

DEMOS

TRUSTING THE DATA

A PEOPLE'S VIEW OF
RESPONSIBLE
TECHNOLOGY

A PEOPLE'S VIEW OF RESPONSIBLE TECHNOLOGY

The Covid-19 pandemic has both accelerated the trend of digitalisation, and highlighted how data and technology can support public health responses to even the most serious crises. However, it has also shown the stark divides that exist in the UK between the digitally included and excluded.

From exam grades to automated moderation online, we have been reminded how technology can perpetuate discrimination and marginalisation. As new technologies and uses of data develop, so does the duty on governments and companies to use them responsibly, and protect individual rights while working towards the public good.

In 2021, Demos and BT partnered to conduct a national conversation about responsible technology with the UK public, inviting a nationally representative sample of over 1,000 adults to take part in a survey conducted on the open source deliberation tool Polis.



DEMOS

We found evidence of a two-way crisis in trust: that even those who most strongly think that new uses of data and tech can be for the public good don't trust private companies who provide that technology to use it properly. And on the other hand, we see users not feeling trusted to make their own informed decisions about how their data is used and what uses technology is put to.

But though there are deep divides in public opinion, there is room for consensus too: a clear call for steps to be taken to redress the power imbalance between citizens and companies that makes the status quo possible. These must be at the heart of a public settlement on the responsible use of technology.

We found that the public are open to new uses of data which improve their health, increase public safety and their day to day lives, but want to be brought along with these advances. This means addressing the current crisis of trust in how data is used. Responsible technology needs to demonstrate it is meant to serve a public need, and there is a need for effective regulatory control governing these uses and bringing along those who are in danger of being left behind by the new digital normal.

This short slide deck explores our findings in detail.

- **50%** would support any use of their personal health data by private companies that could help improve their health
- **47%** said that as long as companies were transparent and clear about their intentions, they were not worried about how their personal data is used.

BUT:

- **67%** were worried that their data is going to be used against them without their knowledge
- **65%** often worry about the unintended consequences of new technological developments


WHAT IS POLIS? MORE THAN A POLL

This research was conducted using Polis, an online deliberation platform, which encourages people to participate in discussions, rather than simply responding. It differs from a traditional polling platform in two crucial ways.

1: POLIS IS PARTICIPATORY

Participants in a Polis debate are shown a series of statements, and asked whether they agree, disagree or want to 'pass' on each - this is shown on the right. Crucially, they are then able to add their own statements to the debate, which, after moderation, are added to the stack.

This changes the passive process of surveying into a participatory one, allowing people to draw on their own lived experiences to add missing dimensions into the debate, and allowing new ideas and solutions to be sourced from those taking part, rather than simply put forward by researchers.

 Anonymous wrote: 39 remaining

I often worry about the unintended consequences of new technological developments (e.g. smart devices being used for surveillance)

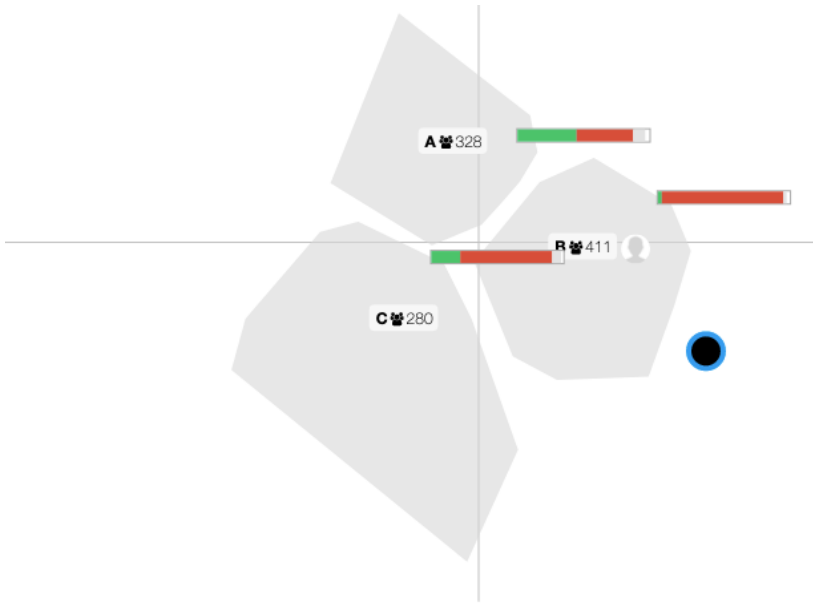
Agree Disagree Pass / Unsure

Share your perspective...

2: POLIS SURFACES AREAS OF CONSENSUS AND DIVISION

While people are voting, Polis employs a technique called 'Principle Component Analysis' to place users who vote similarly into groups. A visualisation showing these groups, seen on the right, is shown to participants while they take the poll, alongside a coloured circle which shows in real time where they sit in relation to others.

Clicking buttons below the groups shows which opinions which are shared amongst all participants, and which are characteristic of a given group. This approach gives users a sense of where they stand, but also shows them what unites them with those from other groups.



Majority Opinion

Group:

A

B

C

Statement:

7

8

11

26

186

268

#7 I am happy for companies to sell my personal data to advertising companies to enable them to send me targeted adverts



71% of everyone who voted on statement 7 disagreed.



**THE
CONFLICTED**

**THE
CONCERNED**

**THE
NONCHALANT**

In this discussion, we found users split into three groups typified by their attitude to responsible technology - which we have called them **'the Conflicted'**, **'the Concerned'** and **'the Nonchalant'**. We examine these in detail below.

LIMITATIONS

1. THIS METHODOLOGY DOES NOT OFFER EQUAL ACCESS TO ALL DEMOGRAPHICS

The topics we discussed included digital exclusion and accessibility, as well as children's data rights. However, as this discussion took place using an online tool, those who experience digital exclusion would have been unlikely to participate. We were also only able to poll adults, meaning that the voices of children and the digitally excluded are not represented here.

2. RESULTS FOR STATEMENTS SUBMITTED DURING THE DISCUSSION MAY NOT BE NATIONALLY REPRESENTATIVE

While our discussion as a whole was nationally representative, not all participants voted on each statement, meaning the response to statements submitted during the discussion may not be representative. Percentages therefore refer to the percentage of respondents on each statement rather than the whole sample. We have also only analysed responses from participants who completed the survey.

TOP LEVEL STATISTICS

Between 6th and 13th January 2021, Demos and BT hosted a Polis discussion with 1,006 participants.

This recruited participant group was nationally representative of UK adults, and the results shown here have been weighted for gender, age and social class.

During the debate:



WHAT DID PEOPLE WANT TO SAY?

The conversation was seeded by BT and Demos with comments. Participants were then able to submit their own statements for other people to vote on; some examples of these are below. The statements participants voted on and submitted were related to five themes: Data Custodianship, Healthcare, Regulation, Surveillance and User Empowerment.

HEALTHCARE

I feel that data used for health should only be accessed by gov or NHS

DATA CUSTODIANSHIP

I'm worried that my data is going to be used against me some way, without my knowledge

SURVEILLANCE

The only people worried about smart technology being used for surveillance are people that have something to hide

USER EMPOWERMENT

Children should be taught about data safety in schools

REGULATION

I think technology is moving too fast and should be strongly regulated.

FINDINGS

THE PUBLIC ARE UNHAPPY WITH THE CURRENT DATA STATUS QUO, AND WORRIED ABOUT THE FUTURE

People are concerned - from how to use their devices to what someone could do with their data without them knowing. Common existing data practices garner little support, and potential future and new uses are often seen in the negative.

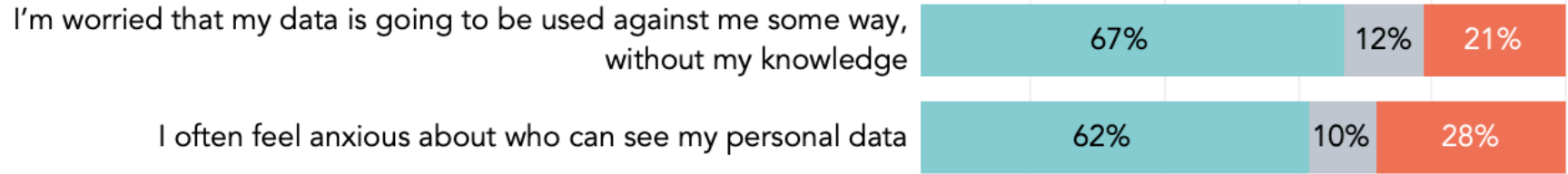
There are positive feelings towards the opportunities that using data could present - but with a desire for a transparent and controlled framework to govern how this happens.

People want to see action: from government and from tech companies, to tackle inequalities and empower individuals to be in charge of their data and technology.

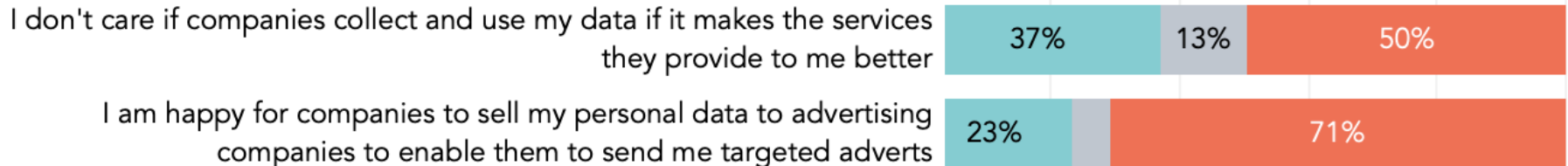
THE PUBLIC ARE UNHAPPY WITH THE DATA STATUS QUO

People are very worried about who can see their data and what it will be used for

Agree Pass/unsure Disagree

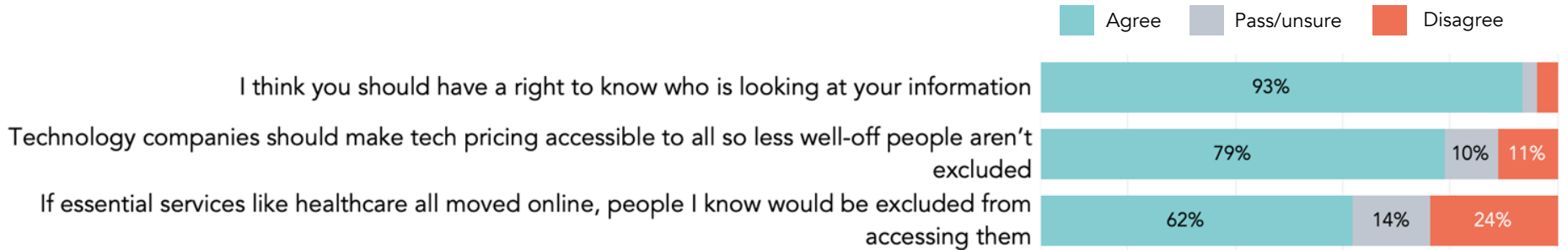


Commercial reasons for using personal data generally receive less support: though there are different levels of support for different use cases - targeted ads being particularly disliked

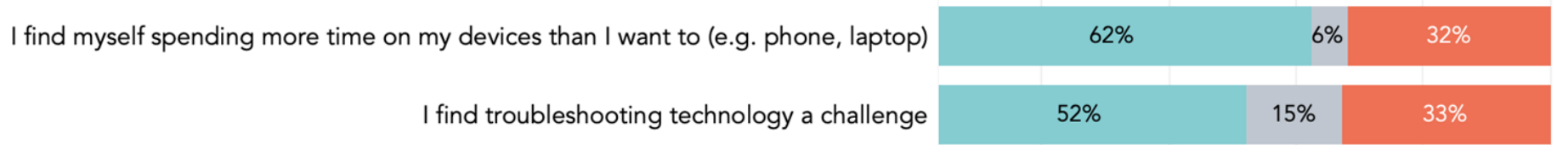


THERE ARE BARRIERS TO TECH PLAYING A POSITIVE ROLE

There is a clear desire for technology to be inclusive and accessible, with users empowered to understand how their personal data is used

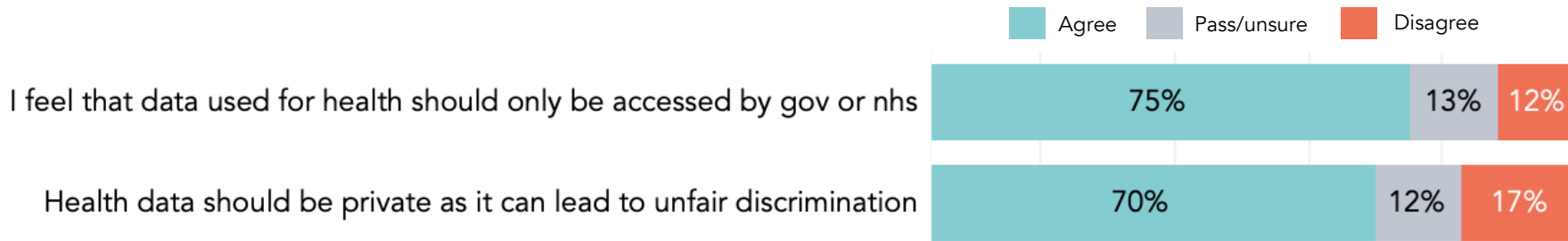


But this isn't happening: people don't feel in control of how they use technology

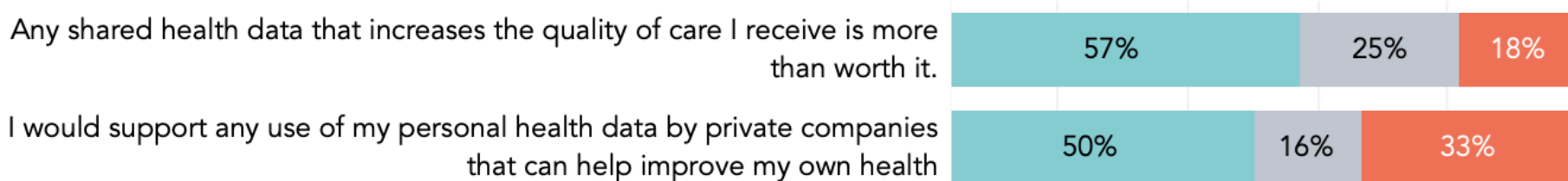


THE PUBLIC SUPPORTS LIMITS ON THE USE OF HEALTH DATA

Health data was seen as particularly sensitive: with people worried about discrimination on the basis of health, and a desire for strong limits on who is able to access health data.

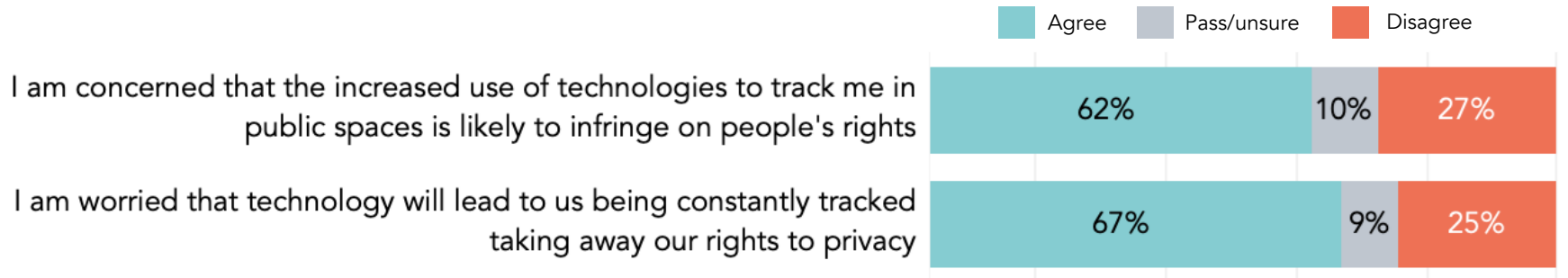


There is support for health data being used to improve people's health: but there is significantly more opposition to these uses specifically by private companies

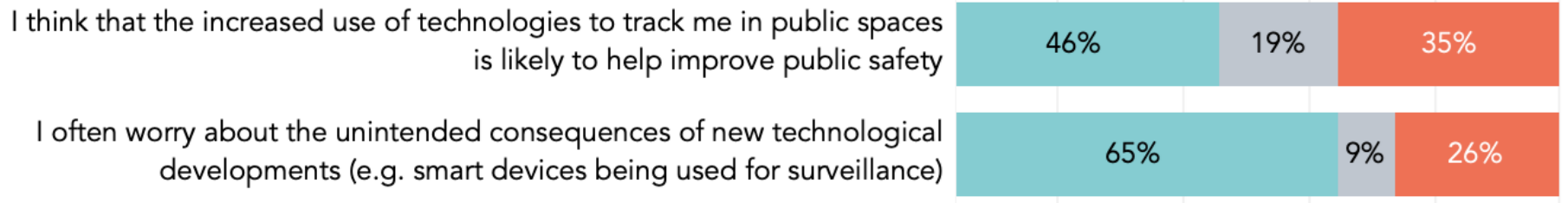


THE MAJORITY OF PEOPLE ARE CONCERNED BY THE USE OF SURVEILLANCE TECHNOLOGY

In many statements concerning surveillance technology, the clear majority of people indicated that they were concerned about its use infringing individual rights.

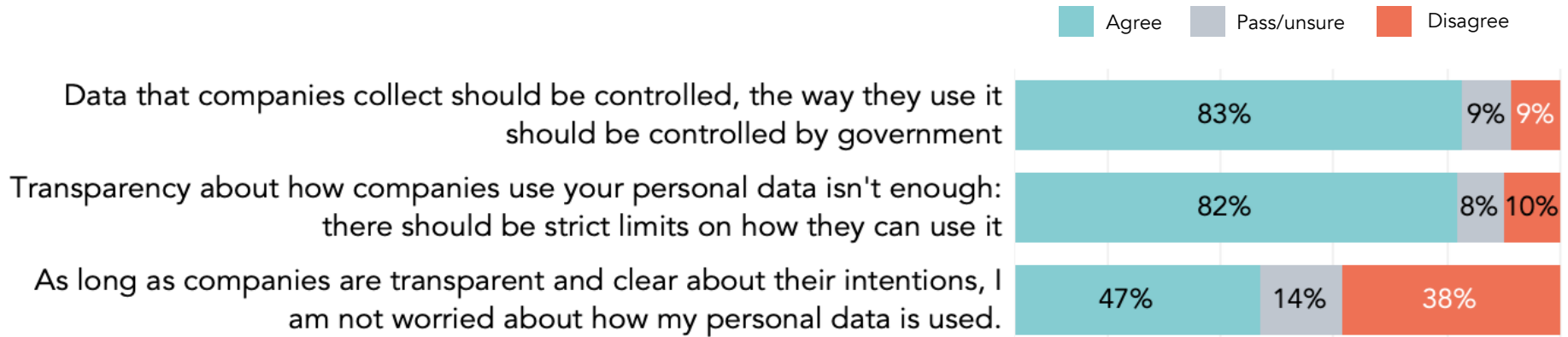


There was support for the idea that these technologies could make public space safer: but there are also significantly higher concerns persisting about unintended consequences of their use.



THE PUBLIC SUPPORT STRONG DATA REGULATION

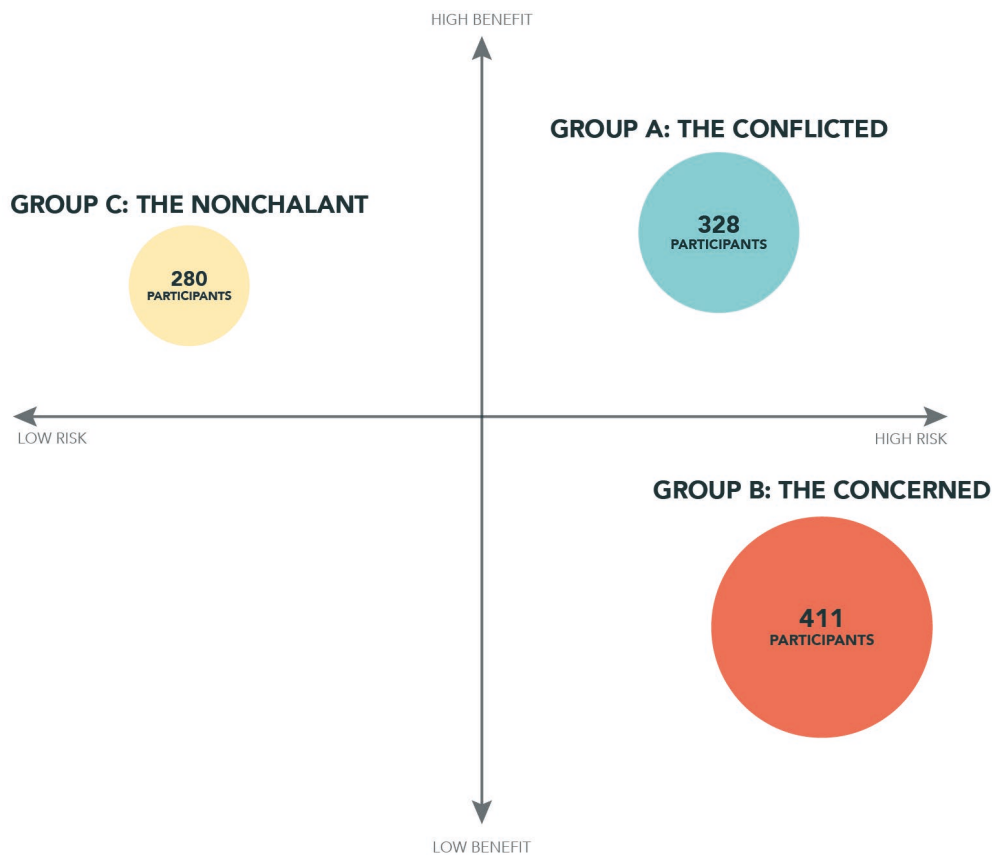
Transparency around companies' use of data is valued but not sufficient. There is strong support for regulation which effectively controls these uses.



THE PUBLIC AREN'T A MONOLITH: PEOPLE CALCULATE BENEFITS AND RISKS OF TECH DIFFERENTLY

We found three distinct groups within the public, who have nuanced views on the benefits and risks associated with technology and data use.

One group is very concerned about the risks of current and new technologies (the Concerned); another is fairly nonchalant about these risks and more amenable to the idea of positive use cases (the Nonchalant). The third, however, is torn on these issues (the Conflicted) - they strongly believe in the positive potential for technology, but they are also just as concerned about the potential risks. The groups also have differing experiences with technology, which affects how they see their relationship to technology.



OPINION GROUPS

As the conversation is underway, Polis uses a clustering algorithm to place voters into groups, based on similarities in their voting behaviour. Participants in a group may differ on some statements but tend to be more in agreement with each other than they are with other groups.

While the system cannot describe these groups - it doesn't know what makes them tick - grouping by voting patterns in this way allows researchers to examine these patterns for differences in participants' attitudes to responsible technology.

At the end of this poll, three distinct groups had formed. These were found to centre around attitudes to companies' use of technology and personal data across a wide range of fields.

We have nicknamed these groups 'the Conflicted', 'the Concerned' and 'the Nonchalant'.



**GROUP A:
THE
CONFLICTED**

Group A are worried about the negative impacts of technology and support greater clarity and controls on how data can be used. But they are also strongly in favour of personal data being used in positive ways - such as to improve their healthcare.

Group A are more likely to be **female (57%), under 34 (43%), and from an ethnic minority background (18%)** than respondents from other groups.



**GROUP B:
THE
CONCERNED**

Group B are worried about how and for what purpose their data is being used: they see great potential for abuse and don't think commercial, health or public safety are reasons to collect and use extensive personal data.

This group **tended to be older, with over a quarter (27%) of its members aged over 65.**



**GROUP C:
THE
NONCHALANT**

Group C are far less worried about how their data is used. They are supportive of some uses of personal data (e.g. to improve public health), and dislike others (e.g. to target adverts).

This group was more likely to be **male (59%) and from social group ABC1 (63%)** than other groups.

AREAS OF DIVISION

The poll exposed five key areas across which our groups were divided:

RELATIONSHIP
WITH
TECHNOLOGY

TERMS AND
CONDITIONS

RISKS OF
SURVEILLANCE

DATA TO
IMPROVE HEALTH

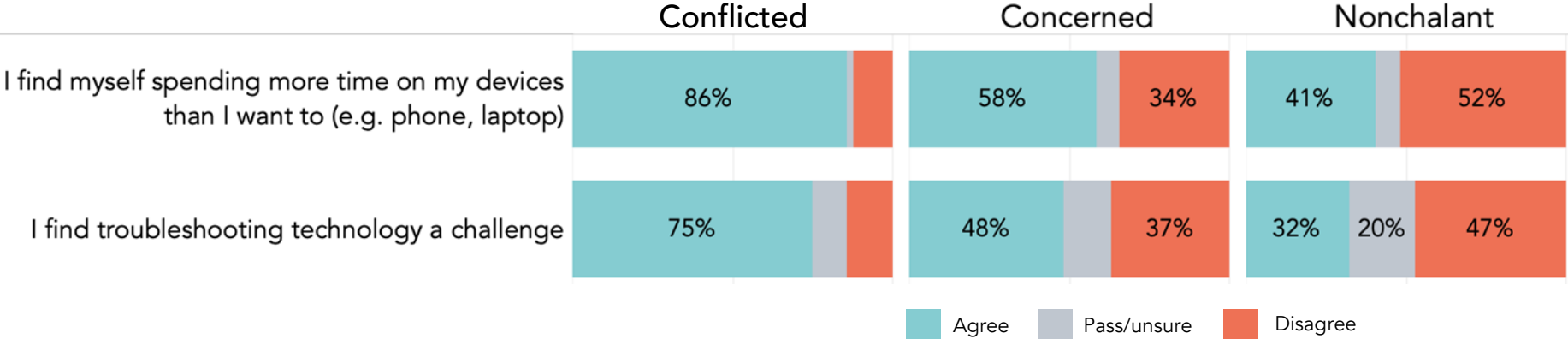
COMMERCIAL
DATA USE

Each of these is examined in detail below.

THE GROUPS DIVIDE: RELATIONSHIP WITH TECHNOLOGY

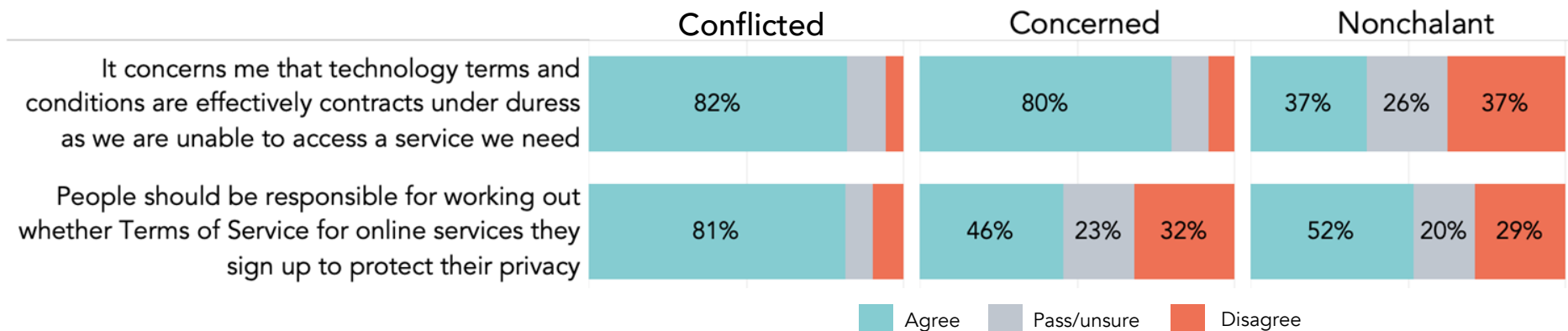
The Conflicted group reported the most difficulties with technology - spending too much time and finding it hard to troubleshoot.

The Concerned and the Nonchalant were more divided, though higher proportions of Concerned respondents agreed that they faced the stated difficulties, suggesting that those who have more negative experiences with tech may be more likely to feel negatively about how tech and data are used.



THE GROUPS DIVIDE: TERMS AND CONDITIONS

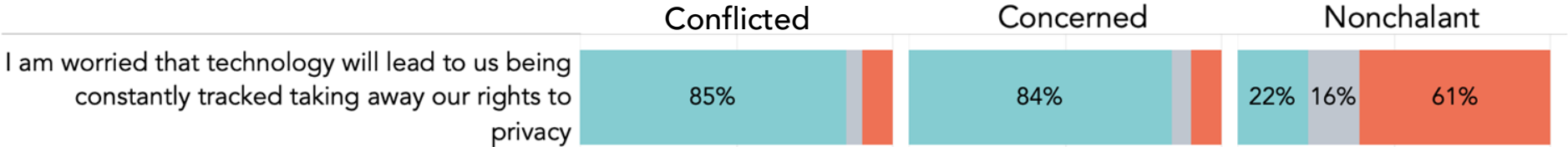
The groups show different views of how much agency users have when they agree to terms and conditions for data use set by companies: the Concerned think that they have little choice whereas the Nonchalant do not feel pressured to agree to terms.



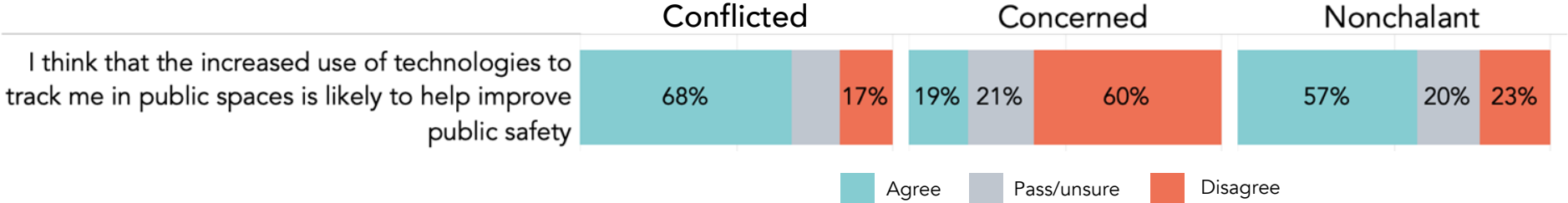
The Conflicted are very strongly concerned that users have little control over what terms and conditions they are offered. However, they also feel very strongly that individuals have responsibilities in what terms they agree to. One-size fits all solutions to problems such as transparency are thus not likely to be acceptable to all groups.

THE GROUPS DIVIDE: RISKS OF SURVEILLANCE

Surveillance technologies are not a source of concern for the Nonchalant, in contrast to the other groups who both see serious risks.

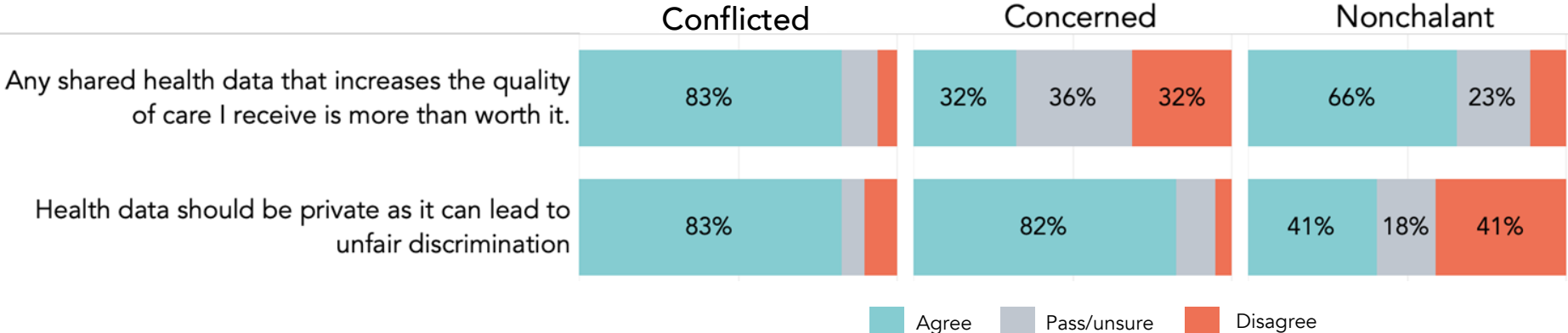


However, the Conflicted feel more strongly than the Nonchalant about the potential benefits of using technology for surveillance - with over two thirds agreeing that technologies in public space can help public safety.



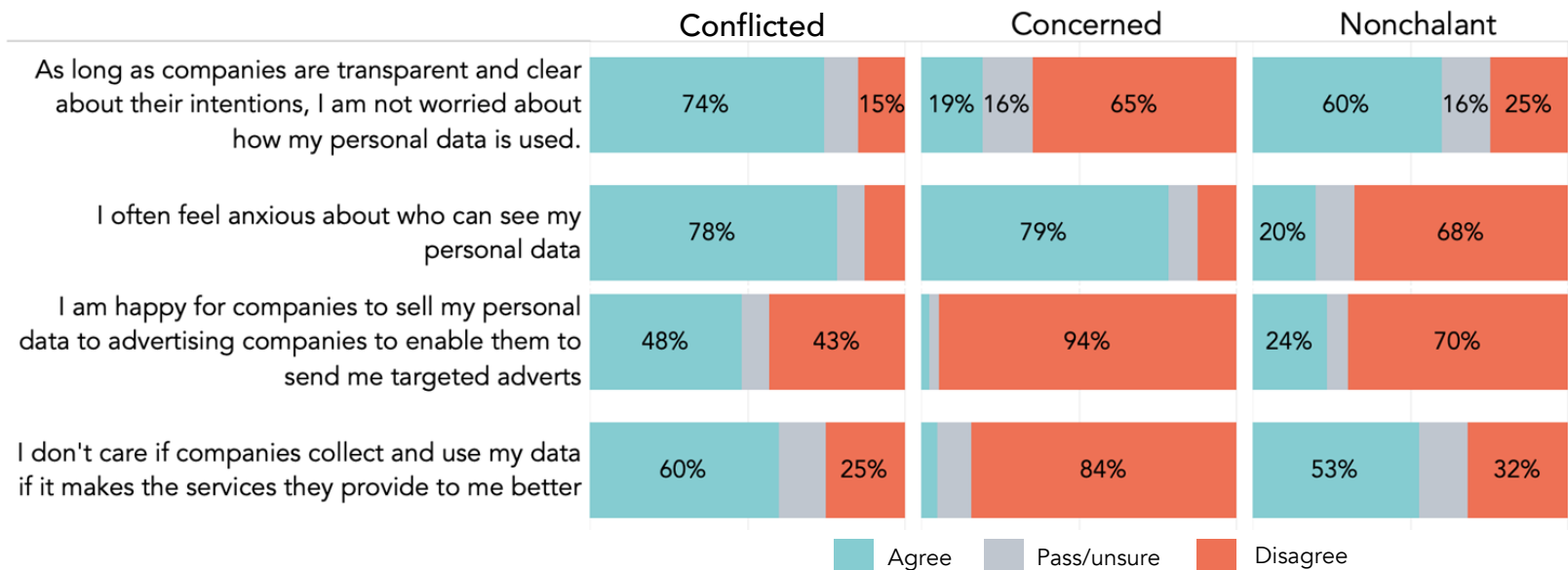
THE GROUPS DIVIDE: DATA TO IMPROVE HEALTH

The Conflicted are strongly in favour of using health data to improve healthcare, but also strongly in favour of strict limits of who can access that data (sometimes to the point of potential contradiction). The Concerned, by contrast, agree about the risks but are much less positive about the benefits of using health data: for many, the possible risks far outweigh any benefit.



THE GROUPS DIVIDE: COMMERCIAL DATA USE

The Conflicted and Concerned are both very worried about how their data is used: however, the Conflicted's worries can be alleviated by transparency from companies about data use.



Only the Concerned are strongly against common commercial uses of data. The Nonchalants are strongly opposed to the use of targeted adverts, whereas the Conflicted are more evenly divided. This suggests the public make a distinction between 'better services' and 'targeted ads' - which companies often elide.

**THERE IS
CONSENSUS ON THE
NEED FOR GREATER
EMPOWERMENT:
FOR USERS TO BE IN
CONTROL OF THEIR
DATA AND TECH**

There is broad agreement across all the groups that action needs to be taken to give more power to users and trust them with access to tech and information about their data: to improve education, to increase regulation and to improve accessibility and information rights.

AREAS OF CONSENSUS

The poll exposed four key areas where consensus emerged despite people's different attitudes and experiences - where there was agreement not only overall but strong majority support within each attitude group on certain statements.

DATA CONTROL

EDUCATION

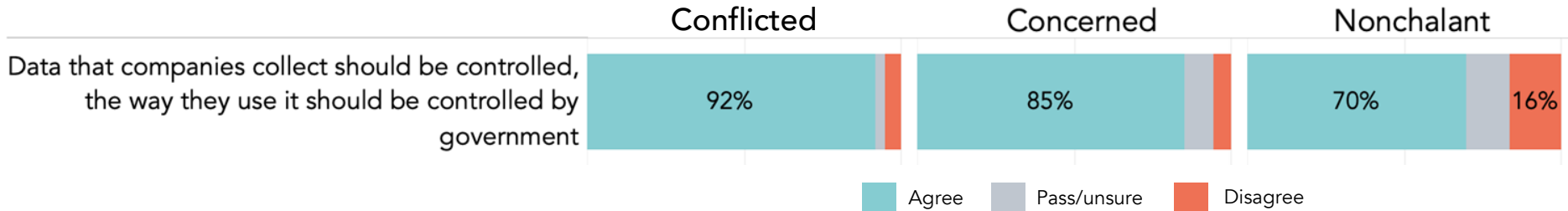
TRANSPARENCY

INCLUSION

Each of these is examined in detail below.

CONSENSUS: DATA CONTROL

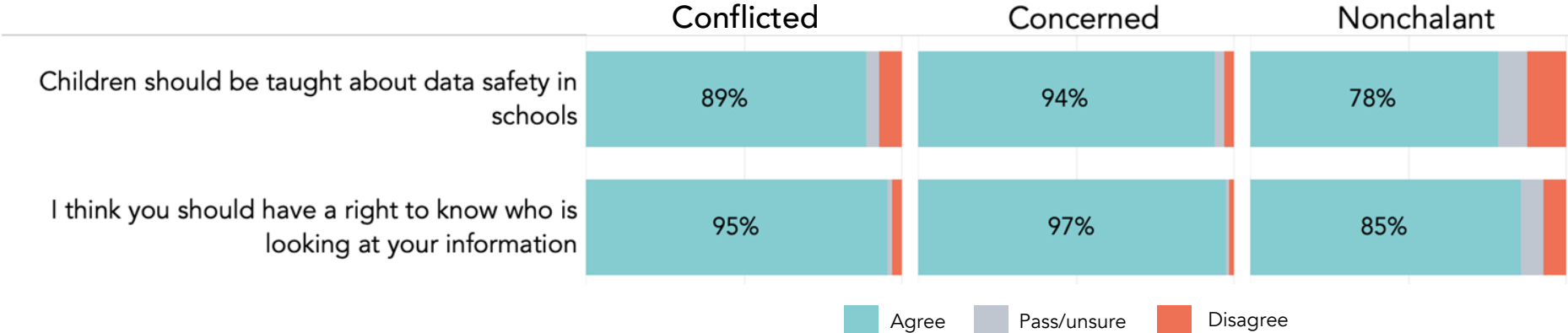
People across groups showed a desire for greater controls on how companies can use personal data - with majority support (although to varying degrees) specifically for controls on data collection and use.



This agreement exists despite these groups having very different levels of concern in general about data misuse, and differing levels of support for other forms of regulation - for example, 62% of the Nonchalant respondents disagreed with a statement suggesting we need strong regulation of technology in general, whereas other groups agreed.

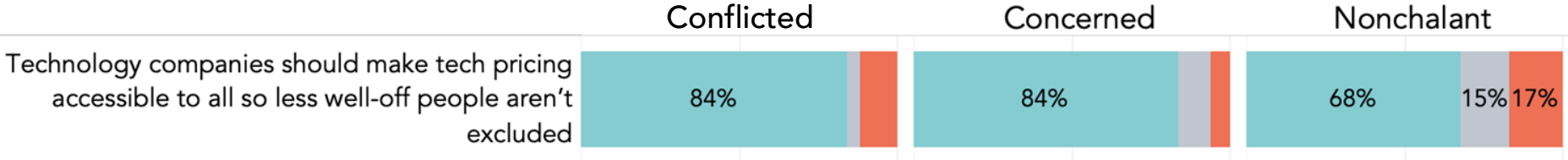
CONSENSUS: TRANSPARENCY AND EDUCATION

People wanted greater transparency and understanding of how their data is being used - not only by having rights to information about their data, but also through better education to empower the next generation of digital citizens.

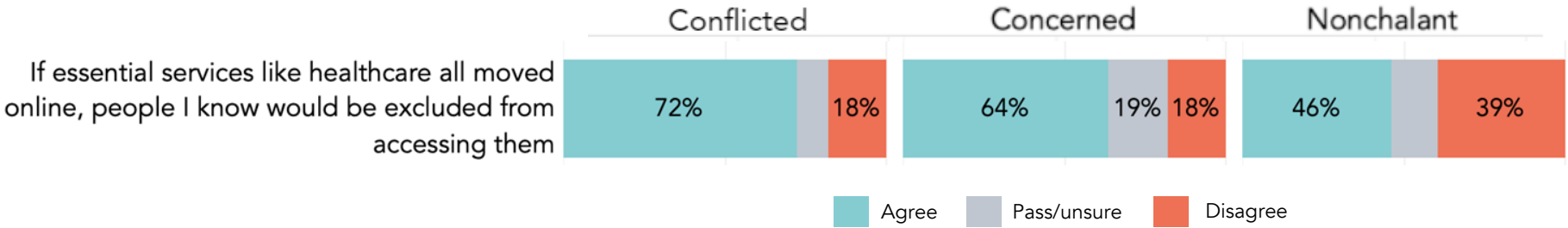


CONSENSUS: INCLUSION

And people want equality: there is majority support across groups for action to be taken by companies to ensure that people aren't being unfairly excluded from using technologies.



However, the levels of support for this are lower amongst the Nonchalants, who are less likely to know someone at risk of digital exclusion if essential services moved online - though still a majority.



CONCLUSIONS

Our findings show that the public's views are complex: the divisions we see are not simply 'pro-tech' and 'anti-tech'. The public are not universally opposed to technological developments - many see potential benefits as a result, for their own and public wellbeing. But the current lack of clarity and trust in how data and tech are used and managed currently means people feel disempowered and uncertain about the future.

People's attitudes vary according to their needs and experiences: what is sufficient for one group of users may not work for another. A public settlement on the way forward for responsible tech relies on government and industry engaging with citizens and civil society to understand how mutual trust can be built: on what outcomes are legitimate pursuits, on what safeguards and controls need to be put in place, and on what powers users demand they be entrusted with. And trust cannot be retrofitted: action must be taken now.

A WAY FORWARD FOR RESPONSIBLE TECH?

Our findings suggest that in order for uses of data and technology to have public consent, they must, at a minimum, be based on the following principles. Some of these principles are already enshrined in existing regulations - but these must be effectively enforced and lead to greater meaningful control for users.

RESPONSIBLE USES OF DATA AND TECHNOLOGY SHOULD:



BE SPECIFIC AND LIMITED

- Uses of and access to user data must be specific, clear and limited, with regulatory oversight
- More restrictions on more sensitive categories of data, particularly health data
- Justification for uses be clear with clear and effective avenues for redress



ENABLE USER CONTROL

- Users able to make their own decisions about what their data is used for
- Transparency about data use is necessary but not sufficient
- System design that promotes ongoing and informed consent
- Investment in education to promote digital literacy

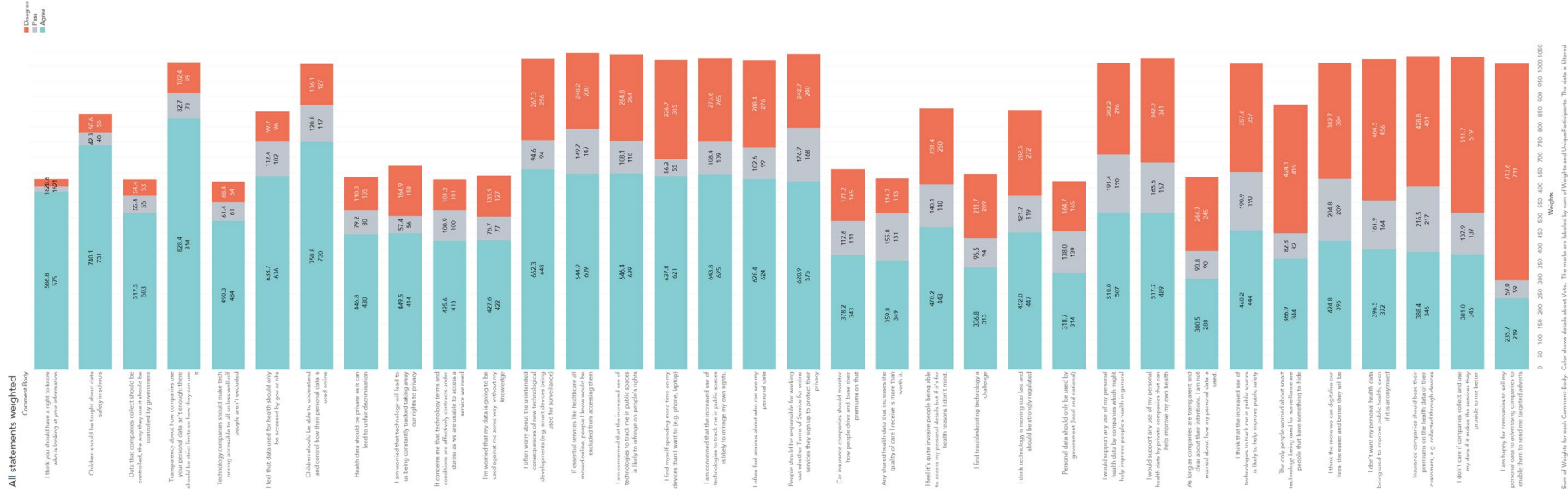


BE INCLUSIVE AND EMPOWERING

- Non-discrimination as a fundamental principle of design and metric of success
- Internet and digital technologies accessible to all
- Technologies should be designed with promotion of wellbeing in mind
- Active promotion of digital rights

APPENDIX

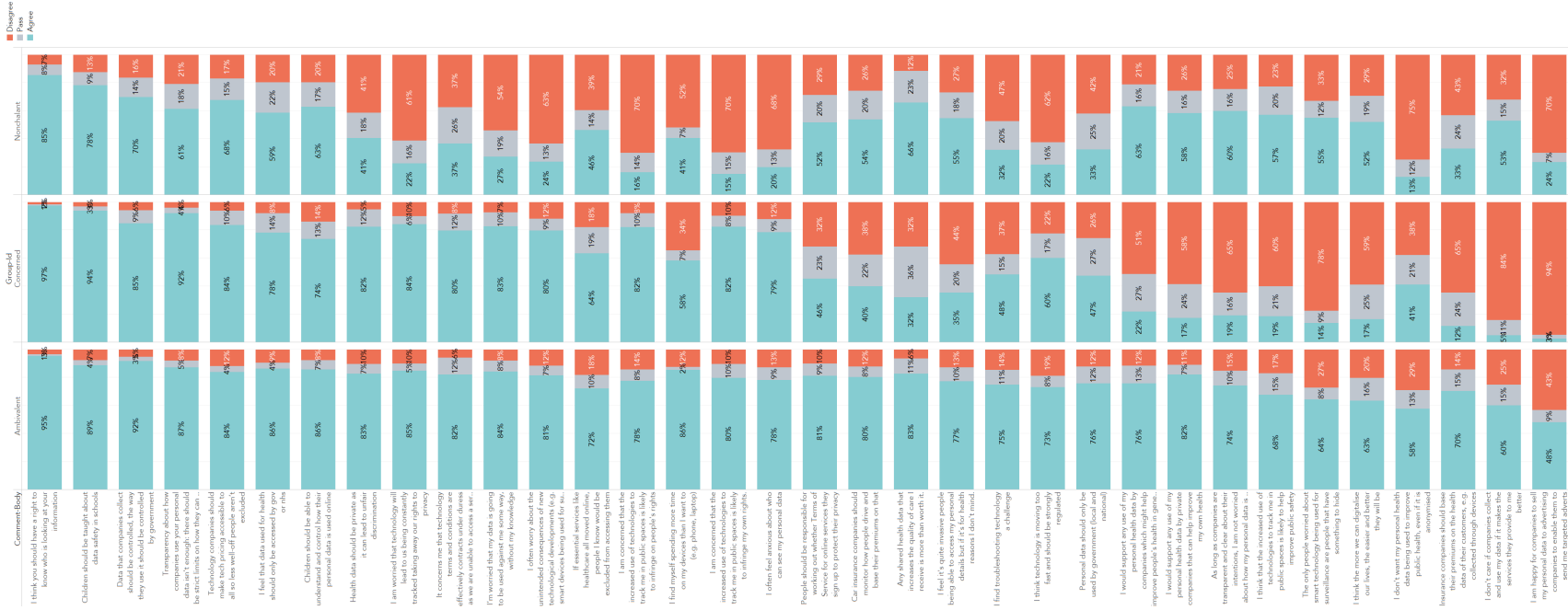
Number above is weighted: below is number of unique participants who voted



0 50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000 1050
 Weights
 *The data for this chart is based on the 100% of the 1000 unique participants who voted on the statements. The data is filtered on Anonymous and State Name. The Malware does report 1. The States show three hours completion. The vote is filtered on Consent Body, which includes 6 members.

APPENDIX

All statements weighted



0% 20% 40% 60% 80% 100% 10% 20% 40% 60% 80% 100% 10% 20% 40% 60% 80% 100%
 % of Total Weights % of Total Weights % of Total Weights
 % of Total Weights for each Group. The chart shows the percentage of total weights for each statement, broken down by group. The bars are color-coded by level of agreement, from Disagree (red) to Agree (teal). The data is based on 8 members. Percentages are based on each cell of each page of the table.