### Appendix 1: Further details on participants hopes and goals, and whether they were met

Table 4B is an expanded version of the abridged table in the main paper, including all recorded goals that participants expressed across the whole study (Table 4 in the paper only showed those goals shared by 3 or more participants). It also divides the goals into two types: those relating to gaining control of one’s personal data (upper section), and those relating to using data for personal benefit (lower section):

Table 4B: Summary of Participants’ Hopes, Imagined Data Uses and Goals for GDPR, and whether Perceived Successful

| **Hope or Goal** | **Distinct** | **Distinct** | **Specific companies** | **Goal perceived as met?** | | |
| --- | --- | --- | --- | --- | --- | --- |
|  | **instances of this goal** | **participants** | **in mind for this goal, if any** | **Unmet?** | **Partially met?** | **Fully met?** |
| GOALS RELATING TO ACCOUNTABILITY AND CONTROL (88 occurrences / 74% of all goals): | | | | | | |
| Understand the breadth and  depth of what data is collected | 24 | 7 | Amazon, Apple, CheckMyFile, Credit Karma, Facebook, Google, LNER, Nectar, Philips Hue, Spotify, Tesco, Three, Virgin Media | 42% | 17% | 42% |
| Understand what is inferred  about you from your data | 15 | 7 | Amazon, Apple, Direct Line, Google, Instagram, last.fm, LNER, Spotify, Tesco, Three | 73% | 20% | 7% |
| Assess provider trustworthiness | 12 | 6 | Apple, Credit Karma, Direct Line, Facebook, Freeprints, Nectar, Niantic, Sunderland AFC, Tesco, Three | 42% | 42% | 17% |
| Remove your data &  control/limit its use | 10 | 3 | Bumble, ifun.tv, Instagram | 90% | 0% | 10% |
| See inside black box algorithms  & processes | 9 | 4 | Amazon, Facebook, Google, Tesco | 56% | 11% | 33% |
| Understand how and why  your data is used | 6 | 5 | Direct Line, Google | 50% | 33% | 17% |
| Investigate specific questions  or incidents | 4 | 4 | Airbnb, Three, Credit Karma, Instagram | 100% | 0% | 0% |
| Learn about data use and how  to be safer online; educate others | 3 | 2 |  | 0% | 33% | 67% |
| Secure data about you and identify risks and leaks | 2 | 2 | Apple, Facebook | 100% | 0% | 0% |
| Check accuracy of data about you | 1 | 1 | CheckMyFile | 100% | 0% | 0% |
| Move your data to another service | 1 | 1 |  | 100% | 0% | 0% |
| Test your data rights | 1 | 1 |  | 0% | 100% | 0% |
| GOALS RELATING TO USING DATA FOR PERSONAL BENEFIT (31 occurrences / 26% of all goals): | | | | | | |
| Reflect on past activities  & gain insights | 14 | 5 | Airbnb, Apple, Google, last.fm, LNER, Tesco, Virgin Media | 57% | 36% | 7% |
| Find patterns/habits & track goals | 6 | 5 | last.fm, Nectar, Spotify, Tesco | 17% | 50% | 33% |
| Combine data from many  sources for deeper insights | 3 | 2 | Philips Hue, Google | 33% | 67% | 0% |
| Play with, create, hack  & remix your data | 3 | 3 | Google | 67% | 0% | 33% |
| Nostalgia, fun & inspiration | 3 | 3 | Spotify, Niantic | 33% | 33% | 33% |
| Keep your own data archive | 2 | 2 | last.fm | 0% | 50% | 50% |
| **OVERALL** | **18 goal types** | **10 people** | **–** | **54%** | **24%** | **22%** |

In Table 5 and 6, the individual hopes and goals of participants that contributed to these totals are detailed separately, including feelings and viewpoints expressed upon reviewing each set of returned data (or lack thereof) and being reminded of their previously stated goal for that target company. Table 5 details goals relating to accountability and control (corresponding to the upper part of Table 4), whereas Table 6 details goals related to using data for personal benefit (corresponding to the lower part of Table 4. Feelings and goals have been in some cases been reworded for reasons of code clustering and space, but remain semantically equivalent to participants’ original words.

Table 5: Detailed breakdown of hopes, imagined data uses and goals relating to accountability and control, with outcomes and feelings

| **Hope or Goal** (*goal groupings in italics*) | **Participant** | **Target Company, if applicable** | **Was this hope met?** | **Feelings expressed (if any)** |
| --- | --- | --- | --- | --- |
| *To understand the breadth and depth and detail of what data is collected (24 occurrences, 7 participants)*: | | | | |
| Find out scope of how much they actually know | P1 | Amazon | No | Slightly perplexed |
| Get a full understanding of data about me | P1 | Amazon | No | Slightly perplexed |
| Get an understanding of what data is stored | P3 | Amazon | No | Have learned something |
| See what data is stored | P10 | Apple | Yes | - |
| Raise my awareness of what is stored and its granularity, e.g. my routines | P4 | CheckMyFile | Yes | Interested |
| Get an understanding of what data is stored | P3 | Credit Karma | Yes | No benefit |
| Find out scope of how much they actually know | P1 | Facebook | Yes | - |
| Understand what datas collected involuntarily | P1 | Facebook | No | - |
| Understand what data is stored | P3 | Facebook | Yes | Have learned something |
| Find out scope of how much they know | P1 | Google | Yes | Perplexed. They should do better. |
| Get a full understanding of data held about me | P1 | Google | Partially | This is too much, need guidance |
| Find out what data companies collect and store | P5 | Google | Yes | Underwhelmed vs my expectations |
| Find out what data they have | P11 | LNER | No | Sad, disappointed |
| Find out if they have more data than just trips | P11 | LNER | No | Sad, disappointed |
| Get an understanding of what data is stored | P3 | Nectar | No | Confused |
| Raise my awareness of what is stored and its granularity, e.g. my routines | P4 | Philips Hue/ Signify | Yes | Interested |
| Find out what data companies collect and store | P5 | Spotify | Partially | Underwhelmed vs my expectations |
| Find out scope of how much they actually know | P1 | Tesco | No | Perplexed. They should do better. |
| Get a full understanding of data held about me | P1 | Tesco | No | This is too much, need guidance |
| Understanding how much data they have | P11 | Tesco | Partially | Disappointed |
| Understanding what categories of data they have | P11 | Tesco | Partially | Disappointed |
| Understand the data they have | P11 | Three | Yes | Satisfied but suspect they have more |
| Raise my awareness of what is stored and its granularity, e.g. my routines | P4 | Virgin Media | No | Surprised, still in the dark. |
| Understand what they know, how they fill gaps | P7 | (general) | Partially | Want to understand more. More inclined to reflect on what info I give. |
| *Understand what is inferred about you from your data (15 occurrences, 7 participants):* | | | | |
| Understand taste profiles | P1 | Amazon | No | Frustrated |
| See how much they are profiling & targeting me | P11 | Apple | No | Indifferent |
| Find out how they classify / profile me | P5 | Direct Line | No | Indifferent |
| Find out what they have inferred about me | P5 | Google | No | Disappointed, resentful |
| Assess the impact of my cat being on Instagram | P5 | Instagram | Yes | Unmoved. Curiosity satisfied. |
| Find out what they have inferred about my cat | P5 | Instagram | No | Sheltered from the truth |
| See how much they are profiling & targeting me | P11 | Last.fm/CBS | No | Disappointed, resentful |
| See how much they are profiling & targeting me | P11 | LNER | No | Disappointed, resentful |
| See how much they are profiling & targeting me | P5 | Spotify | No | Annoyed |
| See how much they are profiling & targeting me | P11 | Tesco | No | Annoyed |
| See how much they are profiling & targeting me | P11 | Three | No | Bit frustrated |
| Find out how they classify / profile me | P2 | (general) | Partially | - |
| See what labels/judgements exist about me | P3 | (general) | No | Disappointed |
| See how they understand me, what insights they have | P4 | (general) | Partially | I still have questions. Potential to find out more from this but with effort |
| See how I’m categorised or profiled for ads or recommendations. | P7 | (general) | Partially | Interested but confused |
| *Assess provider trustworthiness (12 occurrences, 6 participants):* | | | | |
| See if Apple really is a defender of privacy | P2 | Apple | No | Cant tell. Surprised how much is held. |
| See if claims match reality and if I should leave | P11 | Apple | Partially | Pleasantly surprised how little is held. |
| See if they deserve my continuing loyalty or not | P3 | Credit Karma | Yes | Learned enough; will leave them |
| Inform my decisions about insurance, tell others | P5 | Direct Line | No | - |
| See if they deserve my continuing loyalty or not | P3 | Facebook | Partially | - |
| See if they deserve my continuing loyalty or not | P6 | Freeprints | No | Determined to keep trying |
| See if they deserve my continuing loyalty or not | P3 | Nectar | Partially | Uncertain, tempted to leave them |
| Confirm that they’re using my data appropriately | P10 | Niantic | Yes | Trusting |
| Find reassurance that they do what they say | P6 | Sunderland AFC | Partially | Partially reassured, Determined to keep trying |
| Use data to decide different choices in future | P11 | Tesco | Partially | I can’t stop them [from collecting data] |
| Become more aware/savvy, know whether it’s a good deal | P6 | (general) | No | Let down |
| *Remove your data & control/limit its use (10 occurrences, 3 participants):* | | | | |
| Confirm my data (esp. photos) has been deleted | P10 | Bumble | No | - |
| Get them to delete my data | P10 | Bumble | No | - |
| Ban them from future use of my data | P10 | Bumble | No | - |
| Confirm that they know nothing about me | P10 | ifun.tv | No | - |
| Stop use of my data for personalised recommendations | P10 | Instagram | No | Annoyed |
| Take control over what they see and collect | P7 | (general) | Yes | - |
| Delete data, so they don’t have it, so I can leave | P7 | (general) | No | Discouraged.  Uncertain how to proceed. |
| Recover all my data then delete their copies of it | P8 | (general) | No × 3 | Disappointed, still tied in. |
| *See inside black box algorithms & processes (9 occurrences, 4 participants):* | | | | |
| Understand their algorithms | P1 | Amazon | No | Frustrated. |
| Understand their algorithms | P1 | Facebook | No | Can only see results not their thinking |
| Understand their algorithms | P1 | Google | Yes | Some insights gained. |
| Gain transparency | P1 | Google | No | Drowning in data. |
| Know what happens behind the scenes | P1 | Tesco | No | Frustrated |
| Gain transparency | P1 | (general) | Partially | Overloaded |
| Satisfy my interest in transparency | P2 | (general) | Yes | Satisfied |
| Satisfy my curiosity | P3 | (general) | Yes | Happy to have done this |
| See inside the black box of these companies | P6 | (general) | No | Disappointed and resigned. |
| *Understand how and why your data is used (6 occurrences, 5 participants):* | | | | |
| Understand how companies use data to make decisions and if it is fair | P6 | Direct Line | Partially | Frustrated. This was a token effort. |
| Understand how companies use data to make decisions and if it is fair | P5 | Google | No | I don’t know what it means that they have this data, what the significance is. |
| Understand how data is used (e.g. can they tell from Nest when I am in) | P4 | (general) | No | I need to do more work to understand |
| Find out how my data is used, connected and joined up and why they need my data | P6 | (general) | No | Determined to keep trying. |
| Understand how they use my data | P7 | (general) | Partially | I know what they have but not what they are doing with it. I am suspicious. |
| Understand how they use my data for marketing | P8 | (general) | No | Concerned |
| *Investigate specific questions or incidents (4 occurrences, 4 participants):* | | | | |
| Find out what happened with Airbnb in 2017 | P2 | Airbnb | No | Disappointed, but I don’t care |
| Find out if they know my web viewing history | P11 | Three | No | A bit frustrated |
| See how my credit score is calculated and where the information comes from | P3 | Credit Karma | No | Unsurprised, could find out more if I wanted to. |
| Find out how they know that certain people are linked | P10 | Instagram | No | Annoyed |
| *Learn about data use and how to be safer online and then to educate others (3 occurrences, 2 participants):* | | | | |
| Find out how to change my habits to protect my privacy | P3 | (general) | Partially | Don’t know yet, but I can now make changes and see what impact it has |
| Increase awareness and collect anecdotes I can talk about with friends | P6 | (general) | Yes | - |
| To learn online safety and have better defined relationships and know what I want to delete | P6 | (general) | Yes | - |
| *Secure data about you and identify risks and leaks (2 occurrences, 2 participants) :* | | | | |
| Check my data is safe | P10 | Apple | No | I have no control over my data safety |
| Know where the leaks are with my data | P3 | Facebook | No | Not surprised |
| *Check accuracy of data about you (1 occurrence, 1 participant) :* | | | | |
| Check how true my credit report is | P4 | CheckMyFile | No | - |
| *Move your data to another service (1 occurrence, 1 participant) :* | | | | |
| Be able to transfer my data to a new app | P8 | (general) | No | Unsure how to proceed. |
| *Test your data rights (1 occurrence, 1 participant) :* | | | | |
| Have fun exercising new powers over companies | P2 | (general) | Partially | Resigned |

Table 6: Detailed breakdown of hopes, imagined data uses and goals relating to using data for personal benefit, with outcomes & feelings

| **Hope or Goal** (*goal groupings in italics*) | **Participant** | **Target Company, if applicable** | **Was this hope met?** | **Feelings expressed (if any)** |
| --- | --- | --- | --- | --- |
| *Reflect on past activities and gain insights (14 occurrences, 7 participants):* | | | | |
| See a portfolio of my travels | P2 | Airbnb | No | Disappointed there is no portfolio |
| Reflect on my data | P11 | Apple | Partially | The data is not browsable, it’s facts without emotional context/value |
| See summarised insights to learn what I like | P2 | (general) | No | I’m not interested in huge tables. Resigned and disappointed. |
| Explore the data to find interesting things | P2 | (general) | Partially | This is not practical, it would be a lot of effort to write the tools to explore this. |
| Insight and self-reflection | P2 | (general) | Partially | Even raw data can make you reflect. |
| Get interesting data about my behaviours, routines, and patterns to reflect upon | P4 | (general) | No | Intrigued. I got a glimpse but I want more! |
| Look back over and browse my data for nostalgia | P6 | (general) | Yes | Interested but this not a game changer. |
| *Find patterns/habits & track goals (6 occurrences, 5 participants):* | | | | |
| Better understand and change my habits | P7 | (general) | Partially | This will take time to use. |
| Analyse my spending so I can change it | P8 | (general) | Yes | Helped |
| Analytics and hacking | P11 | Last.fm/CBS | Partially | This is just the basics |
| Visualisation for budgeting | P3 | Nectar | Partially | That was painful, I won’t do it again |
| Understand trends in my listening and link them to experiences | P5 | Spotify | No | The genre is missing so I can’t use it |
| See how much I have spent over time | P11 | Tesco | Yes | - |
| *Combine data from many sources for deeper insights (3 occurrences, 2 participants):* | | | | |
| To have a visual overview of my data | P7 | (general) | No | - |
| Combine Nest and Hue data to get insights | P4 | Philips Hue/Signify | Partially | Sighing at the effort required |
| Combine Nest and Hue data to get insights | P4 | Google (Nest) | Partially | I don’t know how to reflect on this |
| *Play with, create, hack & remix your data (3 occurrences, 3 participants):* | | | | |
| Mashup and remix my data | P5 | (general) | No | Too hard, how does it fit together? |
| Do a creative project with my data | P7 | (general) | Yes | - |
| Make some mashups from my Google data | P4 | Google | No | It’s outside my skillset to use this |
| *Nostalgia, fun & inspiration (3 occurrences, 3 participants):* | | | | |
| Look back w/different lenses/triggers, looking into your past, capturing moments in time | P6 | (general) | Partially | I want to continue to explore. |
| Find new (old) music I might like | P5 | Spotify | No | Disappointed |
| Understand my own routines for memories & fun | P10 | Niantic | Yes | Satisfied |