Treatment of consumers by Internetenabled businesses: Assurances calibration

Prepared by Melanie McComsey, PhD

Sponsored by Me2B Alliance

April 2020

Executive Summary

Objective

To calibrate proposed Me2B certification criteria by collecting participant responses to the key themes of trust, fairness, and control and by collecting participant reactions to prototypes of Me2B assurances.

Approach

Open-ended interviews and a structured elicitation technique conducted with 9 people. **Insights**

Trust

Participants said they trusted the connected products and services they used on a regular basis. Participants felt trust was not terribly important because they felt it was "inevitable" that their data would be taken and used. Most said they would never be able to fully trust a connected product or service. Those who said they may be able to at some point were the most technologically savvy, who proposed very elaborate policies that could lead to trust. Unprompted, participants indicated they may have trouble trusting the Me2B seal itself.

Fairness

For paid products, participants overwhelmingly felt they were getting a fair deal. The concept of "paying" for a "free" service with non-monetary currencies was relatively novel for most participants. However, after prompting, they did articulate some of these units of exchange. For "free" products, participants also felt they were getting a fair deal, though they seemed less certain of this and spent more time justifying it in their responses. Some participants felt exchanging data/information for a "free" service was not only fair, but desirable because it gave them more tailored content.

Control

The notion of having control in interactions with an online company over time was not immediately intelligible to participants, and not something they seemed to have considered without prompting. Instead, participants interpreted this theme as having to do with control over the functionality of a product or over their data. In the context of these kinds of interpretations, participants did, in general, feel they had sufficient control in their interactions with the connected products or services they used, but said it is not possible for consumers to have full control over their information. Participants were also unfamiliar with the notion of having a relationship with a company when just browsing a product ("window-shopping"), but, when prompted, allowed that data may be collected from them in this circumstance. Participants did not find this practice problematic when asked about it in an open-ended format; yet, they did seem to value having an assurance that this practice was not taking place.

Products with/without Me2B seal

Not surprisingly, most participants said they would feel better about using a particular online product if it had earned a seal saying it was safe or trustworthy. There was variation

in how participants said they might react to a product that had not earned a seal. But while some said that it would not matter to them and others said it would, no participant said that the lack of a seal would cause them to stop using their favorite connected product.

Recommendations by research question

"Do people believe it is possible to trust a connected product or service?"

- Define "trust" in graduated rather than binary terms. Certification of a certain level of trust may be "enough," rather than seeking to reach "full" trust.
- Consider the mechanisms for how the certification may be funded, marketed, deployed, etc. to cultivate trust of the seal itself among consumers.
- Consider which companies obtain the seal first, and what effect this could have on consumer perception and other companies' perceptions of the seal.
- Consider how companies might obtain, implement, and communicate to their customers about the seal, and how this may affect perception of the seal.

"Are the prototype assurances related to the theme of *trust* meaningful, comprehensive, and essential?"

- Distinguish protections against fraud and security issues from those pertaining to other intended definitions of "trust."
- If the goal is to change the perspective of consumers so that they recognize a broader set of "digital harms" beyond security concerns, this may need to be done through outreach and education.

"Are the prototype assurances related to the theme of *fairness* meaningful, comprehensive, and essential?"

- Prioritize increasing the transparency of and enumerating data collection practices.
- Avoid subjective evaluations of behaviors as these may not align with consumer evaluations.
- Avoid potentially ambiguous terms like "fair;" favor simple, unambiguous terminology that captures the meaning of the intended concept (as in Slide 3).
- If the goal is to change the perspective of consumers so that they recognize a broader notion of "fairness", this may need to be done through outreach and education.

"Are the prototype assurances related to the theme of *control* meaningful, comprehensive, and essential?"

- Distinguish control over product functionality and personal information from other intended senses of "control" in interactions with companies.
- Define control over information in graduated rather than binary terms. Prioritize transparency and communication over guaranteeing "full" control.
- Define intended consumer-producer "relationship types," as these are unfamiliar to consumers.
- If assuring access to information, ensure the information is brief and easy to understand. Test language with consumers.

Table of Contents

Executive Summary	2
Table of Contents	4
1 Introduction	6
1.1 Background	6
1.2 Study Objectives	6
2 Research Design	7
2.1 Research Questions	7
2.2 Participants	7
2.3 Recruitment	7
2.4 Interviewing Process	8
2.4.1 Informed Consent	8
2.5 Open-ended Interviewing	8
2.6 Structured Elicitation	8
2.7 Data Analysis	9
3 Insights1	0
3.1 Trust1	0
3.1.1 Trusting the Me2B Seal1	3
3.1.2 Assurance: "I know I will not be harmed by using this product"1	3
3.2 Fairness1	4
3.2.1 Exchange units for "free" products1	4
3.2.2 Fair deals1	6
3.2.1 Assurance: "I know what I'm giving, what I'm getting, and that the product is upholding its end of the deal"1	.8
3.2.2 Assurance: "I know I will be treated fairly when using this product"1	9
3.3 Control: Interactions and information2	1
3.3.1 Control in interactions with companies2	1
3.3.2 Control over online information2	4
3.4 Connected products with and without the Me2B seal2	8
3.4.1 With seal	8
3.4.2 Without seal	9
4 Conclusions and Recommendations	1
4.1 Do users believe it is possible to trust a connected product or service?	1

4.2 Are the prototype assurances related to the theme of trust meaningful, comprehent and essential?	
4.3 Are the prototype assurances related to the theme of fairness meaningful, comprehensive, and essential?	32
4.4 Are the prototype assurances related to the theme of control meaningful, comprehensive, and essential?	33
Appendix A: Screener Survey	34
Appendix B: Informed Consent	35
Appendix C: Interview Guide	37
Appendix D: Structured Elicitation Stimuli	41
Appendix E: Coding Categories and References	44

1 Introduction

1.1 Background

The purpose of this study was to collect participant reactions to a set of prototype assurances generated on the basis of previous ethnographic research, and to explore participant understandings of the key themes that undergird the assurances. These key themes are trust, fairness, and control over information and interactions with online companies. Me2B Alliance seeks to use this information to calibrate certification criteria for the Me2B seal.

1.2 Study Objectives

- 1. Conduct qualitative research to answer the following questions:
 - a. Is each prototype assurance meaningful, comprehensive, and essential?
 - b. Do users believe it is possible to trust a connected product/service?
- 2. Communicate results of qualitative research to Me2B stakeholders through a written report.

2 Research Design

This was a small-scale, qualitative study. Interviews consisting of an open-ended segment and an elicitation exercise were conducted with 9 adult participants in order to understand their understandings of and reactions to current Me2B certification criteria.

2.1 Research Questions

Two primary research questions guided the development of the research methods:

- 1. Is each prototype assurance meaningful, comprehensive, and essential?
- 2. Do users believe it is possible to trust a connected product/service?

2.2 Participants

Study participants consisted of 3 men and 6 women of various racial/ethnic backgrounds and from various parts of the United States. Due to the fact that most participants in the previous study were in their 30's, we aimed to recruit participants for this study from different age cohorts. In this study, two of the participants were in their 20's, two in their 40's, one in their 50's, and three in their 60's. Table 1 provides basic demographic information about the 9 participants.

Pseudonym	Sex	Age	Race/Ethnicity	Residence	Employment	
Raquel	F	25	Latina	Portland, OR	Public relations	
Luca	М	64	Latino	Orlando, FL	Supermarket distribution	
Arlene	F	66	Black	Randolf, MA	Retired teacher	
Beth	F	68	White	Boulder, CO	Retired, homeopathic	
					medicine sales	
Barton	М	26	White	Dallas, TX	Physician assistant	
Monica	F	33	Black	Shreveport, LA	Nurse	
Bill	М	41	White	Champaign, IL	Car dealership manager	
Wanda	F	44	Black	Carrollton, TX	Not employed	
Susan	F	55	White	Renton, WA	Receptionist	

Table 1: Study Participants' Demographic Information

2.3 Recruitment

Participant recruitment was conducted using two online platforms, UserInterviews.com and UserTesting.com. The platforms allow for the creation of a screening survey to find eligible participants. Participants were sought who had a home broadband connection, who regularly used at least two Internet-enabled devices, who did not work in the technology sector, and who did not live in a large urban center. See <u>Appendix A</u> for the complete screening survey.

Participants who qualified after completing the screening survey were then hand-selected by the researcher for participation. The researcher invited participants so as to maximize diversity

of the interviewees along the dimensions of age, sex, ethnic/racial background, and geographical location.

2.4 Interviewing Process

Interviews were conducted via videoconferencing using the Zoom application. Melanie McComsey conducted the interviews, and one Me2B volunteer observed each interview and asked some questions of participants. Four different Me2B volunteers took turns observing. Interviews were audio-recorded using Zoom. Each interview lasted approximately 40 minutes.

2.4.1 Informed Consent

Interviewees gave verbal consent to participate in this study. At the start of the interview, via videoconferencing, the interviewer showed the participant a written consent form (see <u>Appendix B</u>). The interviewer read the entire consent form to the interviewee, then asked if he or she had any questions and if he or she agreed to participate in the study. If the interviewee consented, the audio-recording was initiated, and the interviewee was asked to state his or her name and to state, "I agree to participate in this study." These audio recordings of participants' verbal consent were saved as separate audio files and are retained by study personnel. Participants who requested a copy of the consent form were emailed a PDF of the consent form following the interview.

2.5 Open-ended Interviewing

The purpose of open-ended interviewing was to understand participants' perspectives on the key themes encompassed by the prototype assurances: trust, fairness, and control in interactions with connected products or services. We also sought an understanding of how participants viewed their relationship with online companies, and what they might think of a seal such as the proposed Me2B seal. The Interview Guide (see <u>Appendix C</u>) was used to direct the conversation, though open-ended questions were not necessarily asked verbatim or in the order they appear in the guide. The interviewer(s) also improvised questions as necessary in order to follow up with topics introduced by the participants.

2.6 Structured Elicitation

The purpose of structured elicitation was to elicit reactions from participants in response to prototyped designs, in this case, of a set of prototype assurances. By showing participants a mock-up of the Me2B seal and an example of what the seal could stand for, we hoped to understand if the prototype assurances were meaningful, essential, and complete for participants. The prototype assurances covered the themes of trust, fairness, and control in interactions with connected products or services, but included variations on the language and the emphasis to gauge participants' preferences. The elicitation stimulus materials appear in <u>Appendix D</u>. For each assurance, participants were asked to rate how important to them it would be to be assured of that information by the Me2B seal. They were asked to use a 5-point Likert scale: not important, slightly important, moderately important, important, very important. They were then prompted to explain their answer as well as their understanding of the prototype assurance. Because most participants rated all assurances as "very important" or

"important," no quantitative analysis using the Likert scale was conducted. Only a qualitative analysis of explanatory responses was conducted.

2.7 Data Analysis

Audio recordings of the interviews were transcribed verbatim and then coded using a qualitative and mixed method research software (NVivo). Coding was done according to the main themes to be investigated in this study: trust, fairness, and control in interactions with connected products or services; reactions to prototype assurances; and perspectives on user-company relationships and the proposed Me2B seal. Overall, 25 codes were applied to the data and 285 references were coded. For a full inventory of coding categories, see <u>Appendix E</u>.

3 Insights

In order to address the key question of this research—Is each prototype assurance meaningful, comprehensive, and essential?—prototype assurances were created that encompassed the three main themes of import: trust, fairness, and control. Participants were asked open ended questions about these themes in order to gauge whether the themes were meaningful and important to participants, and whether participants introduced other related themes to the discussion. After participants had been introduced to the themes, we presented them with concrete language representing possible Me2B assurances, representing various iterations on these themes, in order to gauge participant reactions to the more specific language. Finally, after participants had been introduced to the prototype assurances and to the concept of the Me2B seal, we elicited their thoughts on the seal and what it might mean to them when applied or not applied to connected products they use frequently. The analysis below is organized according to the main topics of trust, fairness, control, and opinions about the application of a Me2B seal.

3.1 Trust

At the start of the interview, we elicited a short list of connected products or services from each participant, which they said they used regularly. We tried to elicit both free and paid examples, as well as social media examples and non-social media examples. We then asked participants whether they trusted the service/company, and why. The interview design was such that this open-ended trust question was the first that we asked. At the end of the open-ended portion of the interview, after participants had discussed more loaded topics about digital harms, we asked them to rate their trust of each of the aforementioned products on a scale from 1-5, from "don't trust at all" to "trust fully."

One interesting finding was that participants tended to say they trusted a certain connected product or service at the start of the interview, but then rate it low on the 1-5 trust scale later in the interview. For example, in the following excerpt, Monica answered the interviewee's questions about whether she trusted YouTube and Twitter with an emphatic "yes":

I: Let's talk about YouTube a little bit. Do you trust this company? M: Yes. Yes. I trust them. I think YouTube is owned by Google, so yeah, I trust them to give them some of my information. I wouldn't give them my social security number. But yeah, they've been a reliable company for me, so yeah. I trust them. I: And what about Twitter? M: Twitter? Yeah, the same goes for Twitter. I think they owned by the same company. So yeah, I trust them. Not enough to give any personal information, like my security number, but yeah, I trust them (Monica 2:08).

Later in the interview, however, when asked to rate her trust of these companies from 1-5, Monica gave each one a 3, saying that she doesn't trust them with her "personal information" and called her position toward them "neutral": I: So how much do you trust YouTube? M: I'd say three. I: Okay. And what about Twitter? M: Three. The same thing... Somewhere in the middle because I'm very neutral. It's not that I don't trust them, but I don't trust them with my personal information (Monica 11:27).

Monica's pattern of responses was typical in that participants tended to say they "trust" a company when they were asked in general terms, but, when asked to quantify that level of trust, indicated levels that were not especially high. This result could also indicate an effect of the interview itself priming participants to trust online companies less after discussing these issues.

Amazon was the most trusted company, and the only company to get a 5, scoring 5's from two different participants. Facebook was the least trusted company, scoring the lowest possible score and getting explicitly bashed by several participants. Smart speakers were also unloved and not trusted, corroborating findings from the previous study; Bill, for example, said that his wife made him keep "Alexa" in the garage because she believed it was spying on them. Other companies and products tended to score in the middle range. In the following excerpt, Arlene exemplifies these trends:

I: How much would you say you trust Macy's?
A: I'm going to have to be neutral on it. I mean, I'll be honest that I don't really trust a lot of the webs period. So, I think the only one that I really trust is the Amazon site.
I: So, what number would you give Amazon?
A: I would give Amazon a five, meaning trusty.
I: And what about Facebook?
A: Can I give them a zero? I don't trust Facebook. I really don't. So, it'd be the lowest one that you have, which is a one.
I: You can give them a zero if you want.
A: Give them a zero. I don't (Arlene 17:07).

In addition to participants' ambivalence when it came to trusting specific companies or products, participants tended to suggest that trustworthiness was a bit of a moot point because online data sharing has become so ubiquitous. In the following example, Raquel said it's "inevitable" that one's information will be online, and seemed to place the onus on the user to have the right "mentality" about this, rather than placing the onus on the company to safeguard users' information.

I've kind of gotten to a point where everyone says like, 'Oh your data's everywhere and Twitter's stealing from you,' and you get an ad that of a product you were talking about literally 10 minutes ago. But I believe that our information is out there no matter what. So, it's all about having the mentality or having a specific mentality that your information is out there whether you like it or not, so it's going to happen. It's inevitable. And so, I trust [Twitter] in the sense where I'm following the ones I love and my friends and all that and they are a very useful platform to get news out very quickly. But on the other hand, they do have your data and they are watching you even though it's not necessarily visual (Raquel 01:52). This pattern is in line with findings from the previous study suggesting that participants felt a sense of resignation and powerlessness about having their information online.

When asked what it would take for them to fully trust a connected product, most participants said they would never be able to do so. In the following examples, Beth said so in slightly gentler terms than Luca.

I: So, what would it take for someone to get a five? B: I just don't think in this day and age you can totally trust anybody completely online. So, I'm not sure if it's possible for me (Beth 10:13).

I: Do you trust Twitter? L: I trust no one. I trust nothing. I don't trust this world (Luca 06:23).

Bill and Raquel were the two participants who seemed the savviest about online technology, and Raquel, working in PR, was a self-proclaimed "data nerd." These participants tended to give longer, more detailed, and more technical responses throughout the interviews. They were also the only two participants to offer creative suggestions as to how a company or product could go about improving trustworthiness. Bill suggested oversight and standardization as possible solutions:

I: So, it sounds like you trust Google more or less, but what would it take for you maybe to fully trust Google or any company?

B: You'd have to have some sort of an oversight or some sort of standards that require them to do certain things to protect it. And I don't even know what that could be, because no matter how secure you think your computer system is, people were proven to be able to hack into anything... I think that's all you can ask for, is that everything is a safe and secure as possible. I don't think anything could ever be 100%. The only way to be 100% safe is to literally unplug everything and not be connected (Bill 07:20).

Raquel envisioned a kind of "backwards" VPN that would allow her to trust Twitter:

I: Now, what would it take for you to fully trust Twitter for example? More than somewhat. R: Sure. I would think if they made a statement or they, I don't know how within the realm of technology, but if they basically made a promise that they're not going to utilize any of your information besides what you submit into the platform maybe. Kind of almost enabling a VPN but backwards and only from their side, I guess, if that makes any sense. Then I guess I would completely trust it (Raquel 03:13).

In general, then, participants felt they could never fully trust a connected product. But participants with more background in the technology domain seemed better positioned to envision potential solutions that would help them trust an online company.

3.1.1 Trusting the Me2B Seal

Participants were not specifically asked about whether they would trust a future Me2B seal, but this theme emerged organically. Most commonly, participants brought it up in the course of the structured elicitation, claiming that while the assurance sounded nice, they may have trouble believing it. Luca exemplified this stance most theatrically:

I: When I see the Me2B seal, I know that when I'm not signed in, this product doesn't take information from me.

L: [Laughing] I'm sorry I'm laughing. That's a good one. I really want to be with you guys. I want to know that when I see this, that I can trust it all the way. I want to feel that passionately. So, it would take a while for me to get that feeling. You would have to work on me to get that feeling, really (Luca 27:14).

Similarly, Beth suggested that one of the assurances could not be true, but then allowed that if the seal were "not easy to get" or "expensive to get" she would be more inclined to trust it.

I: When I see the Me2B seal, I know I can choose how my information will be used.
B: Well, that would be important if that were true.
I: But you don't believe it could be true?
B: Well, I trust that if this kind of certification is coming that yeah, it's just like organic foods. It's probably not easy to get. It's probably expensive to get and therefore I trust that it should uphold its promises (Beth 21:12).

When Barton volunteered that he would have trouble trusting the seal, he was prompted to elaborate on what it would take for him to trust a seal. He listed media coverage, endorsement by "experts," widespread adoption, and government sanctioning as possibly enhancing his trust.

I: Now, you mentioned if this seal were trustworthy, what do you think it would take for you to find the seal trustworthy?

B: Maybe coverage in the media speaking to its integrity. So, experts weighing in saying, 'Hey, this is valid. This is something you can trust, and this is something you should be looking for around services that you're using in order to be able to trust them with your data.' And then maybe widespread adoption of it overall... Maybe if it was through a government agency or something along those lines (Barton 22:48).

It is not surprising the participants were somewhat untrusting of a Me2B seal, given the context in which the interviewer was eliciting their opinions on the trustworthiness of other online companies and products. It is possible that this priming, in addition to the unfamiliarity of the concept, led to their skepticism. However, most also indicated steps that could be taken to increase their trust in the seal.

3.1.2 Assurance: "I know I will not be harmed by using this product"

One of the prototype assurances was designed to test a specific component of the theme of trust: "I know I will not be harmed by using this product" (Slide 10). Participants felt it was

important to know they were not being harmed by an online product. Their interpretation of "harms" in this context centered primarily on theft, especially of personal data or financial information.

Yeah, that's important to me. Definitely. And when you say harmed, I'm thinking you're referring to information theft and so forth online pretty much is what I'm thinking you're referring to (Luca 37:23).

Yeah, that's important, probably very important... And that, financial harm, people really don't pay attention and get taken advantage of on stuff like that (Bill 31:40).

Other participants cited "stalkers, "fraud," viruses, hacking, and getting unknowingly locked into subscriptions as other potential harms. These understandings of "harm" may be narrower than the meaning intended by Me2B Alliance in their notion of "digital harms."

Summary: When asked in an open-ended format, participants said they trusted the connected products and services they regularly used. Consistent with the previous study, the least trusted products were Facebook and smart speakers, while Amazon was highly trusted. In spite of the high levels of trust, participants felt trust was not particularly important because they felt it was "inevitable" that their data would be taken and used. Most said they would never be able to fully trust a connected product or service. Those who said they may be able to trust a connected product at some point were the most technologically savvy participants, and they offered some suggestions for making products more trustworthy. Unprompted, participants indicated they may have trouble trusting the Me2B seal itself. In the context of the discussion of trust, participants were asked about "digital harms." Most understood this in a narrower sense than is perhaps intended by Me2B stakeholders, as centering on fraud, viruses, hacking, and other security issues.

3.2 Fairness

Me2B has stated that one of the most important ideas related to the meaning of the Me2B seal is the idea of the fairness of the relationship between consumer and business. By this they mean that the units of exchange are understood and perceived as fair by the stakeholders. For this reason, participants' ideas about fairness in the Me2B relationship, described in this section, may be of particular interest.

3.2.1 Exchange units for "free" products

Based on the previous study, we hypothesized that participants would understand the Me2B relationship and exchange differently from the way Me2B stakeholders interpret this relationship. In particular, we hypothesized that monetary units of exchange would be transparent to participants as a medium of their relationship with a business or product, but that non-monetary units of exchange may not be transparently recognized by participants as something they "give" or "get" in their relationship with a business or product.

In order to explore this hypothesis, we asked participants what they believed they were giving or getting in exchange for using a "free" connected product, such as a social media site. For many participants, this seemed to be a surprising question or novel concept, and they did not seem to have ready answers. In the excerpt below, for example, Susan rambled a bit as she thought through the question and repeated several times that she didn't "know." She finally arrived at the conclusion that attention to advertising and information could be things she is exchanging for the service, and that maybe this is "too much" to give.

I: So, Facebook is a free service. What do you feel like you're giving in exchange to be able to use this service?

S: I don't know. I don't know. I mean, I have to look through it to see what's going on with people so I'm aware of things in their life. And then you feel like you're caught up with people before you talk to them again. And maybe somebody died in their family, or they've done something, so you have to acknowledge things and know what's going on or you'll totally miss things. What do I give back? I don't know what they want to get from me. I mean, they do advertise things. They seem to know what I'm looking at and what charitable organizations I'm a part of or I support. Yeah, they kind of know too much (Susan 06:36).

Monica also seemed to think through the question as she spoke, but more readily than Susan settled on the explanation that she is "giving" something to YouTube by "showing them" the sites and services that she likes. At the end of the discussion she trailed off, "But I'm not...", perhaps suggesting that she is unconvinced that she is "giving" anything at all for the free service.

I: Okay. And since [YouTube is] a free service, what do you see yourself as giving in exchange to be able to use that service?

M: When you say giving, I think maybe I'm just going on, just showing them, going on different bloggers or watching or writing the different comments. Just go on their sites and just let them know that I'm an active participant and that I enjoy their services. But I'm not... (Monica 03:24).

Barton responded to the interviewer's question about whether he "paid" for his free Spotify account with anything besides listening to ads (which he had identified previously as a unit of exchange) with a "no." But then he apparently changed his mind as he went on to muse about other currencies he may be paying with:

I: Do you feel like you're paying in any other way besides sitting through the advertisements?

B: No. Maybe just like the data they're collecting on me like music preferences, I guess they sort of aggregate that data across all their different users and obviously that helps them change and build their service and tailor it to us, and then therefore get more money and become more successful. So, I mean, it's definitely there. Our data, our opinions, that's what they're kind of benefiting from, and then ads as well (Barton 03:59).

Arlene seemed less surprised by the question about non-monetary units of exchange, and readily explained that she was "sharing" her contacts with Facebook, as well as a record of her interactions with those contacts.

I: So, in the case of Facebook, obviously, you're not paying money. What do you think that you're giving in exchange for that service?

A: Basically, sharing a lot of your contacts or friends with it. That's what it is. What I generally do is, if I like something on someone's Facebook page or somebody's message chat, something like that, I'll share a particular thing with them, with my particular page (Arlene 10:12).

In general, it seemed that the concept of "paying" for a free service with non-monetary exchange units was relatively novel for participants. But, after being prompted in the interview to consider the concept, participants were able to articulate several of these units of exchange, including the viewing of advertising, patterns of use, preferences for content, access to contacts, and information about how one interacts with those contacts.

3.2.2 Fair deals

Participants were asked if they felt they were getting a "fair deal" in cases where they exchanged money for a connected product, and in cases in which they did not exchange money for the product. Overwhelmingly, participants did believe they were getting a fair deal for connected products they paid for, even in cases where they acknowledged that they were probably also exchanging additional, non-monetary currencies for these same products.

I: So, do you feel the amount that you're paying either in terms of money or other currencies that you feel you may be giving to Netflix, do you feel like you're getting a fair deal? B: I do. Yeah. It feels fair (Barton 02:46).

Arlene was among several participants, in this study and in the previous study, who had high praise for Amazon.

I: So, do you think that you're getting a fair deal from Amazon? A: Oh yeah. Oh yes, definitely. Because again, price wise, it's great because if I were to have to ship something out via UPS or United States Post Office, it would cost me a little bit more... I remember one example, yesterday I had to mail something out, for my granddaughter in California, to have it for next day, it would have cost me \$125. Versus going through Amazon, it would've been free (Arlene 04:45).

Her response in this excerpt exemplifies a pattern in which participants interpreted our "fair deal" question to be specifically about the value or functionality of the particular product, rather than being about a broader or more sustained relationship with a company. Susan drove this point home even further. She had specifically mentioned in the interview that she did not trust smart speakers such as "Alexa," but then rated her trust of Amazon highly. When prompted by the interviewer about this apparent discrepancy, she distinguished her trust of the company from her trust of the specific product.

I: Now, what about Amazon? How much do you trust Amazon from one to five?
S: They're probably more of a four.
I: Okay. And now, you mentioned, though, that Alexa is something you wouldn't want to have in your house. And of course, Amazon is behind Alexa. In that case, do you feel like it's specifically Amazon that you wouldn't trust with the recorded information?
S: It's not that I don't trust it with Amazon. I just don't trust it. I've been at parties where Amazon, Alexa picked up on something we said. It was embarrassing (Susan 22:34).

For "free" connected products, participants also generally agreed they were getting a fair deal, though they spent more time explaining why, perhaps justifying to themselves this somewhat novel concept. For example, Bill admitted it was sometimes "a little weird" to see targeted advertisements, but, overall, he still felt he was getting a fair deal from Google. He characterized his own attitude as "realistic," in the sense that he acknowledged that apparently free products are not truly free: "Somebody's got to pay for it."

I: So, do you think it's a fair trade in terms of what you give and what you get from Google? B: I think so. Every once in a while, it's a little creepy if I search for something and then it pops up later. I always am just like, 'That's a little weird.' But I think it's a fair trade off, because like you said, I'm not paying for anything, so I don't have an expectation to have a hundred percent advertisement-free or a perfect experience. I'm realistic in the fact that I expect that I'm going to have to look at something, or view something, or sit through a two-second ad in order to get to my YouTube video that I want to watch or whatever. I get that. Because this stuff can't all be free, somebody's got to pay for it. And if, like you said, I'm not paying anything for any of these services, somebody's got to, and that's the advertisers (Bill 08:48).

Similarly, Barton characterized the ads on Spotify as "ridiculous" and "excessive," but nevertheless concluded that the exchange was fair, even including the exchange of his data.

B: *The advertisements are ridiculous, just not enough for me to justify paying for the service.*

I: So, do you feel like that's a fair exchange sitting through the ads in exchange for the music?

B: I would say so, yeah. Sometimes they can be a bit excessive, but overall, like I said, it's just not enough to motivate me to start paying like \$10 a month for ad-free music when I can get what I want to listen to now, and then just sit through a few ads here and there... I: And how do you feel about them potentially collecting data from you?

B: I feel it's a worthwhile exchange. I'm fine with it. I really don't care if they have my music preferences just because, I mean, that allows them to tailor the services better to me. So, I get what I want, and they give me what they want. So, I feel it's a fair exchange (Barton 02:44).

Barton's appreciation of data collection that is used to "tailor" services to him was repeated by several of the participants in this study and the previous one, especially the younger ones. Other participants said that they also enjoyed some advertisements and had clicked on advertisements in their social media feeds, and even purchased items based on the ads.

I: So, you feel like the trade of your pictures for the value you get [from Instagram] is a fair trade?

B: Yes. And also, they have so many ads that you're exposed to and sometimes I buy things. So, I have bought things on Instagram. Some I've been happy with, some I haven't, but that's my responsibility. And so, Instagram benefits from that as well (Beth 03:27).

Thus, some participants felt that exchanging their data for a "free" service was not only fair, but desirable. Overall, participants did feel they were getting a fair deal in their exchange relationship with online products and services. The only participant who did not believe she was getting a fair deal, in her relationship with Facebook, in this case, was Arlene. It is possible her negative reaction was also influenced by the company in question since many participants had strong negative reactions about Facebook.

I: So, do you think that that's a fair exchange? Giving your sort of contact information to Facebook in exchange for that service?

A: No, I don't think it is... It's not a fair exchange. Number one, is because they're taking that information without your permission. And they're using that. I don't know (Arlene 11:15).

3.2.1 Assurance: "I know what I'm giving, what I'm getting, and that the product is upholding its end of the deal"

The first prototype assurance participants were shown represented the core Me2B assurance about the fairness of the relationship: "I know what I'm giving, what I'm getting, and that the product is upholding its end of the deal" (Slide 3). Participants were asked to evaluate the importance of this assurance immediately after they had completed the open-ended portion of the interview, so the key themes of trust, fairness, and control were fresh in their minds. This may account for the somewhat surprising enthusiasm about the importance of the assurance, in contrast to the more nonchalant attitudes elicited in the open-ended portion of the interviews.

Bill's response stood out because it made an explicit analogy between traditional, offline business transactions and online business transactions. His response also acknowledged the possibility that one might be buying a product online, or simply using a service or "website," and still be engaged in a transaction analogous to the typical business transaction.

Yeah, I think that sounds very important. I think that's the entire basis of doing the transaction or doing whatever... I'm a marketing background, and I'm in the car business, and when we could do a deal with somebody, we have to have it all in writing. We have to say, 'Here's what you're getting. Here's how much you're paying. Here's the car you're taking home.' It's good business. It's just, 'Look, up front, here are the terms of,' whatever it is that this website, or if I'm buying a thing, I just know that it is what you say it is, and I know how much I'm paying. It's just the terms of the deal, basically (Bill 23:13).

Other responses exhibited a range of interpretations of what the implied units of exchange could be in this assurance. Monica, for example, interpreted it in the context of a traditional

business transaction, where money might be exchanged for a product. Beth, in contrast, specifically mentioned "my data" first, as a possible unit of exchange, before also referencing a product.

Important. Because as a consumer, I definitely, whatever I'm buying, offline or in a store, I definitely want to know what I'm getting. Sometimes you order something, you probably don't get a knock-off. So it's important to me to know what I'm getting, what I'm giving and what I'm getting, and that the site that I'm going on is very legitimate and it's upholding its end of the deal so I can come back as a consumer (Monica 14:44).

I know what I'm giving in terms of my data and I know what I'm getting in terms of products or services offered. I know what I have to pay or what is free. The fine print is visible and comprehensible and not too lengthy that people won't read it. Yeah. And that everything's honored that's being stated (Beth 13:09).

Barton noted that this assurance seemed to capture the essence of Me2B, as he had understood it from the interview context, saying that it was "pretty much the very definition of what this company would stand for."

I would say very important... I mean, I feel that's pretty much the very definition of what this company would stand for as far as a security company and one that kind of qualifies the integrity of the case company you're looking at. I mean, that's the foundation of trust with whatever product or service I'm using (Barton 13:20).

In general, participants' understanding of this prototype assurance seemed to align with its intended meaning, and participants saw it as an essential component of the Me2B seal, as they understood it.

3.2.2 Assurance: "I know I will be treated fairly when using this product"

A second prototype assurance was designed to target the theme of fairness: "I know I will be treated fairly when using this product" (Slide 9). This assurance seemed to be the one most open to interpretation and least readily understood by participants, as many were not sure how to answer or asked for clarification. In those cases, participants were prompted to offer their own interpretation, especially of the key word "fairly." As with the other assurances, all participants thought this was very important or important, but there were a range of interpretations surrounding the idea of being treaded "fairly" when using a connected product.

Most participants described some form of "fairness" related to product quality and transparency of the transaction. Bill's description captured several of these dimensions:

You're not taken advantage of; you're not bait and switched, or you're not just pushed around, or fooled, or tricked, or anything like that. It's just simple, upfront, honest, fair treatment for a consummation of any purchase, or deal, or a service, or anything like that (Bill 30:44).

Barton's interpretation of "fairness" included the idea of his data being secure and used according to his intents.

Yeah, I mean, I would say important. I mean, obviously, I want to be treated fairly. I don't want my data compromised or used without my willingness or in ways that I didn't intend it to be used (Barton 19:05).

Monica suggested that "fair" treatment might mean companies have a responsibility to protect their customers from harm, or "harassment," on their platforms.

I: What would it mean to be treated fairly by Twitter? *A:* Maybe if somebody was harassing you, you would want-- Once you do, they'll follow the protocol in notifying Twitter, you would want to be treated fairly. You want that person or whoever doing that to stop harassing you. You want them to take charge (Monica 22:55).

Both Arlene and Luca offered interpretations of "fairness" that had to do with equality across consumers. Arlene suggested that data could be used to treat consumers differently based on "religion or race," and referenced historical race-based discrimination in mortgage lending as an example. Luca made a similar point, perhaps more class-based than race-based, when he suggested that fairness meant that "even the little people" would be treated well.

A: I know I'm being treated fairly, in other words because well, here I go, fairly, meaning you treat everybody as the same. That based on religion, or race, or anything like that. You can see what information is out there, as far as your race and all of this. You know, you, you want to make sure that they're going to treat you respectfully and with dignity and without, not-- You just want to be respected, period. Not just because of your race or anything like that.

I: So, you would worry that maybe a company, if they found out some data about you, they could kind of use it against you, potentially.

A: They could. That means going for a mortgage or something in a bank (Arlene 24:01).

In other words, I'm feeling that maybe this seal or these people, this company, will treat everyone the same and not have preferential treatment to certain people depending on what status you're in and so forth. So, I'm thinking even the little people involved with this insignia will be treated as fairly as anyone else. That's what I interpret when I read this (Luca 36:36).

Raquel was the only interviewee to mention the potential of employers having access to data collected by online service providers. When prompted to explain her understanding of "fair treatment," she said that third parties should not be able to use information "against you."

Yeah, so that information or the information that's being used, is it going to be used against you? You know, like how the example I was saying earlier about your employer and getting just a file of your information and what you're looking at online on your off time. Or it's not used just generally against you or that you're not being pulled into a group that you don't necessarily want to be pulled into, if that makes sense (Raquel 23:12). These responses by Arlene, Luca, and Raquel point to a worldview that was rarely indexed by participants in this study, in which they saw themselves as embedded in a broader social world. While our interview questions emphasized the relationship between individual consumers and institutions, these responses invoked structural, social elements that could play a role in these relationships.

For this assurance, overall, there was variation in how participants understood the concept of "fairness." These interpretations ran the gamut from product quality and transparency of the transaction, to data security, to protection from harassment, to equal treatment across consumers.

Summary: For paid products, participants overwhelmingly thought they were getting a fair deal. The concept of "paying" for a "free" service with non-monetary currencies was relatively novel for most participants; however, after prompting, they did articulate some of these units of exchange. For "free" products, participants also felt they were getting a fair deal, though they seemed less certain of this and spent more time justifying it in their responses. Some participants felt exchanging data/information for a "free" service was not only fair, but desirable because it gave them more tailored content.

Participants' understanding of one of the prototype assurances pertaining to "fairness" (Slide 3) seemed to align with its intended meaning, and participants saw it as an essential component of the Me2B seal, as they understood it. For the other "fairness" assurance (Slide 9), there was variation in how participants understood the concept of "fairness." These interpretations ran the gamut from product quality and transparency of the transaction, to data security, to protection from harassment, to equal treatment across consumers. It was in the context of this latter point about equal treatment across consumers that we obtained some of the only data in which participants invoked broader social and structural elements as relevant to the relationship between individuals and organizations.

3.3 Control: Interactions and information

The theme of control had two components in this study: consumer control in interactions with online companies, and consumer control over information collected from them by online companies. We explored each of these components in the open-ended interview and in the elicitation procedure.

3.3.1 Control in interactions with companies

After the names of several connected products or services they regularly used had been elicited, participants were asked, "Do you feel you have control in your interactions with [company name]?" The purpose of this question was to explore participants' understanding of Me2B's proposal that consumers enter into long-term relationships with companies providing connected products, and that these relationships are fundamentally different from the kinds of relationships consumers form with offline, traditional companies.

Overwhelmingly, participants interpreted the question as pertaining to their control over functionality or features in a product, rather than pertaining to a more abstract relationship with the company providing the product. For example, without prompting, Monica offered her interpretation of the question, about YouTube, as being about which videos she wants to watch or which ads she is given to watch.

I: Do you feel like you have control in your interactions with YouTube? M: Control to see which videos or which different videos I want to watch? Yes, but not the different ads (Monica 07:59).

For at least one participant, the interviewer used the word "company" in the question, to attempt to steer the participant toward thinking of their relationship with the company (Facebook) rather than with the product (the social media platform). In this case, as well, the participant still interpreted the question of control as pertaining to her control over functionality in the product.

I: So, do you feel like you have control over your interactions with a company like Facebook?

A: You would think that you did, but you, no. Like, they say, 'Go to your settings and click on if you only want your friends or if you only want you to see this or whatever. But then when it comes to a certain area, you'll say that, 'I don't want anyone but my friends to see this,' or ,'I want no one to see this.' Okay. And then they have this... it's like the anniversary type thing and they'll have stuff that you had from before. 'Remember when?' That type of thing. So, you have no control over, because people are still seeing, when you don't want anybody to see (Arlene 12:16).

As in other parts of the interview, participants had mostly positive things to say about the apps and companies they used, except Facebook. Most claimed they did have "control" when using the various products or services. Raquel, who was generally one of the more skeptical participants, also felt she had plenty of control in her interactions with Twitter. Though, again, she interpreted this as pertaining to the functionality of the app and being able to eliminate "negative" content from her feed.

I: Now, do you feel like you have control in your interactions with Twitter? R: I feel like that, yes... Yeah, so, I actually was just talking about this with my friend, but I personally think that there's so much negativity in the world, and so what I started doing was muting things. So, if there's a cancel party in which everyone's band-wagoning together to just hate on one celebrity or person, I'll mute their names so then I don't see anything like that because I just don't personally want the negativity of that interfering with my life. And so I feel I've, more so lately, kind of gained control in who I follow and what content I see so that when I log on, yeah, there might be some other negative stuff on there, but like, for the most part, I'm curating that based off of who I'm following, what I'm muting, who I'm blocking and things like that (Raquel 06:12).

Bill was the only participant who interpreted the question as pertaining to control over information or data. And his response did suggest a notion of a relationship that unfolds over

time because he listed a series of actions a company might do with one's data, implying a sequence, and suggesting that this could happen well after one had used the product.

Yeah, it would be nice to know what they're doing with the information. But I would like there to be some accountability to know, 'Hey, we are taking this information about you. We're using it to do this, and then we're also selling it, or we're providing it to these people so they can market to you.' And I'd probably be overwhelmed, and I think a lot of people would be like, 'Oh, my goodness, you're doing what?' But I think it would be nice to know who's getting access to the information, and that way at least there's some sort of accountability for who's getting it (Bill 11:03).

Because participants' understanding of their relationship with an online company differed from the Me2B notion of this relationship, a question was added to the interview for some participants that would attempt to explore this discrepancy further. These participants were asked about the Privacy Policy or Terms and Conditions related to using an online product or service, with the assumption that this might prompt them to think about the company itself, and about them having an ongoing agreement with the company. However, participants who were asked this question said they did not read any of the "fine print," so it did not affect their sense of control in their interaction with an online company.

One of the prototype assurances, "I know I have meaningful control in my interactions with this product" (Slide 7) was also designed to get at the question of control in sustained interactions between consumers and online companies. As with the previous set of questions, participants interpreted this assurance as pertaining to control over product functionality or over the use of their information.

I: And what do you think this means exactly? L: I'm thinking that I know how to utilize the product properly and get the most out of it? (Luca 32:34).

I: And could you maybe tell me what you understand this to mean? R: Yeah, so that when you are engaging with the app or the website, basically, you know that when you're clicking on something or liking something, following whatever that the information that is gathered from that interaction, I guess you would say, you can control who that information is going to, if that makes sense (Raquel 21:44).

Overall, the notion of having control in interactions with an online company over time was not immediately intelligible to participants, and not something they seemed to have considered without prompting. Instead, participants interpreted this theme as having to do with control over functionality of a product or over their data. In the context of these kinds of interpretations, participants did, in general, feel they had control in their interactions with the connected products or services they used. Having access to "fine print" such as terms and conditions did not seem to have an effect on their feelings of control as those who were asked about this topic said they did not read such information.

3.3.2 Control over online information

Participants were also explicitly asked whether they felt they had control over their information when using a connected product or service. This topic was much more familiar and intelligible to participants, and elicited longer and more detailed responses compared to responses about control in interactions with companies. As in the previous study, participants either did feel they had enough control over their information, as Arlene's example shows, below; or they felt they did not have control, but were resigned to this or unconcerned about it because they saw themselves as "having nothing to hide." Beth, Monica, and Luca expressed this latter sentiment.

I: Now, do you feel like you have more control in your actions with Amazon? A: I do. I really believe I do. I think as far as the privacy issue, yeah (Arlene 13:06).

I: Do you feel like you have control over how they're using your information? *B:* No, I'm not really sure and I'm not one to read long consent forms, honestly. But again, I'm not that worried about it. I don't think anything about my information is that-- I use secure credit cards when I buy things. I'm not that concerned about it. I don't really think about it that much (Beth 06:04).

I: And do you feel like there's any cases where YouTube has used your information in a way that made you feel like you didn't have control over it? M: Maybe, because I know the cookies, they keep the cookies, they keep track of the videos and whatever I'm watching. So yeah, I know they're keeping the track of it. So... I feel okay because I'm not doing nothing illegal (Monica 08:43).

I still get my use out of the shows, so I'm not really going to worry about that other stuff because I have nothing to hide. So, if anybody wants to record me, go ahead. I'm okay (Luca 22:19).

Participants' responses in the domain of control over online information suggest that this is a topic that is less important to them, partially because they feel it is not possible for consumers to fully control their information, and also because they see it as the consumer's responsibility not to do anything "wrong" or "illegal."

"Window shopping"

Me2B has posited three different consumer-company relationship types: long-term relationships, when a consumer uses a product multiple times; one-time relationships, when a consumer uses a product just once; and "window shopping" relationships, in which a consumer merely browses a product, but does not sign up or log in. Me2B argues that companies collect certain kinds of data from people who are "window shopping" online products, and has hypothesized that consumers may be unaware of this kind of data collection practice.

During the open-ended interview, participants were asked about their "window shopping" practices. Most seemed not to have considered this type of relationship and needed prodding to think of products they had "just browsed" but not signed up for. However, once they had been prompted to think of this kind of behavior or activity, all responded that they believed

information was being collected from them during "window shopping." When asked how they felt about this, most were unconcerned, like Monica.

I guess I'm okay with it. It really doesn't affect me because I just think they just trying to keep-- I think they're just trying to see what the consumers are reading so they can know what to put back out to the consumers (Monica 10:25).

One participant, Raquel, was even supportive of this kind of data collection practice because, as a self-proclaimed "data nerd," she found it interesting and felt she was "helping" the company by providing her data.

Honestly, I'm kind of a data nerd. I love looking at numbers and all that. So, in my mindset, it's like if I'm helping them better their product through my demographics and my age and my location, and they're seeing, 'Oh, we have an audience here, blah, blah, blah,' whatever, I'm fine with them knowing that I downloaded it. I personally don't think that they're going and they're seeing, oh, Raquel downloaded it and then from there they're going to my Instagram or they're going to my Twitter. I think it's just a more generalized set of information that gets sent to them. So, I'm personally okay knowing that they have that (Raquel 09:29).

In contrast to this general nonchalance toward "window shopping" data collection practices displayed by participants during the open-ended interview, most judged the assurances that assured against these kinds of practices as "important" or "very important." These included the following: "I know that when I'm not signed it, this product doesn't take information from me" (Slide 4); and "I know when I'm not signed in, this product doesn't identify me or correlate any information" (Slide 8). Even Raquel, for example, said that both of these prototype assurances were "very important" to her. And Beth claimed that she had never even thought about the idea before, even though this discussion followed the open-ended discussion about "browsing" online products.

B: I know that when I'm not signed in, this product-- I've never even thought about that. I would say that's very important... Unless you give them permission. Because I know that sometimes an app will ask you if they can run in the background all the time or just when you're using it. So, I think that's very important. I generally do not want anybody taking information from me when I'm not on an app or using it (Beth 13:49).

In general, it seemed participants were not familiar with the idea that they had a relationship with a company when just browsing a product or when not logged in to a service, but, when prompted, realized that data may be collected from them in this circumstance. Participants did not find this practice problematic when asked about it in an open-ended format; yet, they did seem to value having an assurance that this practice was not taking place.

Assurances: control over information

Several different prototype assurances were related to the theme of consumer control over information. These varied in their wording and in the implied interpretation of the theme. The most general was worded as follows: "I know I have control over my information" (Slide 6).

Participants interpreted this assurance as referring to either the theft of information by a third party, or the selling of information, presumably by the company the consumer is patronizing, to a third party.

It would mean that I wouldn't have to worry about someone grabbing my information, doing whatever they want to do with it. Selling my information on the dark web, just to whomever, because that happens a lot. That would mean a lot (Wanda 27:23).

[It means] that my information isn't sold or there are controls that prevent being hacked, my information being hacked, and my privacy is maintained (Beth 14:56).

Another assurance suggested a meaning more in the realm of "security," in that it invoked potential external parties who could access information not intended for them: "I know my information is safe from outsiders" (Slide 5). Participants most often interpreted this assurance as relating to financial information. Monica explained:

When I'm shopping, they're keeping my information on my debit card, my credit cards, the way I'm paying, they're keeping that information safe from hackers (Monica 17:53).

Although security was important to participants, most were skeptical that it was possible to assure a consumer's information be truly safe from outsiders. Both Arlene and Bill insisted that "100%" protection from hackers is not possible.

Because I don't think anyone is able to really 100% protect the information. And that's based on the fact that people are constantly hacking different things. So, if the Me2B could guarantee things like that, I think I would also still have to see data on that (Arlene 22:08).

Yeah, that's important. And like I was saying earlier, I know that you can't be 100% guaranteed, but it's nice to know that if you've got a certification that you are doing everything technologically and within your power to protect your customers' information. I think that's super important. Because with all the hacking that you see, and whether it's credit cards, or banks, or website registrations, or whatever, you don't ever want to get the letter in the mail, says, 'Hey, we had to sign you up for two years of credit monitoring because our system got hacked.' Talking from experience, because the company that does my software at work got hacked and all my customers got that letter. That puts a bad taste in your customers' mouth. So, anything that we can do, or anything that this company could do to protect your information is important. It can't be 100% guaranteed, like I said. I don't believe there's any 100% hack-free, super-secure, encrypted, whatever, that can't be broken. But I think it's important to know that it's safe as possible (Bill 25:58).

Another variation on the assurance of control over information implied control over information by the company being patronized, without the suggestion of any third parties: "I know I can choose how my information will be used" (Slide 11). Participants interpreted the assurance as pertaining primarily to collection of information for marketing purposes. As Bill put it:

Yeah, that's important. We've talked about that, just being able to say, 'Here's the information you get. Here's what you're going to do with it,' or they provide you, 'Here's what we have. Here's what we're going to do with it. Are you okay with providing it or doing this with it, or are we allowed to market to you?' I think it's important (Bill 32:42).

Finally, participants were asked about a sort of meta-assurance about information control: "I know I can easily find answers to my questions about how my information will be used" (Slide 12). Participants said this was important to them, but emphasized the need for such information to be easy to understand; "Not in legalese," as Beth put it, or a "Cliffs Note" version as Bill put it.

Yeah. I would like to be able to click on something that gives me that information clearly, concisely, and easy to understand and not in legalese (Beth 22:22).

That would be really important. Having a FAQ, having some sort of quick and easy link to where you can actually get that Cliffs Note, that synopsis of, 'Here's what we do. Here's why we do it. Here's how we do it. Here's what you give us. Here's how much you pay us,' or whatever it is, 'And here's what we provide you.' I think a quick snapshot overview of that is super valuable... And you don't have to dig through 65 pages of scroll-through all this stuff to find it. It's right there for you. I think that's important (Bill 33:32).

Prototype assurances about consumer control over information were readily interpreted by participants as pertaining to security from data theft and control over data collected for marketing purposes or for selling to third parties for marketing purposes. Participants thought such assurances were important but were also skeptical that they were possible. Participants valued having access to information about how their data might be used, but emphasized that this information must be brief and easy to understand.

Summary: Overall, the notion of having control in interactions with an online company over time was not immediately intelligible to participants, and not something they seemed to have considered without prompting. Instead, participants interpreted this theme as having to do with control over the functionality of a product or over their data. In the context of these kinds of interpretations, participants did, in general, feel they had control in their interactions with the connected products or services they used. Having access to "fine print" such as Terms and Conditions did not seem to have an effect on their feelings of control, as those who were asked about this topic said they did not read such information. Participants' responses in the domain of control over online information suggest that this topic is less important to them, partially because they feel it is not possible for consumers to fully control their information.

Participants were also unfamiliar with the notion of having a relationship with a company when just browsing a product or when not logged in to a service ("window-shopping"), but, when prompted, allowed that data may be collected from them in this circumstance. Participants did not find this practice problematic when asked about it in an open-ended format; yet, they did seem to value having an assurance that this practice was not taking place.

Prototype assurances about consumer control over information were readily interpreted by participants as pertaining to security from data theft and control over data collected for marketing purposes. Participants thought such assurances were important but were also skeptical that it was possible to make such assurances. Participants said they valued having access to information about how their data might be used but emphasized that this information must be brief and easy to understand.

3.4 Connected products with and without the Me2B seal

At the close of the interview, participants were asked to imagine that the Me2B seal had become commonplace, and that they were seeing it on various online products or services. They were then asked whether their attitudes or behaviors toward their favorite product would change if it were to earn the seal or to not earn the seal.

3.4.1 With seal

Not surprisingly, most participants said they would feel better about using a particular online product if it had earned a seal saying it was safe or trustworthy.

I would say yeah, I would increase my trust in Google. Seeing some sort of security certification that I trust labeling it (Barton 21:36).

This attitude applied even to Facebook, which many participants saw as untrustworthy.

I: Now [what about] a company like Facebook, that [you said] you didn't really trust? Would that change your mind about them? W: That would make me feel a lot better. That really would make me feel a lot better if they could do that (Wanda 21:31).

Bill's long response is worth reproducing here because he advanced the idea that for certain big companies, such as Google, to earn the seal would be a "game changer." He seemed to suggest that this would validate not only the seal, but the very idea of security and privacy. He also said he believes that individuals are not really Google's "customers;" companies that buy ads are their customers. This observation may suggest he thinks the Me2B relationship might not really apply to Google. He also expressed skepticism that a big company like Google could earn such a seal, and also noted that it would cost them "billions and billions and billions of dollars."

I: Would you feel any differently than you do now [about Google]?

B: I would. Because, like I said, if this is the standard of internet security, or data security, or whatever, this means what it means, and if Google has it, I think that's huge. Because Google is the biggest company out there. I think they're one of probably the three or four biggest companies ever in market cap and all that. So, for them to be able to say, 'Look, here's what we have. Here's what we have done to help all of our customers across the entire world,' I think that'd be massive. Like I said, I would be amazingly impressed if that happened, because a company that big, I just don't believe it's possible. But no, I would take a 4.2 up to maybe like a 4.8, 4.9, because I think that would just say so much about them and what their belief structure is for how they're going to take care of their customers. But I don't think their customers are us. I think their customers are people that

pay them all the ad dollars. And so, I don't think that we're there yet, but I would love that. I think that would be amazing if they could have that sort of, 'Here is the gold standard of internet security or personal data security, and we participate. We are a part of it, and we abide by all the rules and all the regulations, and we self-check ourselves, and other people come in and audit us, and we absolutely follow the rules.' Be amazing. It would be a game changer for them. I think it would also cost them billions, and billions, and billions of dollars. So, it doesn't sound likely, but it's possible. Anything's possible (Bill 34:36)

Raquel had an interesting perspective as well because she believed that *how* a company implemented the process of obtaining a certification seal, and communicated this process to its customers, would be just as important as receiving the seal in the first place.

If Twitter was to get that seal that would be amazing, and I would definitely trust it more. But how they use that seal or if they abuse it would also be a consideration. If they do a whole PR campaign around how great they are at being private and all that and taking your information, it would have to be done in a genuine way and the information would have to be shared to consumers or followers, users, whatever in an organic and meaningful way. So if they just slapped this seal on there, I don't know if I would necessarily trust them, but if they kind of did a whole explanation as to what that seal means and how it affects you as a follower or user then I would definitely be like, 'Okay, I trust this.' Does that make sense? (Raquel 28:05).

3.4.2 Without seal

Participants' reactions to the hypothetical situation in which their favorite sites did not earn a Me2B seal were more varied. Wanda and Monica said it wouldn't matter to them much if their favorite sites didn't earn a Me2B seal, and that it would probably not change their behavior.

It still wouldn't bother me because I trust Amazon. Sometimes a company may feel that, we already do such a great job, we don't really need it. Would it help? Yeah. Would it hurt them? No (Wanda 32:05).

I would be okay. It's neutral because I see it being used in the retailers more than the YouTube, because I can see how YouTube could use it to... for harassment or something... So, it wouldn't make no difference if they had it or if they didn't had it, I would still continue to use them, but I'll be a little bit more secure knowing they got it (Monica 26:38).

Bill said he wouldn't be surprised to hear certain companies hadn't earned the seal. He seemed ambivalent, first claiming this would not affect his behavior, but also claiming he would potentially make an effort to patronize companies who had earned such a seal.

I wouldn't be that surprised. I would be like, 'Yeah, okay. Everything I thought makes sense and is right.' I would probably still use whatever it was, because it's just ingrained in daily life... I would try to do business with people that are trying to do business with, or do right by us. And so I'd have a little bit more pause in doing things like that if a lot of other companies had said certification, or they were all playing by this set of rules, and this guy's over here doing their own thing, I would probably try to do more with the people that were playing the game the right way (Bill 36:27).

Barton and Raquel said it would matter to them, though did not indicate this would have an impact on their behavior.

A little bit concerned, suspicious. If I knew that it was a seal that was stringently applied and could be trusted, the fact that a service that I use often doesn't have it and hadn't earned that in some way. Obviously, that's going to raise some red flags to make me ask questions why it hadn't earned that same level of security and trust (Barton 22:02).

I would trust it less because I would think that there's something naughty that they're doing that they want to keep doing and they don't want it to come out to the public, I guess (Raquel 30:22).

Beth's perspective was unique because she suggested that some companies who did not earn a Me2B seal may not have due to lack of money or clout, even if their privacy practices were up to par. These themes related to the accessibility to the seal are also related to participants' commentary on "trusting" the seal, discussed in §3.1.1.

I: How would you feel about those products, then?

B: Probably not very good because they have all the money in the world, so they can definitely afford it. And if they don't achieve it, there's got to be something wrong. I mean, I live in an area where there are a lot of small farmers in the outlying areas, and they can't afford an organic certification even though their food is probably better than some organically grown foods. Because of their small farming practices and whatnot. So that might have something to do with it too... If you got a brand-new start-up that has good intentions but just can't afford to participate in something like that. I'd want to know how accessible it is to the public, to people that are trying to obtain that kind of integrity (Beth 23:37).

Overall, there was variation in how participants said they might react to a product that had not earned a Me2B seal. But while some said that it would not matter to them and others said it would, no participant said that the lack of a seal would cause them to stop using their favorite connected products. These findings suggest that changing attitudes and changing behaviors may require different strategies.

4 Conclusions and Recommendations

In this section, conclusions that follow from the insights detailed in the previous section are presented for each of the two primary research questions guiding this study:

- 1. Is each prototype assurance meaningful, comprehensive, and essential?
- 2. Do users believe it is possible to trust a connected product/service?

For each conclusion, some recommendations are made for calibrating the Me2B certification criteria to better align with consumers' understanding and valuation of the prototype assurances.

4.1 Do users believe it is possible to trust a connected product or service?

Most participants in this study said they would never be able to fully trust a connected product or service. Perhaps paradoxically, participants said they trusted the connected products and services they used on a regular basis. The conclusion may be drawn that participants trust certain products "enough," and do not expect to trust them "fully." Indeed, participants did not highly value "trust" of online products because they felt it was "inevitable" that their data would be collected and retained.

Unprompted, participants indicated they may have trouble trusting the Me2B seal itself. Nevertheless, most participants said they would feel better about using a particular online product if it had earned a seal saying it was safe or trustworthy. There was considerable variation in how participants said they might react to a product that had not earned a seal. But while some said that it would not matter to them and others said it would, no participant said that the lack of a seal would cause them to stop using their favorite connected products. These findings suggest that changing attitudes and changing behaviors may require different strategies. One participant (Bill) said that *who* earned the seal first could influence how it was perceived. He seemed to suggest that certain big companies could serve as "lead users" in paving the way for others. Another participant (Raquel) suggested that *how* a company implemented the process of obtaining a certification seal, and communicated this process to its customers, would be just as important as receiving the seal in the first place.

Recommendations

- Define "trust" in graduated rather than binary terms. Certification of a certain level of trust may be "enough," rather than seeking to reach "full" trust. This principle may apply to other themes beyond trust.
- Consider the mechanisms for how the certification may be funded, marketed, deployed, etc. to cultivate trust of the seal itself among consumers.
- Consider which companies obtain the seal first, and what effect this could have on consumer perception and other companies' perceptions of the seal.
- Consider how companies might obtain, implement, and communicate to their customers about the seal, and how this may affect perception of the seal to a broader audience.

4.2 Are the prototype assurances related to the theme of **trust** meaningful, comprehensive, and essential?

Participants' understanding of "digital harms" was likely narrower than the meaning intended by Me2B stakeholders when they use this term. For participants, the meaning centered on fraud, viruses, hacking, and other security issues. These kinds of security issues were very important to participants. The broader set of "digital harms" that may include aspects of an ongoing relationship between company and consumer were not generally recognized by participants, even with prompting.

Recommendations

- Distinguish protections against fraud and security issues from those pertaining to other intended definitions of "trust."
- If the goal is to change the perspective of consumers so that they recognize a broader set of "digital harms" beyond security concerns, this may need to be done through outreach and education.

4.3 Are the prototype assurances related to the theme of **fairness** meaningful, comprehensive, and essential?

Participants generally felt they were getting a fair deal when using both paid and free connected products and services. Some participants felt exchanging data/information for a "free" service was not only fair, but desirable because it gave them more tailored content. In this sense, the meaning of "fairness" may differ between participants and Me2B stakeholders because participants did not always see data collection practices as inherently unfair. They did, however, seem to value transparency in this exchange.

Participants' understanding of one of the prototype assurances pertaining to "fairness" (Slide 3) seemed to align with its intended meaning, and participants saw it as an essential component of the Me2B seal, as they understood it. For the other "fairness" assurance (Slide 9), there was variation in how participants understood the concept of "fairness." These interpretations ran the gamut from product quality and transparency of the transaction, to data security, to protection from harassment, to equal treatment across consumers. These assurances were important to the participants who delineated them.

Recommendations

- Prioritize increasing the transparency of and enumerating data collection and sharing practices.
- Avoid subjective evaluations of company or consumer behaviors as these may not align with consumer evaluations.
- Avoid potentially ambiguous terms like "fair;" favor simple, unambiguous terminology that captures the meaning of the intended concept as in Slide 3.
- If the goal is to change the perspective of consumers so that they recognize a broader notion of "fairness" that occurs over the course of a durative consumer-producer relationship, this may need to be done through outreach and education.

4.4 Are the prototype assurances related to the theme of **control** meaningful, comprehensive, and essential?

The notion of having control in interactions with an online company over time was not immediately intelligible to participants, and not something they seemed to have considered without prompting. Instead, participants interpreted this theme as having to do with control over functionality of a product or over their data. In the context of these kinds of interpretations, participants did, in general, feel they had control in their interactions with the connected products or services they used.

Prototype assurances about consumer control over information were readily interpreted by participants as pertaining to security from data theft and control over data collected for marketing purposes or for selling to third parties. Participants thought such assurances were important but were also skeptical that they were possible. Participants valued having access to information about how their data might be used but emphasized that this information must be brief and easy to understand. Participants' responses in the domain of control over online information suggest that this is a topic that is less important to them, partially because they feel it is not possible for consumers to fully control their information.

Participants were not readily familiar with the idea that they had a relationship with a company when just browsing a product or when not logged in to a service, but, when prompted, allowed that data may be collected from them in this circumstance. Participants did not find this practice problematic when asked about it in an open-ended format; yet, they did seem to value having an assurance that this practice was not taking place.

Recommendations

- Distinguish control over product functionality and personal information from other intended senses of "control" in interactions with companies.
- Define control over information in graduated rather than binary terms. Prioritize transparency and communication over guaranteeing "full" control.
- Define intended consumer-producer "relationship types," as these are unfamiliar to consumers.
- If assuring access to information, ensure the information is brief and easy to understand. Test language with consumers.

Appendix A: Screener Survey

- 1. Do you have Internet service to your home?
 - a. Yes (accept)
 - b. No (reject)
 - c. Not Sure (accept)
- 2. What kinds of computing devices do you frequently use?
 - a. Smart TV or Smart DVD/Blu-ray player (may select)
 - b. Computer (may select)
 - c. Smartphone (may select)
 - d. Tablet (may select)
 - e. Connected Device (connected thermostat, connected scale, security cameras, etc.) (may select)
 - f. Connected Wearable (smart watch, Fitbit etc.) (may select)
 - g. Smart Speaker or Personal Assistant (Amazon Echo, Google Home, etc.) (may select)
 - h. Other (may select)
 - i. None of the above (reject)
- 3. In which of the following sectors do you work?
 - a. Banking or finance (accept)
 - b. Business management (accept)
 - c. Healthcare (accept)
 - d. Law (accept)
 - e. Technology (reject)
 - f. Media (accept)
 - g. Education (accept)
 - h. Other/none (accept)
- 4. Do you live in any of the following locations? Bay Area, Los Angeles, Austin, Chicago, Seattle, New York City.
 - a. Yes (reject)
 - b. No (accept)

Appendix B: Informed Consent

Me2B Alliance CONSENT TO ACT AS A RESEARCH SUBJECT Treatment of consumers by Internet-enabled businesses

Me2B Alliance is conducting a study to understand the concerns of people who use connected products or services. Dr. Melanie McComsey will lead the study. You have been asked to take part because you are a consumer or user of connected products and services. There will be approximately 10 participants in this study over a one-month period.

If you agree to be in this study, the following will happen to you:

You will be asked a series of questions about your technology use and your feelings related to your technology use. The interview will last about 40 minutes. It will take place over videoconference and it will be recorded. The interview will be conducted by Dr. Melanie McComsey, and one additional Me2B volunteer will observe.

There will not be any direct benefit to you by participating in this study. There will be no cost, and you will be compensated for your participation. The investigator may learn more about how people want to be treated by Internet-enabled businesses.

Participation in this research is entirely voluntary. You may refuse to participate or withdraw at any time. You will not be compensated if you withdraw.

Audio recording:

Audio recording you as part of this project will help our research team better analyze your responses. We will not retain any video recording or imagery of your likeness. We will take the following steps to ensure your privacy:

- 1. Except to confirm your consent, we will not record any names, personal data, or obviously identifying characteristics. If recorded, such information will be permanently deleted using audio editing software.
- 2. All identifying details will be concealed in the presentation of data.
- 3. The researcher will remind you when you are being recorded.
- 4. The audio recording and original transcript will not be made available to anyone outside our research team.

Risks: There is the possibility of loss of confidentiality. However, research records will be kept confidential to the extent allowed by law. Because this is an investigational study, there may be some unknown risks that are currently unforeseeable.

Dr. McComsey has explained this study to you and answered your questions. If you have other research related questions or problems, you may reach Dr. McComsey at m.mccomsey@gmail.com.

By giving verbal consent, you agree to participate, and you have received a copy of this consent document if requested.

Appendix C: Interview Guide

I. Introduction

We are forming a new non-profit organization to develop a certification mark, like the "Organic Foods," label, but for technology products connected to the Internet, so you can know if an app or website is treating you right. We would like to get your feedback on our ideas for what the certification mark would mean.

II. Consent form

III. Background information

- a. Name:
- b. Sex:
- c. Age:
- d. Ethnicity:
- e. Place of residence:
- f. Employment description:
- g. Do you have broadband at home?
- h. What internet-connected devices do you regularly use? (computer, smartphone, television, video game, wearable, connected household gadgets, etc.) [Elicit type for each one]

IV. Interview guide

Part I: Open-ended

- 1. What is one connected product or service that you use a lot?
- 2. Do you trust this company? Why/why not?
- 3. What would it take for you to fully trust a company?
- 4. What do you give in exchange for the service? Does it cost money? Do you "pay" with other kinds of currencies?
- 5. Do you feel like this is a fair trade/deal? What do you think a fair value is to give for this service? What do you think is a fair value for you to receive?
- 6. Do you feel like you have control in your interactions with [company]?

- 7. What would it take for you to feel like you had control in your interactions/in your relationship with [company]?
- 8. How do you feel about accepting a Privacy Policy or Terms of Service agreement in order to use a service? Do you feel it give you more control in the interaction?
- 9. What is one connected product or service that you just browsed, either by visiting a website or downloading an app, but didn't sign up for?
- 10. When you are just browsing products or shopping around, do you believe your information is being collected? Why/why not? How do you feel about that?
- 11. Do you think [item in #10] retained information about you? Do you feel like you understand what this company may have done with your information? What is your understanding? Why do you feel that way?
- 12. What would it take for you to fully understand what a company might be doing with your information?
- 13. How much do you trust this company [in #10] on a scale from 1-5, 1 being you don't trust them at all, and 5 being you trust them fully? Tell me about your response; why do you trust/not trust the company?
- 14. Thinking back to [item in #1], how much do you trust this company on a scale from 1-5,1 being you don't trust them at all, and 5 being you trust them fully? Tell me about your response; why do you trust/not trust the company?

Part II: Assurances [slides]

Introduction [Slide 1]: The Me2B seal might look something like this, and you might see it on a website you are using. We want people to recognize the seal and to know, when they see it, that certain information is true. Like when you see an organic food label, you know that the food has not been treated with synthetic pesticides or fertilizers.

[Slide 2] I am going to show you a series of slides, each with a different statement of something you might know when you see the Me2B seal. I want you to tell me how important this knowledge is to you, using the scale below.

[Slides 3-12] "When I see the Me2B seal on an online product or service...

- 15. I know what I'm giving, what I'm getting, and that the product is upholding its end of the deal."
- 16. I know my information is safe from outsiders."
- 17. I know I have control over my information."
- 18. I know I have meaningful control in my interactions with this product.
- 19. I know that when I'm not signed in, this product doesn't take information from me."
- 20. I know that when I'm not signed in, this product doesn't identify me or correlate any information."
- 21. I know I will be treated fairly when using this product."
- 22. I know I will not be harmed by using this product."
- 23. I know I can choose how my information will be used."
- 24. I know I can easily find answers to my questions about how my information will be used."

For each assurance:

25. How important is it to you that [repeat assurance in 2nd person]?

1	2	3	4	5
Not important	Slightly	Moderately	Important	Very important
	important	important		

- 26. Tell me about your answer. Why is this important/not important to you?
- 27. What is your understanding of this assurance? What do you think it means?

Part III: Me2B Seal

28. Thinking back to [product or service discussed in Part I], imagine it earned a seal like this to say that it was safe or trustworthy. How would you feel about that? Would you feel differently about the service than you do now? How so?

29. Imagine that this Me2B seal became commonplace, like the organic foods label, but that [product or service discussed in Part I] did not earn the seal. How would you feel about that? Would you feel differently about the service than you do now? How so?

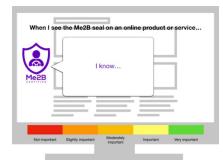
V. Closing

Do you have any questions for me? Do you have any other comments you'd like to share? Thank you

Appendix D: Structured Elicitation Stimuli



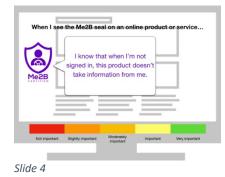
Slide 1

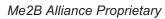


Slide 2



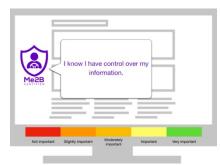








Slide 5



Slide 6



Slide 7







Slide 9



Slide 10



Slide 11



Slide 12

Appendix E: Coding Categories and References

Code	Number of coding references	Number of items coded
Assurance, elicited with stimuli	82	9
Assurance, elicited with stimuli\Assurance, slide 10	8	8
Assurance, elicited with stimuli\Assurance, slide 11	8	8
Assurance, elicited with stimuli\Assurance, slide 12	8	8
Assurance, elicited with stimuli\Assurance, slide 3	9	9
Assurance, elicited with stimuli\Assurance, slide 4	9	9
Assurance, elicited with stimuli\Assurance, slide 5	10	9
Assurance, elicited with stimuli\Assurance, slide 6	8	8
Assurance, elicited with stimuli\Assurance, slide 7	7	7
Assurance, elicited with stimuli\Assurance, slide 8	7	7
Assurance, elicited with stimuli\Assurance, slide 9	8	8
Assurance, importance of	78	9
Assurance, understanding of	27	9
Control, information	12	9
Control, interaction	8	8
Fair deal	16	9
Product with seal, feelings toward	8	8
Product without seal, feelings toward	7	7
Relationship type, one-time user	0	0
Relationship type, regular or repeat user	0	0
Relationship type, window shopping	8	8
Seal, other attitudes toward	8	5
Terms and Conditions, small print	3	3
Trust	20	9
Trust, ratings	8	8