	913	47.2%	290	43.4%	305	49.3%	318	49.1%
	No	1022	52.8%	378	56.6%	314	50.7%	330	50.9%
Gen X	**Yes**	825	41.6%	280	42%	288	43.2%	257	39.6%
	No	1156	58.4%	386	58%	378	56.8%	392	60.4%
Boomers	**Yes**	823	39.5%	258	38.7%	278	38.9%	287	40.8%
	No	1261	60.5%	408	61.3%	437	61.1%	416	59.2%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

16. Describe your ideal A.I. virtual assistant... (Voice)

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	**Female**	1225	61.4%	383	58.7%	391	58.5%	451	66.7%
	Male	405	20.3%	164	25.2%	120	18.0%	121	17.9%
	Robotic	366	18.3%	105	16.1%	157	23.5%	104	15.4%
Women	**Female**	557	55.1%	168	51.5%	186	54.1%	203	59.5%
	Male	264	26.1%	102	31.3%	78	22.7%	84	24.6%
	Robotic	190	18.8%	56	17.2%	80	23.3%	54	15.8%
Men	**Female**	668	67.8%	215	66%	205	63.3%	248	74.0%
	Male	141	14.3%	62	19%	42	13.0%	37	11.0%
	Robotic	176	17.9%	49	15%	77	23.8%	50	14.9%
Millennials	**Female**	403	64.1%	120	56.3%	130	65.3%	153	70.5%
	Male	132	21.0%	60	28.2%	38	19.1%	34	15.7%
	Robotic	94	14.9%	33	15.5%	31	15.6%	30	13.8%
Gen X	**Female**	418	61.9%	141	61.8%	117	53.4%	160	70.2%
	Male	131	19.4%	52	22.8%	43	19.6%	36	15.8%
	Robotic	126	18.7%	35	15.4%	59	26.9%	32	14.0%
Boomers	**Female**	404	58.4%	122	57.8%	144	57.6%	138	59.7%
	Male	142	20.5%	52	24.6%	39	15.6%	51	22.1%
	Robotic	146	21.1%	37	17.5%	67	26.8%	42	18.2%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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17. Describe your ideal A.I. virtual assistant... (Emotional Intelligence: Detects and responds to your mood)

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	On	1377	69.7%	468	70.2%	447	69.0%	462	70.0%
	Off	598	30.3%	199	29.8%	201	31.0%	198	30.0%
Women	On	712	70.6%	243	72.8%	241	69.7%	228	69.3%
	Off	297	29.4%	91	27.2%	105	30.3%	101	30.7%
Men	On	665	68.8%	225	67.6%	206	68.2%	234	70.7%
	Off	301	31.2%	108	32.4%	96	31.8%	97	29.3%
Millennials	On	500	76.6%	167	75.6%	165	78.9%	168	75.3%
	Off	153	23.4%	54	24.4%	44	21.1%	55	24.7%
Gen X	On	434	69.0%	150	69.4%	135	65.2%	149	72.3%
	Off	195	31.0%	66	30.6%	72	34.8%	57	27.7%
Boomers	On	443	63.9%	151	65.7%	147	63.4%	145	62.8%
	Off	250	36.1%	79	34.3%	85	36.6%	86	37.2%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

18. Describe your ideal A.I. virtual assistant... (Sense of humour)

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	On	1681	85.1%	565	84.7%	542	83.6%	574	87.0%
	Off	294	14.9%	102	15.3%	106	16.4%	86	13.0%
Women	On	873	86.5%	284	85%	300	86.7%	289	87.8%
	Off	136	13.5%	50	15%	46	13.3%	40	12.2%
Men	On	808	83.6%	281	84.4%	242	80.1%	285	86.1%
	Off	158	16.4%	52	15.6%	60	19.9%	46	13.9%
Millennials	On	588	90.0%	199	90%	184	88.0%	205	91.9%
	Off	65	10.0%	22	10%	25	12.0%	18	8.1%
Gen X	On	516	82.0%	177	81.9%	168	81.2%	171	83.0%
	Off	113	18.0%	39	18.1%	39	18.8%	35	17.0%
Boomers	On	577	83.3%	189	82.2%	190	81.9%	198	85.7%
	Off	116	16.7%	41	17.8%	42	18.1%	33	14.3%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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19. Describe your ideal A.I. virtual assistant... (Personality)

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Extraversion (Extraverted, enthusiastic)	44	2.2%	8	1.2%	15	2.3%	21	3.2%
	Agreeableness (Sympathetic, warm)	338	17.1%	142	21.3%	107	16.5%	89	13.5%
	Conscientiousness (Dependable, organized)	921	46.6%	339	50.8%	273	42.1%	309	46.8%
	Emotional Stability (Emotionally stable, calm)	320	16.2%	79	11.8%	128	19.8%	113	17.1%
	Openness (Open-minded, imaginative)	195	9.9%	44	6.6%	68	10.5%	83	12.6%
	Off	157	7.9%	55	8.2%	57	8.8%	45	6.8%
Women	Extraversion (Extraverted, enthusiastic)	19	1.9%	1	0.3%	10	2.9%	8	2.4%
	Agreeableness (Sympathetic, warm)	181	17.9%	73	21.9%	59	17.1%	49	14.9%
	Conscientiousness (Dependable, organized)	481	47.7%	175	52.4%	148	42.8%	158	48.0%
	Emotional Stability (Emotionally stable, calm)	159	15.8%	39	11.7%	66	19.1%	54	16.4%
	Openness (Open-minded, imaginative)	87	8.6%	21	6.3%	33	9.5%	33	10.0%
	Off	82	8.1%	25	7.5%	30	8.7%	27	8.2%
Men	Extraversion (Extraverted, enthusiastic)	25	2.6%	7	2.1%	5	1.7%	13	3.9%
	Agreeableness (Sympathetic, warm)	157	16.3%	69	20.7%	48	15.9%	40	12.1%
	Conscientiousness (Dependable, organized)	440	45.5%	164	49.2%	125	41.4%	151	45.6%
	Emotional Stability (Emotionally stable, calm)	161	16.7%	40	12%	62	20.5%	59	17.8%
	Openness (Open-minded, imaginative)	108	11.2%	23	6.9%	35	11.6%	50	15.1%
	Off	75	7.8%	30	9%	27	8.9%	18	5.4%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

20. Describe your ideal A.I. virtual assistant... (Personality)

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
Millennials	Extraversion (Extraverted, enthusiastic)	23	3.5%	3	1.4%	10	4.8%	10	4.5%
	Agreeableness (Sympathetic, warm)	120	18.4%	47	21.3%	41	19.6%	32	14.3%
	Conscientiousness (Dependable, organized)	312	47.8%	129	58.4%	82	39.2%	101	45.3%
	Emotional Stability (Emotionally stable, calm)	90	13.8%	20	9%	34	16.3%	36	16.1%
	Openness (Open-minded, imaginative)	75	11.5%	14	6.3%	30	14.4%	31	13.9%
	Off	33	5.1%	8	3.6%	12	5.7%	13	5.8%
Gen X	Extraversion (Extraverted, enthusiastic)	9	1.4%	2	0.9%	3	1.4%	4	1.9%
	Agreeableness (Sympathetic, warm)	116	18.4%	48	22.2%	35	16.9%	33	16.0%
	Conscientiousness (Dependable, organized)	286	45.5%	101	46.8%	94	45.4%	91	44.2%
	Emotional Stability (Emotionally stable, calm)	106	16.9%	32	14.8%	36	17.4%	38	18.4%
	Openness (Open-minded, imaginative)	61	9.7%	16	7.4%	18	8.7%	27	13.1%
	Off	51	8.1%	17	7.9%	21	10.1%	13	6.3%
Boomers	Extraversion (Extraverted, enthusiastic)	12	1.7%	3	1.3%	2	0.9%	7	3.0%
	Agreeableness (Sympathetic, warm)	102	14.7%	47	20.4%	31	13.4%	24	10.4%
	Conscientiousness (Dependable, organized)	323	46.6%	109	47.4%	97	41.8%	117	50.6%
	Emotional Stability (Emotionally stable, calm)	124	17.9%	27	11.7%	58	25.0%	39	16.9%
	Openness (Open-minded, imaginative)	59	8.5%	14	6.1%	20	8.6%	25	10.8%
	Off	73	10.5%	30	13%	24	10.3%	19	8.2%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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21. Describe your ideal A.I. virtual assistant... (Coaching - Physical Health)

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	On	1577	77.7%	503	73.9%	531	77.6%	543	81.8%
	Off	452	22.3%	178	26.1%	153	22.4%	121	18.2%
Women	On	790	77.9%	242	71.2%	280	81.4%	268	81.2%
	Off	224	22.1%	98	28.8%	64	18.6%	62	18.8%
Men	On	787	77.5%	261	76.5%	251	73.8%	275	82.3%
	Off	228	22.5%	80	23.5%	89	26.2%	59	17.7%
Millennials	On	536	82.1%	176	75.2%	177	83.9%	183	88.0%
	Off	117	17.9%	58	24.8%	34	16.1%	25	12.0%
Gen X	On	515	76.1%	156	70.3%	182	75.8%	177	82.3%
	Off	162	23.9%	66	29.7%	58	24.2%	38	17.7%
Boomers	On	526	75.3%	171	76%	172	73.8%	183	75.9%
	Off	173	24.7%	54	24%	61	26.2%	58	24.1%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

22. *Describe your ideal A.I. virtual assistant... (Coaching - Financial Health)*

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	On	1304	64.3%	347	51%	481	70.3%	476	71.7%
	Off	725	35.7%	334	49%	203	29.7%	188	28.3%
Women	On	645	63.6%	158	46.5%	252	73.3%	235	71.2%
	Off	369	36.4%	182	53.5%	92	26.7%	95	28.8%
Men	On	659	64.9%	189	55.4%	229	67.4%	241	72.2%
	Off	356	35.1%	152	44.6%	111	32.6%	93	27.8%
Millennials	On	475	72.7%	128	54.7%	175	82.9%	172	82.7%
	Off	178	27.3%	106	45.3%	36	17.1%	36	17.3%
Gen X	On	417	61.6%	109	49.1%	158	65.8%	150	69.8%
	Off	260	38.4%	113	50.9%	82	34.2%	65	30.2%
Boomers	On	412	58.9%	110	48.9%	148	63.5%	154	63.9%
	Off	287	41.1%	115	51.1%	85	36.5%	87	36.1%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

23. Describe your ideal A.I. virtual assistant... (Coaching - Emotional Health)

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	On	1092	53.8%	335	49.2%	387	56.6%	370	55.7%
	Off	937	46.2%	346	50.8%	297	43.4%	294	44.3%
Women	On	519	51.2%	153	45%	201	58.4%	165	50.0%
	Off	495	48.8%	187	55%	143	41.6%	165	50.0%
Men	On	573	56.5%	182	53.4%	186	54.7%	205	61.4%
	Off	442	43.5%	159	46.6%	154	45.3%	129	38.6%
Millennials	On	434	66.5%	125	53.4%	157	74.4%	152	73.1%
	Off	219	33.5%	109	46.6%	54	25.6%	56	26.9%
Gen X	On	344	50.8%	108	48.6%	127	52.9%	109	50.7%
	Off	333	49.2%	114	51.4%	113	47.1%	106	49.3%
Boomers	On	314	44.9%	102	45.3%	103	44.2%	109	45.2%
	Off	385	55.1%	123	54.7%	130	55.8%	132	54.8%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

24. It is the future and the armed forces have developed fully autonomous military drones that are weaponized and powered by A.I. Should lethal autonomous weapon systems (LAWS) be permissible in armed conflict?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	1127	56.2%	260	38.6%	394	59.2%	473	70.9%
	No	879	43.8%	414	61.4%	271	40.8%	194	29.1%
Women	Yes	548	53.5%	109	32.5%	200	57.3%	239	70.1%
	No	477	46.5%	226	67.5%	149	42.7%	102	29.9%
Men	Yes	579	59.0%	151	44.5%	194	61.4%	234	71.8%
	No	402	41.0%	188	55.5%	122	38.6%	92	28.2%
Millennials	Yes	357	54.6%	87	38.5%	130	60.2%	140	66.0%
	No	297	45.4%	139	61.5%	86	39.8%	72	34.0%
Gen X	Yes	397	58.6%	102	43.6%	134	60.6%	161	72.2%
	No	281	41.4%	132	56.4%	87	39.4%	62	27.8%
Boomers	Yes	373	55.3%	71	33.2%	130	57.0%	172	74.1%
	No	301	44.7%	143	66.8%	98	43.0%	60	25.9%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

25. It is the future and police have had success using A.I. to predict criminal behavior. Should the police be able to apprehend someone for questioning on the basis of this predictive policing technology alone?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	686	34.8%	212	31.9%	280	43.6%	194	29.0%
	No	1288	65.2%	452	68.1%	362	56.4%	474	71.0%
Women	Yes	327	33.4%	101	30.2%	144	45.1%	82	25.1%
	No	653	66.6%	233	69.8%	175	54.9%	245	74.9%
Men	Yes	359	36.1%	111	33.6%	136	42.1%	112	32.8%
	No	635	63.9%	219	66.4%	187	57.9%	229	67.2%
Millennials	Yes	216	33.6%	62	27.4%	87	45.1%	67	30.0%
	No	426	66.4%	164	72.6%	106	54.9%	156	70.0%
Gen X	Yes	237	37.9%	76	35.7%	97	46.6%	64	31.4%
	No	388	62.1%	137	64.3%	111	53.4%	140	68.6%
Boomers	Yes	233	33.0%	74	32.9%	96	39.8%	63	26.1%
	No	474	67.0%	151	67.1%	145	60.2%	178	73.9%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

26. If self-driving cars could reduce road fatalities by 90%, but this would mean programming them with a rule to sacrifice their own passengers when this would minimize overall fatalities in an accident, should they be programmed in this way?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	1510	50.6%	482	48.2%	540	54.0%	488	49.7%
	No	1472	49.4%	519	51.8%	460	46.0%	493	50.3%
Women	Yes	704	46.5%	225	45.5%	252	49.3%	227	44.8%
	No	809	53.5%	270	54.5%	259	50.7%	280	55.2%
Men	Yes	806	54.9%	257	50.8%	288	58.9%	261	55.1%
	No	663	45.1%	249	49.2%	201	41.1%	213	44.9%
Millennials	Yes	503	53.3%	170	50.6%	173	56.5%	160	53.0%
	No	441	46.7%	166	49.4%	133	43.5%	142	47.0%
Gen X	Yes	520	52.5%	169	49.9%	180	54.1%	171	53.8%
	No	470	47.5%	170	50.1%	153	45.9%	147	46.2%
Boomers	Yes	487	46.5%	143	43.9%	187	51.8%	157	43.5%
	No	561	53.5%	183	56.1%	174	48.2%	204	56.5%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

SYZYGY / Digital Insight

27. Would you travel in a self-driving car programmed to minimize overall harm, even if this included a rule to sacrifice its own passengers when this would minimize overall fatalities in an accident?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	854	28.3%	260	26%	292	29.2%	302	29.6%
	No	2164	71.7%	739	74%	708	70.8%	717	70.4%
Women	Yes	350	23.0%	97	19.2%	135	25.8%	118	23.9%
	No	1171	77.0%	408	80.8%	388	74.2%	375	76.1%
Men	Yes	504	33.7%	163	33%	157	32.9%	184	35.0%
	No	993	66.3%	331	67%	320	67.1%	342	65.0%
Millennials	Yes	339	34.2%	100	30.1%	115	36.7%	124	35.8%
	No	652	65.8%	232	69.9%	198	63.3%	222	64.2%
Gen X	Yes	283	28.6%	94	28.7%	92	27.6%	97	29.3%
	No	708	71.4%	233	71.3%	241	72.4%	234	70.7%
Boomers	Yes	232	22.4%	66	19.4%	85	24.0%	81	23.7%
	No	804	77.6%	274	80.6%	269	76.0%	261	76.3%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

S/Z/G/ / Digital Insight

28. Sex robots with programmable personalities will be available to buy this year. These robots are anatomically enhanced, hyper-realistic and designed to fulfil your sexual desires. If you were privately offered a free trial with a sex robot (male or female), would you accept it?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	691	33.9%	260	37.1%	194	29.3%	237	35.0%
	No	1349	66.1%	440	62.9%	468	70.7%	441	65.0%
Women	Yes	208	20.4%	74	21.7%	67	19.5%	67	20.0%
	No	812	79.6%	267	78.3%	277	80.5%	268	80.0%
Men	Yes	483	47.4%	186	51.8%	127	39.9%	170	49.6%
	No	537	52.6%	173	48.2%	191	60.1%	173	50.4%
Millennials	Yes	252	38.5%	91	38.7%	73	36.5%	88	40.2%
	No	402	61.5%	144	61.3%	127	63.5%	131	59.8%
Gen X	Yes	247	37.0%	93	39.7%	74	33.2%	80	38.1%
	No	420	63.0%	141	60.3%	149	66.8%	130	61.9%
Boomers	Yes	192	26.7%	76	32.9%	47	19.7%	69	27.7%
	No	527	73.3%	155	67.1%	192	80.3%	180	72.3%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

S/Z/G/ / Digital Insight

29. If your partner had sex with a sex robot without telling you, would you consider it cheating?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	**Yes**	1246	63.0%	365	56%	450	67.6%	431	65.4%
	No	731	37.0%	287	44%	216	32.4%	228	34.6%
Women	**Yes**	733	72.8%	212	64.2%	269	75.8%	252	78.3%
	No	274	27.2%	118	35.8%	86	24.2%	70	21.7%
Men	**Yes**	513	52.9%	153	47.5%	181	58.2%	179	53.1%
	No	457	47.1%	169	52.5%	130	41.8%	158	46.9%
Millennials	**Yes**	435	67.0%	137	61.7%	147	71.0%	151	68.6%
	No	214	33.0%	85	38.3%	60	29.0%	69	31.4%
Gen X	**Yes**	403	61.8%	121	55.3%	142	62.6%	140	68.0%
	No	249	38.2%	98	44.7%	85	37.4%	66	32.0%
Boomers	**Yes**	408	60.4%	107	50.7%	161	69.4%	140	60.1%
	No	268	39.6%	104	49.3%	71	30.6%	93	39.9%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

30. You discover that your favourite brand is using A.I. to tailor its offers, ads and recommendations to your personal preferences. How do you feel about the brand?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	More positive	154	7.7%	42	6.3%	40	6.2%	72	10.6%
	No different	1322	66.3%	378	57%	475	73.2%	469	68.9%
	More negative	517	25.9%	243	36.7%	134	20.6%	140	20.6%
Women	More positive	55	5.5%	14	4.2%	16	4.7%	25	7.5%
	No different	672	66.7%	188	56.1%	247	72.6%	237	71.2%
	More negative	281	27.9%	133	39.7%	77	22.6%	71	21.3%
Men	More positive	99	10.1%	28	8.5%	24	7.8%	47	13.5%
	No different	650	66.0%	190	57.9%	228	73.8%	232	66.7%
	More negative	236	24.0%	110	33.5%	57	18.4%	69	19.8%
Millennials	More positive	79	12.1%	21	9.5%	22	10.7%	36	15.9%
	No different	422	64.7%	127	57.5%	147	71.7%	148	65.5%
	More negative	151	23.2%	73	33%	36	17.6%	42	18.6%
Gen X	More positive	57	8.9%	17	7.7%	16	8.0%	24	10.8%
	No different	418	64.9%	125	56.8%	143	71.1%	150	67.3%
	More negative	169	26.2%	78	35.5%	42	20.9%	49	22.0%
Boomers	More positive	18	2.6%	4	1.8%	2	0.8%	12	5.2%
	No different	482	69.2%	126	56.8%	185	76.1%	171	73.7%
	More negative	197	28.3%	92	41.4%	56	23.0%	49	21.1%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

31. You discover that the latest ads from your favorite brands have been created by A.I. rather than humans. How do you feel about the brand?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	More positive	134	6.7%	43	6.5%	41	6.0%	50	7.4%
	No different	1431	71.1%	421	64.1%	523	76.6%	487	72.3%
	More negative	449	22.3%	193	29.4%	119	17.4%	137	20.3%
Women	More positive	49	4.9%	16	4.9%	19	5.5%	14	4.3%
	No different	707	70.6%	205	62.7%	265	76.4%	237	72.3%
	More negative	246	24.6%	106	32.4%	63	18.2%	77	23.5%
Men	More positive	85	8.4%	27	8.2%	22	6.5%	36	10.4%
	No different	724	71.5%	216	65.5%	258	76.8%	250	72.3%
	More negative	203	20.1%	87	26.4%	56	16.7%	60	17.3%
Millennials	More positive	79	12.5%	20	10.1%	26	12.1%	33	14.9%
	No different	417	65.8%	116	58.6%	157	73.0%	144	65.2%
	More negative	138	21.8%	62	31.3%	32	14.9%	44	19.9%
Gen X	More positive	33	4.9%	12	5.2%	8	3.6%	13	6.0%
	No different	486	72.5%	155	67.4%	175	78.5%	156	71.9%
	More negative	151	22.5%	63	27.4%	40	17.9%	48	22.1%
Boomers	More positive	22	3.1%	11	4.8%	7	2.9%	4	1.7%
	No different	528	74.4%	150	65.5%	191	78.0%	187	79.2%
	More negative	160	22.5%	68	29.7%	47	19.2%	45	19.1%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

32. *You discover that your favourite brand is using A.I. instead of humans to offer customer service and support. How do feel about the brand?*

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	More positive	144	7.2%	50	7.4%	32	4.8%	62	9.2%
	No different	1202	59.9%	334	49.6%	442	67.0%	426	63.1%
	More negative	662	33.0%	289	42.9%	186	28.2%	187	27.7%
Women	More positive	42	4.1%	17	5%	10	3.0%	15	4.4%
	No different	597	58.3%	162	47.2%	218	64.5%	217	63.3%
	More negative	385	37.6%	164	47.8%	110	32.5%	111	32.4%
Men	More positive	102	10.4%	33	10%	22	6.8%	47	14.2%
	No different	605	61.5%	172	52.1%	224	69.6%	209	63.0%
	More negative	277	28.2%	125	37.9%	76	23.6%	76	22.9%
Millennials	More positive	84	12.7%	28	11.5%	18	9.2%	38	16.9%
	No different	366	55.1%	106	43.6%	129	65.8%	131	58.2%
	More negative	214	32.2%	109	44.9%	49	25.0%	56	24.9%
Gen X	More positive	36	5.5%	12	5.8%	11	4.9%	13	5.9%
	No different	399	60.9%	105	50.7%	140	61.9%	154	69.4%
	More negative	220	33.6%	90	43.5%	75	33.2%	55	24.8%
Boomers	More positive	24	3.5%	10	4.5%	3	1.3%	11	4.8%
	No different	437	63.4%	123	55.2%	173	72.7%	141	61.8%
	More negative	228	33.1%	90	40.4%	62	26.1%	76	33.3%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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33. Do you think it should be illegal for A.I. application such as social media bots, chatbots and virtual assistants to conceal their identity and pose as humans?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	5034	83.9%	1746	87.3%	1704	85.2%	1584	79.2%
	No	966	16.1%	254	12.7%	296	14.8%	416	20.8%
Women	Yes	2595	85.5%	879	87.9%	896	86.7%	820	82.0%
	No	439	14.5%	121	12.1%	138	13.3%	180	18.0%
Men	Yes	2439	82.2%	867	86.7%	808	83.6%	764	76.4%
	No	527	17.8%	133	13.3%	158	16.4%	236	23.6%
Millennials	Yes	1567	81.0%	567	84.9%	508	82.1%	492	75.9%
	No	368	19.0%	101	15.1%	111	17.9%	156	24.1%
Gen X	Yes	1667	84.1%	579	86.9%	572	85.9%	516	79.5%
	No	314	15.9%	87	13.1%	94	14.1%	133	20.5%
Boomers	Yes	1800	86.4%	600	90.1%	624	87.3%	576	81.9%
	No	284	13.6%	66	9.9%	91	12.7%	127	18.1%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

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34. Do you feel that brands should need your explicit consent before they use A.I. when marketing to you?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	2249	75.1%	795	79.9%	731	74.6%	723	71.0%
	No	745	24.9%	200	20.1%	249	25.4%	296	29.0%
Women	Yes	1162	77.3%	406	80.9%	376	75.4%	380	75.5%
	No	342	22.7%	96	19.1%	123	24.6%	123	24.5%
Men	Yes	1087	73.0%	389	78.9%	355	73.8%	343	66.5%
	No	403	27.0%	104	21.1%	126	26.2%	173	33.5%
Millennials	Yes	683	70.9%	241	73.5%	206	69.4%	236	69.6%
	No	281	29.1%	87	26.5%	91	30.6%	103	30.4%
Gen X	Yes	750	76.0%	280	80.7%	254	77.2%	216	69.5%
	No	237	24.0%	67	19.3%	75	22.8%	95	30.5%
Boomers	Yes	816	78.2%	274	85.6%	271	76.6%	271	73.4%
	No	227	21.8%	46	14.4%	83	23.4%	98	26.6%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.

35. Do you believe the use of A.I. in marketing should be regulated with a legally-binding code of conduct?

		Total		Germany		United Kingdom		United States	
		n	%	n	%	n	%	n	%
All	Yes	2698	89.8%	882	87.8%	940	92.2%	876	89.3%
	No	308	10.2%	123	12.2%	80	7.8%	105	10.7%
Women	Yes	1388	90.7%	435	87.3%	499	93.3%	454	91.3%
	No	142	9.3%	63	12.7%	36	6.7%	43	8.7%
Men	Yes	1310	88.8%	447	88.2%	441	90.9%	422	87.2%
	No	166	11.2%	60	11.8%	44	9.1%	62	12.8%
Millennials	Yes	845	87.0%	288	84.7%	286	88.8%	271	87.7%
	No	126	13.0%	52	15.3%	36	11.2%	38	12.3%
Gen X	Yes	893	89.8%	282	88.4%	309	91.7%	302	89.3%
	No	101	10.2%	37	11.6%	28	8.3%	36	10.7%
Boomers	Yes	960	92.2%	312	90.2%	345	95.6%	303	90.7%
	No	81	7.8%	34	9.8%	16	4.4%	31	9.3%

Base: General population sample of 6000 adults aged 18-65 in Germany (2000), UK (2000), and USA (2000). WPP Lightspeed Online Consumer Panel: Fieldwork conducted Q3, 2017.