Me2B ALLIANCE

Spotlight Report #3

Me2B Alliance Validation Research: Consumer Sensitivity to Location Tracking by Websites and Mobile Apps

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1. Abstract

"I don't want my location to tracked, but I give my location out constantly."

"Location consent is intrusive - often the locations shouldn't be relevant."

"If I don't feel comfortable, I should have the right to deny it's access."

"I might be Googling something real quick at work, and I'm like, "why do they need to know my work location?""

"So they're obviously just tracking me…. it's unnecessary and I never asked for it."

These quotes represent sentiments from our research that illustrate the significance of permission, relevance, and control for respectful technology behavior.

This research was conducted to validate the Location Commitment scoring criteria in the Me2B Alliance Respectful Technology Specification[1]. The objective of the study was to understand if the requirements and passing criteria of select location tests in the Me2BA Respectful Technology Specification are appropriate. Toward that end, we conducted quantitative and qualitative studies of consumers' perception and tolerance for location awareness[2] by digital technologies. The studies explored participants' understanding of what a location request is, how consumers feel about such awareness, and what are the specific parameters and scenarios that make location awareness acceptable.

The core of the research was an online survey of 363 people, in which we looked at respondent's sentiments towards websites or mobile apps that are location aware, explored how having an account affected respondent's feelings about location awareness, and examined how different scenarios and contexts might affect respondent's choice of what location information was acceptable, when, and for how long. We also reviewed other interviews and focus groups studies conducted by the Me2B Alliance, in which participants discussed the kinds of information they share with digital technologies. Two primary research questions guided our work:

1) How do people feel when a website or mobile app automatically knows their location?
2) Under what conditions is it acceptable for a website or mobile app to know one's location?

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[1] *See "Flash Guide #2: What is the Me2B Respectful Tech Specification?"* https://me2ba.org/flash-guide-2-what-is-the-me2b-respectful-tech-specification/

[2] *See Definitions in Appendix A*

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Key findings from our research include:

3) **Participant sentiment is more negative than positive towards a website or app that "knows your physical location when you first open it".** The terms used to describe websites and apps that are immediately location-aware were more often negative than positive. 65% of respondents had an overall negative sentiment towards a website that knew their location upon first open; 52% of respondents had an overall negative sentiment towards a mobile app that knew their location upon first open. In addition, four of the top five terms used were negative (Creepy, Scary, Annoying and Bad), with "Convenient" being the only positive. 30% of respondents indicated that it was "Convenient" for a mobile app to know location information upon first open; this may reflect the element of agency involved in selecting and installing apps creating more tolerance around location awareness in apps versus websites.

1. **About 70% of respondents indicated it was unacceptable for either a website or an app to know their location before the creation of an account - a "Me2B Marriage"[3].**

2. **Respondents were more tolerant of location sharing if they had an account than if they did not.** If they *did* have an account, respondents were more comfortable with mobile apps knowing their physical location (45% Yes vs 35% No) than websites (34% Yes vs 45% No). However, 45% of respondents still felt it was unacceptable for websites to know their location even with an account. For both websites and mobile apps, "Maybe" responses jumped from 4% (website) and 5% (mobile app) to 20% (both) when respondents have an account, which suggests that having an account increases tolerance for location awareness. **These findings validate the importance of the Me2B Marriage state as meaningful context for how people experience their Me2B relationships.**

3. **The specific context in which location information is requested – including the website/app's need for location information – makes a difference** in how accepting or tolerant people are towards sharing that information. Participants were more comfortable sharing their "home address" or "exact location" for scenarios where location awareness was relevant. Depending on the scenario, respondents preferred that websites or mobile apps know or remember their

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location either not at all (“never”), or “only when I am using the site”.

4. **Terms used to describe when location awareness is acceptable highlighted agency and permission, as well as issues of trust and safety, and the importance of specific contexts.** The two largest term clusters were “Ask” and “Ask Permission,” while other leading clusters were around related terms such as: Allow, Access, Consent, Reason or Good Reason, as well as: Security, Trust, Privacy, Safe and Safety. Popular, context specific terms included: Delivery, Ordering, Weather, Directions and Map. For those who selected "Maybe" when asked if it is acceptable to share location information, key reasons were the ability to give permission, and whether location information was required for use.

Our research confirms that location awareness is something people are sensitive to, and that people prefer to have control over the location data being shared. Website and mobile app consumers are aware in most cases that technologies may track their location. The specific context in which this information is requested, and, in particular, the relevance of the location information to the task, affects how accepting people are of sharing their location information – and to what degree, and for what length of time. People are more negatively inclined towards a website or mobile app that automatically knows their location – but, again, context matters. Convenience is a primary factor, while such sites are also seen as “Creepy, Scary, Annoying and Bad." Key variables that make location awareness acceptable are asking permission and having a valid reason for needing this information.

Based on this research, we find that, for people to consider it acceptable for a digital product to know their location, two essential conditions must be met:

1. The person must have agency over granting access to location information, and
2. There needs to be a legitimate and understandable need for location info.

Our research supports the scoring rubric in the Me2BA Respectful Technology Specification. Based on this work, we are confident that the current scoring for passing/failing behavior related to a website or mobile app’s location awareness in the Me2BA Respectful Technology Specification accurately reflects the tolerances and sensitivities of individual Me-s and works towards ensuring respectful behavior for digital technologies.

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2. Introduction

The Me2B Alliance ("Me2BA")[3] is a nonprofit creating a safe and just digital world through standards development and independent technology testing. At the core of our work is our Respectful Technology Specification[4], currently in development, which provides an objective standard for measuring safe and ethical technology behavior. The Specification consists of a series of tests that evaluate how a connected product or service is behaving towards the people that use it. This helps individuals understand how technology is treating them, and helps businesses build technology that is safe for and respectful to the people that use it.

In particular, the Respectful Tech Specification tests each Me2B Commitment[5], including the commitment of location sharing. Among other things, the set of tests for the Location Commitment addresses whether or not the individual has the opportunity to provide permission prior to the sharing, or derivation, of location information with a website or mobile app. Permission is a core attribute of respectful commitments[6]. Websites typically notify users by asking for permission (often through the browser); mobile apps often reference an individual's existing location permission settings, activating a device pop up if permission is needed.

In our rounds of product testing against the nascent specification, we received objections from some vendors ("B-s") for receiving failing scores due to websites "knowing" location (in this case, deriving from the IP header) without the user's consent or awareness. The vendors argued that automatic derivation of an individual's location via the IP header is beneficial to and desired by users. The research described in this report was developed to explore consumer perspectives, and to determine whether the scoring in the specification is sound.

The primary objective of this study was to understand if the requirements and passing criteria of select location commitment tests in the Me2BA Respectful Technology Specification are appropriate. Toward that end, we conducted quantitative and qualitative studies of consumers' perception and tolerance for

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[3] See "Flash Guide #1: What is the Me2B Alliance: A Safety Standard for the Internet", https://me2ba.org/what-is-the-me2b-alliance-a-safety-standard-for-the-internet/
[4] See "Flash Guide 2: What is the Me2B Respectful Tech Specification?" https://me2ba.org/flash-guide-2-what-is-the-me2b-respectful-tech-specification/
[5] See "Flash Guide #8: Digital Me2B Commitments and Deals", https://me2ba.org/flash-guide-8-digital-me2b-commitments-deals/
[6] See "Flash Guide #9: The 10 Attributes of Respectful Me2B Commitments", https://me2ba.org/flash-guide-9-the-10-attributes-of-respectful-me2b-commitments/ for more information on the attributes of respectful Me2B commitments.

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location awareness by digital technologies. The studies explored participants' understanding of what a location request is, how consumers feel about such awareness, and what are the specific parameters and scenarios that make location awareness acceptable.

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3. Research Design

3.1. Methodology

Our research combined qualitative and quantitative approaches. The core of the research was an online survey of 363 people. We also reviewed other studies conducted by the Me2B Alliance, pulling relevant information from focus groups as well as interviews, with an emphasis on sessions where participants discussed the kinds of information that people share with digital technologies. Two primary research questions guided our work:

1. How do people feel when a digital technology automatically knows their location?
2. Under what conditions is it acceptable for a digital technology to know one's location?

3.2. Quantitative Research - Location Awareness Acceptance Survey

The Location Awareness Acceptance Survey, launched via SurveyMonkey on June 10, 2021, contained 23 questions. 363 participants completed the survey. The survey had three main parts. The first two questions involved sentiment analysis –respondents were asked to select from a list of positive and negative adjectives to describe websites or mobile apps that are location aware. The second part involved four questions exploring how having an account affected respondent's feelings about location awareness. The final section contained eight scenarios involving location awareness for mobile apps and websites. For each scenario, respondents were asked to indicate if it was acceptable for an app or website to know their location, and to specify what level of detail (i.e. from precise location up to country level) and for how long. See Appendix B for the full Survey Questionnaire.

3.3. Qualitative Research – Focus Groups and Interviews

In addition to the online survey, we also reviewed previous qualitative studies in which we interviewed people about their understanding of the kinds of information that they share with digital technologies. In particular, we reviewed 12 interviews conducted in October 2020, as well as the content of subsequent focus groups with ten of these interviewees. The focus group members met for three sessions, conducted over Zoom, during the summer of 2021. While location tolerance was not initially a planned topic for the focus groups, participants occasionally brought It up organically. We also included questions about location tolerance in the final focus group session.

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3.4. Participants

For all Me2BA studies, we seek participants who have a home broadband connection, regularly use at least two Internet-enabled devices, do not work in the technology sector, and do not live in a large, urban, technology center. Participant recruitment for the quantitative survey was conducted via SurveyMonkey. For our focus groups and previous interviews, we recruited participants via the online platform, UserInterviews.com, which enables screening, participant communication, and incentive payment. Each survey, interview or focus group participant was paid $35 USD for each one-hour session. See Appendix C for the complete Me2BA screening survey.

Of the 363 volunteer participants that completed the Location Awareness Acceptance survey, 180 identified as female and 183 as male. Respondents ages ranged from 18-29 (35%), 30-44 (39%), 45-60 (17%), and over age 60 (8%). Respondents were all from the US, representing every state except Alaska and Montana. Half (50%) of the respondents indicated they earned between $25,000 and $99,999 per year, with 21.8% of these in the under $49,000 bracket. 20% of respondents indicated that they earned under $25,000, 15% earned over $100,000, and 15% preferred not to answer the income question. Almost all of respondents (97%) completed the survey on their mobile phones or tablets – 58% were using iOS Phone / Tablets and 39% used Android Phone/Tablet. Less than 3% were using their laptops - 2% on Windows Desktop/Laptop and 0.3% on MacOS.

Our qualitative research included reviewing the content of 12 previous interviews, as well as focus groups with ten of these interviewees. Focus group participants included two groups of five participants, two men and three women each, all living in the United States. The ages of the participants ranged from 23 to 70. Profile snapshots of the participants who are quoted in this report are in Appendix D.

For the survey portion of the study, participants agreed to the standard SurveyMonkey consent release. For the interviews and focus group research, each participant reviewed a copy of the Me2B Alliance consent form and gave verbal consent to participate in this study. Audio recordings of participants' verbal consent were saved as separate audio files and are retained by study personnel. Consent forms can be found in Appendix E.

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3.5. Data Analysis

Survey data from the SurveyMonkey questionnaires was downloaded to a Microsoft Excel spreadsheet and analyzed for significant patterns around location awareness and tracking. We further analyzed this data by gender, age, income bracket and U.S. region. We also analyzed comments made in prior interviews and focus groups and in open-ended, textual survey answers.

In addition, we used the Carrot2 Clustering Workbench program[7] with the LINGO algorithm to examine open-ended comments from the survey responses. The LINGO algorithm creates well-described flat clusters and is available as part of the open source Carrot2 framework. We used the Clustering Workbench program to create content clusters from an Excel file, tune clustering parameters, and then export results into a new Excel file. A list of terms and phrases from the cluster analysis is in Appendix F.

[7] *See: https://search.carrot2.org/#/workbench*

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4. Results

4.1. Sentiment Analysis

For the first two questions in the survey, respondents were asked to describe a website or mobile application that knows their location when they first open it. Respondents were provided with a randomized list of five positive and five negative adjectives and were able to choose multiple options. Our objective was to discover how people feel about a website or a mobile app that wants to know their physical location. We were careful to balance negative terms against positive terms that have a similar emotional weight, to avoid skewing the participant toward one side or the other.

How would you describe a WEBSITE that knows your physical location when you first open it?
Check all boxes that apply.
How would you describe a MOBILE APP that knows your physical location when you first open it?
Check all boxes that apply.
Answer Choices:
Annoying, Bad, Confusing, Scary, Creepy
Convenient, Good, Smart, Friendly, Helpful

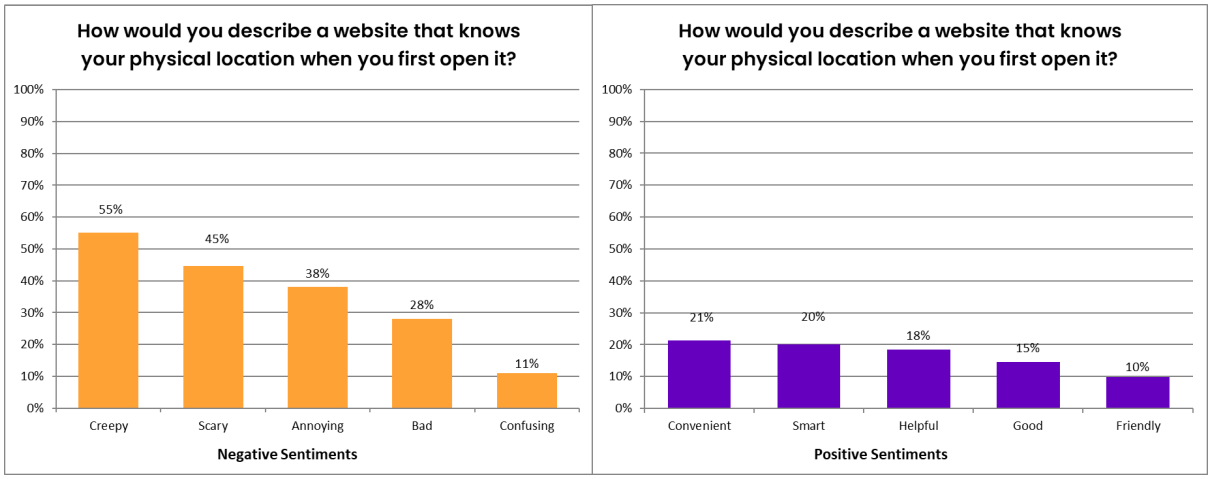

Figure 1: Sentiment Analysis – Website First Open

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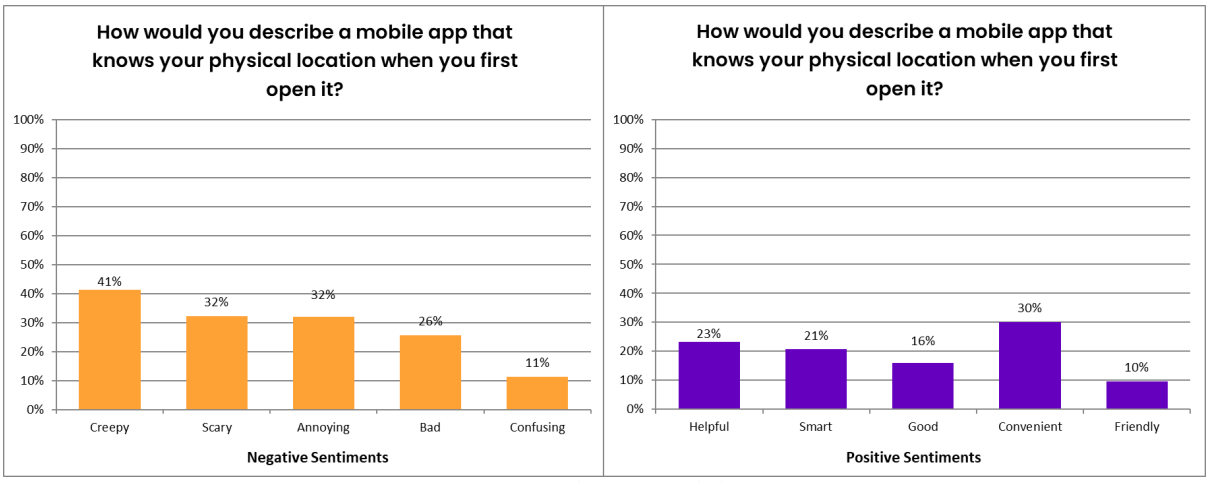

Figure 2: Sentiment Analysis – Mobile App First Open

Table 1: Negative Sentiment Summary

	Creepy	Bad	Scary	Annoying	Confusing	Any Negative Term
Website	55%	28%	45%	38%	11%	81%
Mobile App	41%	26%	32%	32%	11%	68%

Table 2: Positive Sentiment Summary

	Helpful	Smart	Convenient	Good	Friendly	Any Positive Term
Website	18%	20%	21%	15%	10%	44%
Mobile App	23%	21%	30%	16%	10%	53%

As the above charts show, survey respondents tended to select negative terms to describe a technology that knows their location at a greater rate than positive terms for both website and mobile apps. 81% of respondents chose at least one negative term to describe this behavior in websites and 44% selected at least one positive term. They were less likely to select negative terms when describing a mobile app (68%)

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versus a website, but slightly more likely to select a positive term for mobile apps (53%) than for a website.

The top 5 terms to describe websites and mobile apps that know your location immediately were mostly negative – Creepy, Scary, Annoying and Bad – with one positive – Convenient. "Creepy" was by far the most selected term – used by 55% of respondents to describe websites and 41% of respondents to describe mobile apps. The next most common terms were "Scary" (45% for websites and 32% for mobile apps) and "Annoying" (38% for websites and 32% for mobile apps). The terms that selected the least were "Confusing" (11% for both websites and mobile apps) and "Friendly" (10% for both websites and mobile apps).

The term "Convenient" was chosen more frequently (30% of the time) for mobile apps than for websites (20% of the time). The implication here is that the utility of having location awareness on a mobile app is higher or more evident than for a website. App users must download the software to their mobile apps and some of these apps, such as map apps, require location information to be useful.

The negative term that was used the least was "Confusing". Few respondents (11% for both websites and mobile apps) selected "Confusing" to describe a website or mobile app that immediately knows a user's location. The implication is that users do not find this behavior from their technology to be illogical, and that it may be expected that the technology will know or attempt to determine your physical location.

We were also curious about any associations between the negative terms "Creepy" and "Scary," and the more positive terms "Convenient" and "Helpful." Would people be willing to put up with "Creepy" and "Scary" behavior if they also found it "Convenient" and "Helpful"? As Table 3 shows, we learned that this was the case less than 20% of the time, and that there is very little difference between website and mobile app users.

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Table 3: Negative Combination Sentiment Summary

	WEBSITE % of all responses (N=363)	MOBILE APP % of all responses (N=363)
Creepy	55.1% (N=200)	41.3% (N=150)
Scary	44.6% (162)	32.2% (117)
Helpful	21.2% (77)	30.0% (109)
Convenient	8.0% (29)	23.1% (84)
Creepy and Convenient	17.5% (35)	20.0% (30)
Scary and Convenient	12.5% (25)	12.0% (18)
Creepy and Helpful	12.5% (25)	11.3% (17)
Scary and Helpful	7.5% (15)	8.0% (12)

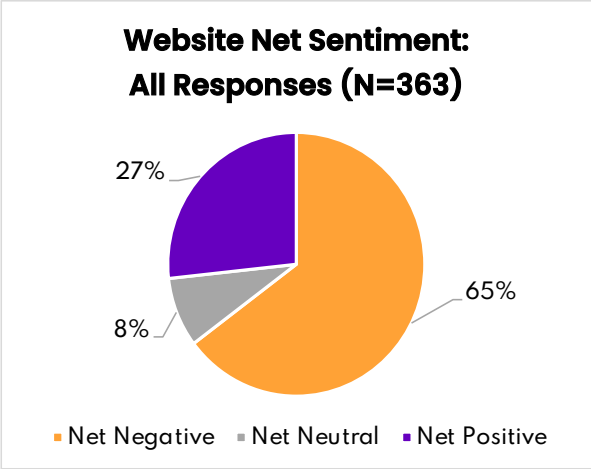

Figure 3: Website Net Sentiment

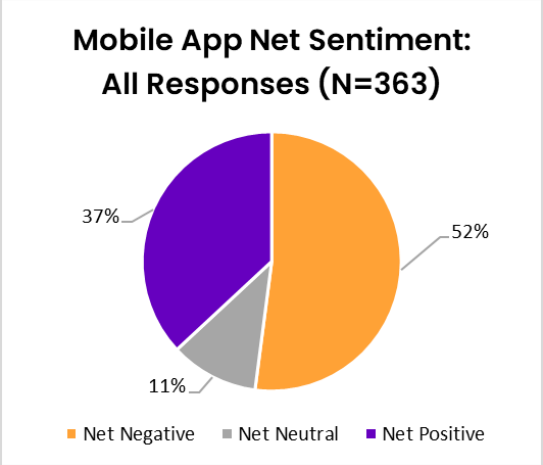

Figure 4: Mobile App Net Sentiment

Net sentiment was calculated by subtracting the number of negative terms from the number of positive terms selected for each response and counting the number of responses that were positive, negative or neutral. A neutral sentiment of zero would indicate that the response had the same number of positive and negative terms. Overall, participants selected mostly negative terms to describe technologies that were location aware - 52% of the adjectives selected for location aware mobile apps were negative, and 65% of the terms selected for location aware websites were negative. Location awareness was more tolerated in mobile apps than in websites – positive net sentiment was at 37% for mobile apps and only 27% for websites.

4.1.1. Sentiment by Gender

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When we analyzed sentiment by cohort groups, we found very little difference between male and female respondents. Both gender groups were more negative than positive in their sentiments towards immediate location awareness, especially for websites.

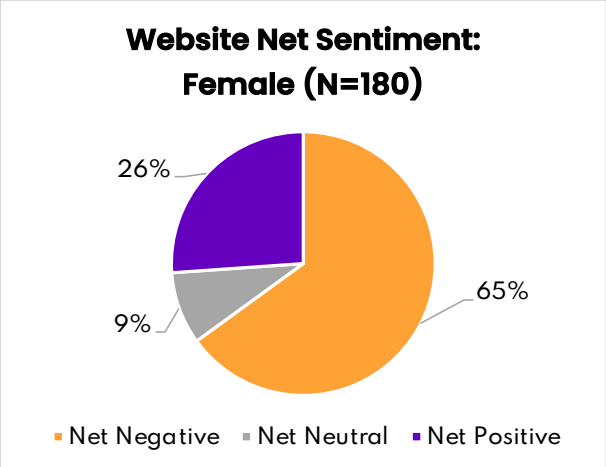

Figure 5: Website Net Sentiment – Female

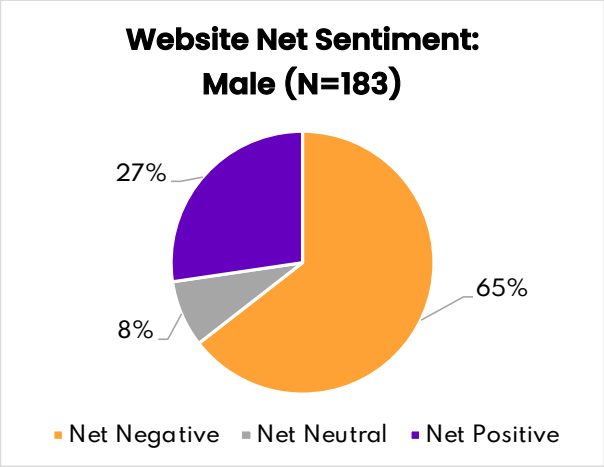

Figure 6: Website Net Sentiment – Male

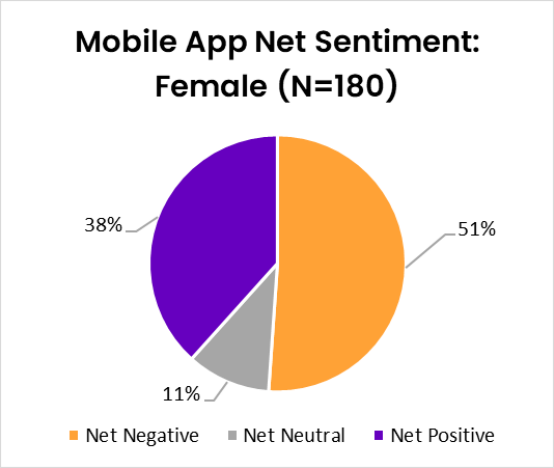

Figure 7: Mobile App Net Sentiment - Female

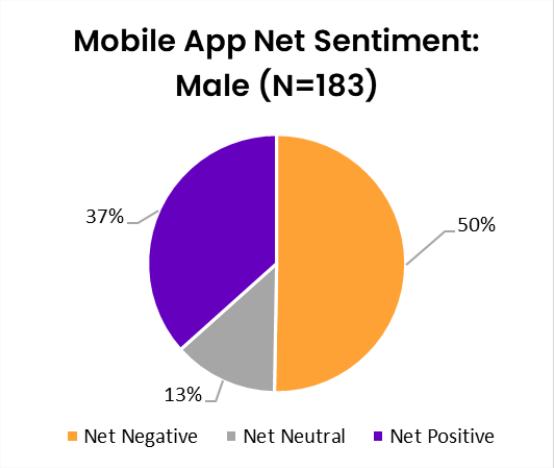

Figure 8: Mobile App Net Sentiment - Male

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4.1.1.1. Negative Sentiments by Gender

Table 4: Website Negative Sentiment by Gender

Website	Creepy	Bad	Scary	Annoying	Confusing	Any Negative Term
Female	56.1%	27.8%	44.4%	40.6%	10.0%	81.7%
Male	54.1%	28.4%	44.8%	35.5%	12.0%	82.0%

Table 5: Mobile App Negative Sentiment by Gender

Mobile App	Creepy	Bad	Scary	Annoying	Confusing	Any Negative Term
Female	40.6%	24.4%	32.2%	28.3%	12.2%	67.2%
Male	42.1%	26.8%	32.2%	35.5%	10.4%	69.9%

4.1.1.2. Positive Sentiments by Gender

Table 6: Website Positive Sentiment by Gender

Website	Helpful	Good	Smart	Convenient	Friendly	Any Positive Term
Female	16.1%	12.8%	19.4%	19.4%	7.8%	42.2%
Male	20.8%	16.4%	20.8%	20.8%	12.0%	45.9%

Table 7: Mobile App Positive Sentiment by Gender

Mobile App	Helpful	Good	Smart	Convenient	Friendly	Any Positive Term
Female	22.2%	13.3%	22.2%	27.2%	10.0%	52.2%
Male	24.0%	18.6%	19.1%	32.8%	9.3%	51.4%

As seen in figures 5-8, the net sentiment score, calculated as the number of positive terms selected by a participant minus the number of negative terms, was similar for both men and women. Tables 4-7 show how frequently each term was chosen, and how often at least one positive or negative word was selected. These tables demonstrate that male and female survey participants chose similar negative terms, at similar levels, to describe immediate location awareness in websites and mobile phones. Overall, men were slightly more favorable towards location awareness in websites, while women were slightly more accepting of location awareness for mobile apps.

4.1.2. Sentiment by Age

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We also looked at the data by age group and found that, in general, the older the cohort, the more likely they were to select negative adjectives to describe website and app location awareness. Notably, however, the 30-44-year-old cohort were the most tolerant to immediate location awareness – even more so than those younger than them.

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Table 8: Net Sentiment by Age Cohort

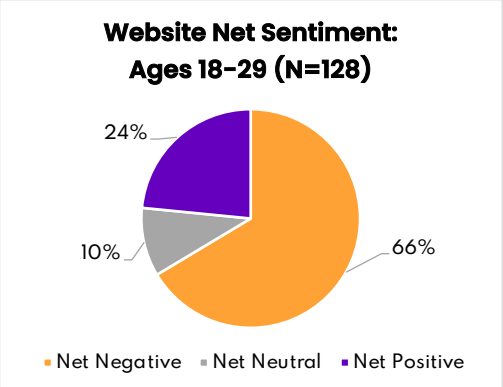
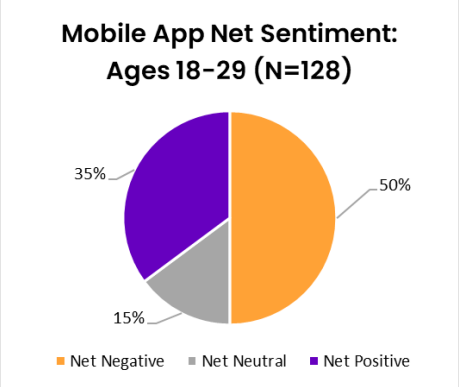
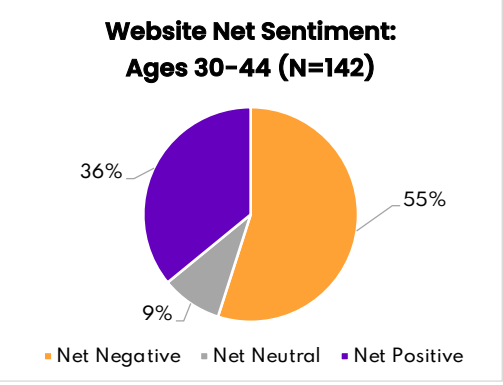
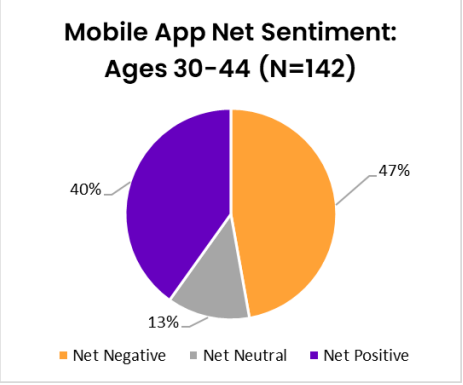
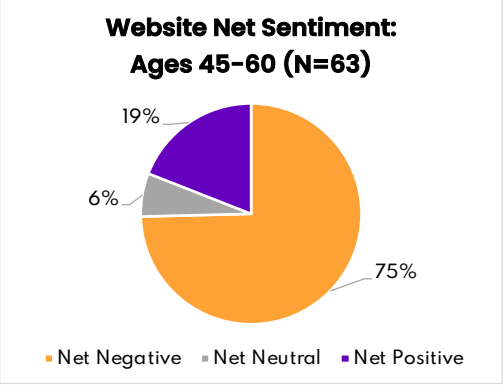
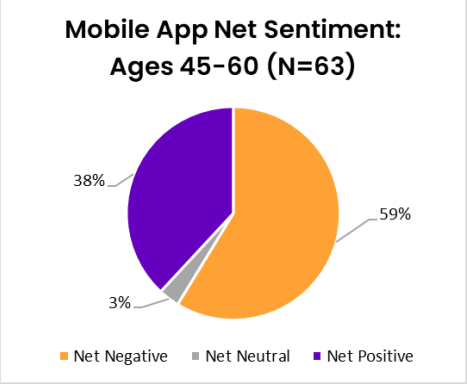
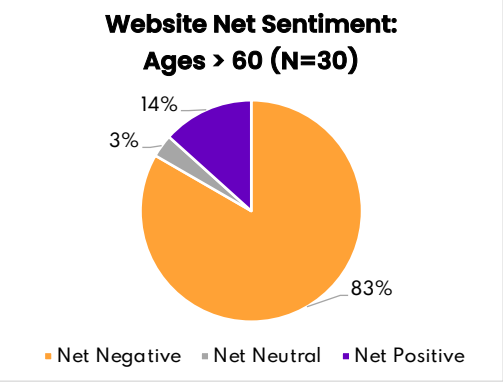
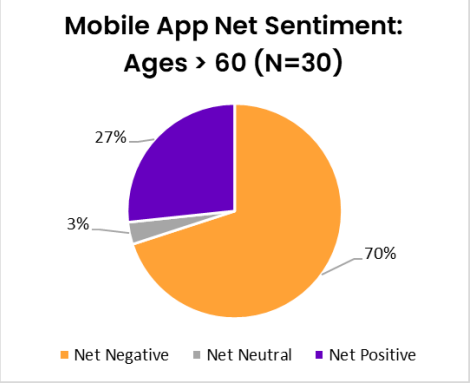
Age Cohort	Website	Mobile App
18-29	 *Figure 9*	 *Figure 10*
30-44	 *Figure 11*	 *Figure 12*
45-60	 *Figure 13*	 *Figure 14*
over 60	 *Figure 15*	 *Figure 16*

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Table 9: Website Negative Sentiment by Age

Website	Creepy	Bad	Scary	Annoying	Confusing	Any Negative Term
18-29	57.0%	24.2%	42.2%	39.1%	16.4%	82.8%
30-44	48.6%	23.9%	42.3%	32.4%	7.0%	77.5%
45-60	63.5%	36.5%	49.2%	41.3%	11.1%	87.3%
over 60	60.0%	46.7%	56.7%	53.3%	6.7%	86.7%

Table 10: Mobile App Negative Sentiment by Age

Mobile App	Creepy	Bad	Scary	Annoying	Confusing	Any Negative Term
18-29	37.5%	21.9%	29.7%	35.9%	14.1%	71.1%
30-44	43.7%	19.7%	29.6%	26.1%	9.2%	66.9%
45-60	39.7%	33.3%	39.7%	28.6%	7.9%	65.1%
over 60	50.0%	53.3%	40.0%	50.0%	16.7%	73.3%

Table 11: Website Positive Sentiment by Age

Website	Helpful	Good	Smart	Convenient	Friendly	Any Positive Term
18-29	16.4%	14.8%	18.8%	20.3%	14.1%	48.4%
30-44	23.2%	19.7%	24.6%	25.4%	8.5%	48.6%
45-60	17.5%	4.8%	15.9%	22.2%	4.8%	36.5%
over 60	6.7%	10.0%	13.3%	3.3%	10.0%	20.0%

Table 12: Mobile App Positive Sentiment by Age

Mobile App	Helpful	Good	Smart	Convenient	Friendly	Any Positive Term
18-29	21.9%	18.0%	19.5%	34.4%	7.8%	55.5%
30-44	25.4%	16.9%	20.4%	29.6%	13.4%	57.7%
45-60	23.8%	11.1%	27.0%	30.2%	6.3%	47.6%
over 60	16.7%	13.3%	13.3%	13.3%	6.7%	30.0%

One interesting finding is that people over the age of 60 were much less likely to find location seeking behavior “Convenient”. For websites, only 3% selected “Convenient” while the other age cohorts were in the 20-25% range. And for mobile apps, 13% selected “Convenient” while the other cohorts were in the 30-35% range. In sum, our survey data suggests that age is a better predictor of sentiment towards mobile app and website location awareness than gender.

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4.1.3. Devices

Since a majority of respondents (98%) used mobile phones to complete the survey, we also segmented sentiment by device. Android and iPhone users both used more negative than positive terms to describe websites and mobile apps that were immediately location aware. Overall, negative terms were chosen between 65-85% of the time (depending on which device was being used, and whether it was used on a website or a mobile app), while positive terms were chosen only 43-56% of the time. Negative terms were used slightly more frequently to describe websites (around 80 and 85% of the time) than mobile apps (around 65 and 73% of the time).

We did find a small difference in sentiment towards immediately location aware apps and websites based on device. Android users were slightly more likely to use a negative term than iPhone users - with a difference of 3.5% for mobile apps and 5% for websites. They were also slightly less likely to use a positive term – with a difference of 3.7% for websites and 6.7% for mobile apps. The choices of specific terms were quite similar across both Android and iPhone users, most often with a difference of just a few percent. A few points do stand out, however. Android users were more likely to choose the term "Bad" to describe websites and mobile apps that were immediately location aware. They were also more likely to use the term "Creepy" and "Scary" to describe mobile apps that were location aware. This negative impression is supported by some of our focus group comments, provided in section 3.6, below.

Negative Sentiments by Device Used

Table 13: Website Negative Sentiment by Device Used

Website	Creepy	Bad	Scary	Annoying	Confusing	Any Negative Term
iPhone	54.5%	20.7%	43.6%	38.4%	12.3%	79.6%
Android	54.5%	28.7%	44.8%	35.7%	9.7%	84.6%

Table 14: Mobile App Negative Sentiment by Device Used

Mobile App	Creepy	Bad	Scary	Annoying	Confusing	Any Negative Term
iPhone	36.5%	20.9%	29.4%	12.3%	32.7%	64.9%
Android	47.6%	30.8%	35.7%	6.3%	30.1%	73.4%

4.1.3.1. Positive Sentiments by Device Used

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Table 15: Website Positive Sentiment by Device Used

Website	Helpful	Good	Smart	Convenient	Friendly	Any Positive Term
iPhone	17.1%	14.7%	19.9%	23.7%	9.5%	46.4%
Android	21.0%	15.4%	21.0%	18.9%	11.2%	42.7%

Table 16: Mobile App Positive Sentiment by Device Used

Mobile App	Helpful	Good	Smart	Convenient	Friendly	Any Positive Term
iPhone	24.2%	16.1%	19.9%	32.2%	12.3%	56.4%
Android	22.4%	16.8%	22.4%	28.7%	6.3%	49.7%

4.2. How Having an Account Affects Tolerance of Location Awareness

Four survey questions investigated whether having an account affects the acceptability or tolerance of immediate location awareness, for both mobile apps and websites. Respondents were overwhelmingly more sensitive to having apps and websites know their location data when they did **not** yet have an account. If they did have an account, respondents were more comfortable with mobile apps knowing their physical location than a website.

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4.2.1. "Is Location Awareness OK?" Account vs No Account

4.2.1.1. Website

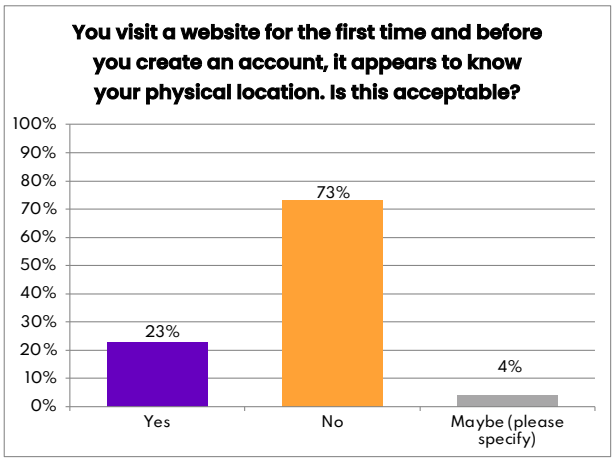

Figure 17: "Is Location Awareness OK?" Website, No Account

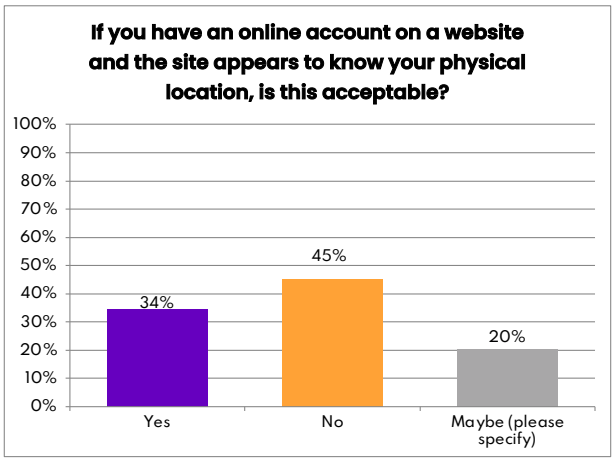

Figure 18: "Is Location Awareness OK?" Website, Account

4.2.1.2. Mobile App

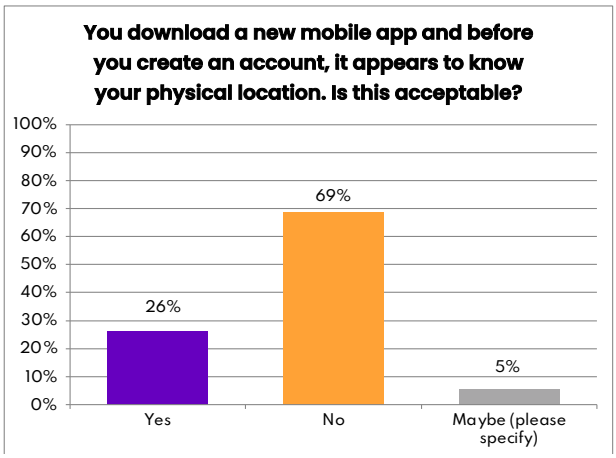

Figure 19: "Is Location Awareness OK?" Mobile App, No Account

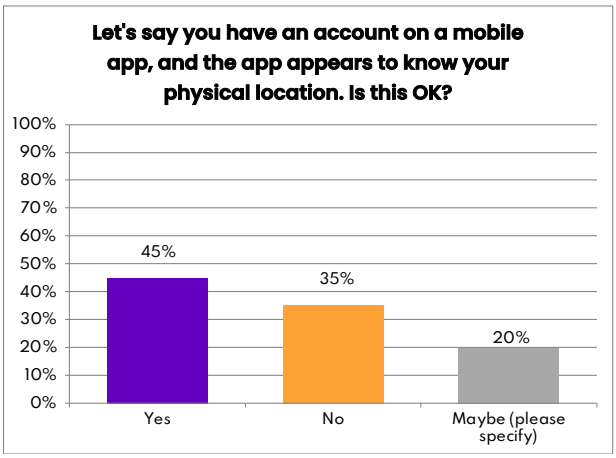

Figure 20: "Is Location Awareness OK?" Mobile App, Account

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Table 17: "Is Location Awareness OK?" Summary

N=363	Website (no account)	Mobile App (no account)	Website (with account)	Mobile App (with account)
Yes	22.9%	25.9%	34.2%	44.9%
No	72.5%	68.3%	45.2%	35.0%
Maybe	3.9%	5.2%	20.4%	19.8%
Total responding	99.2%	99.4%	99.7%	99.7%

A majority of respondents did not consider it acceptable for mobile apps and websites to be aware of your physical location at first use, before an account is created - 68.3% for mobile apps and 72.5% for websites. A very small number (5% for websites and 4% for apps) said "Maybe" it would be acceptable for a website or mobile app to know your physical location at first use. The reasons for this were varied. Website users said location awareness would be acceptable if they trusted the site, if location awareness was necessary or useful, and if they gave their permission. For mobile app users, permission was also a primary factor. Mobile users also wanted their consent to be clearly documented.

While a majority of respondents were against immediate location awareness without an account, those numbers went down significantly once a user had an account. With an account, 45% of respondents felt that it was acceptable for a mobile app to know your location, and almost 35% found this acceptable for websites. The percentage of people who indicated "Maybe" it was acceptable for a technology to know your location after you've created an account went up to 20%, for both websites and mobile apps. In this case, the most cited reasons for finding location awareness to be acceptable were if the application requires location to function or if users were able to explicitly give permission either via opt in or device settings.

4.2.2. "Maybe" it's OK – Analysis

We also conducted a closer analysis of the reasons and explanations given by the 179 respondents that chose "Maybe" it was OK for a website or mobile app to know your location – both upon first use, and after an account has been created.

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Over 80% (147 out of 179) of the "Maybe" responses referred to situation where users had an account, indicating that having an account was an important initial factor. Almost 60% (87 out of 147) of the reasons why location awareness "Maybe" acceptable when a user already had an account involved some sort of "permission," with the answers evenly divided for both websites and mobile apps. Around 35% of responses (64 out of 179) indicated that some use or purpose were necessary. Again, these responses related mostly (55 out of 64) to cases where users already had an account.

Overall, people indicated that they would be OK with sharing location information if they were able to give their permission or if the location information was somehow necessary or required. Not all answers explicitly used the term "permission" or "required". For example, some respondents wrote "if I approve" or "if I have enabled location services," which indicates permission, or "when ordering food" or "depends on what the app is used for," which indicates a reasonable need. Generally, responses that included terms such as: "allow", "let", "permit", "choice" or "ask" were counted among those that require "permission" and responses including terms such as: "use", "need" or "require", or that mention a specific scenario, were counted among those that indicated a reasonable need for the data. Raw responses from the survey responses that indicate "Maybe" can be found in Appendix G.

4.3. Location Tolerance Scenarios

The survey included eight scenarios in which participants were asked if it is acceptable for a digital technology to know their physical location. Some of the scenarios, such as delivering groceries, had a more obvious need for location data, while for others, the need for exact location was not as clear. For each scenario, we inquired about the level of location detail that it was acceptable for the website or mobile app to have. Specifically, for each scenario, we asked if it was OK for the website or mobile app to know the respondent's country, state, zip code, home address, exact location, or none of these. We also asked respondents about the specific context or duration of location awareness – "never", "one time only", "only when I am using the app/site", "for a limited period of time" or "all the time." Respondents were able to select multiple options for acceptable location information.

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4.3.1. When Location Information May Be Necessary

The survey presented three different scenarios in which location information is relevant – although the user's current physical location may not be necessary. These scenarios included: (1) ordering groceries, (2) checking weather and traffic at a vacation destination and (3) sending a gift to an out-of-town friend.

Scenario 1: Ordering Groceries

When ordering groceries from an online store, the assumption is that the store needs to know where to deliver the groceries. In typical cases, the delivery address and home address are the same. The shopper may or may not be at the delivery location when the order is placed. In this scenario, the shopper is ordering groceries to be delivered to their home, and the website or app is requesting the shopper's physical location.

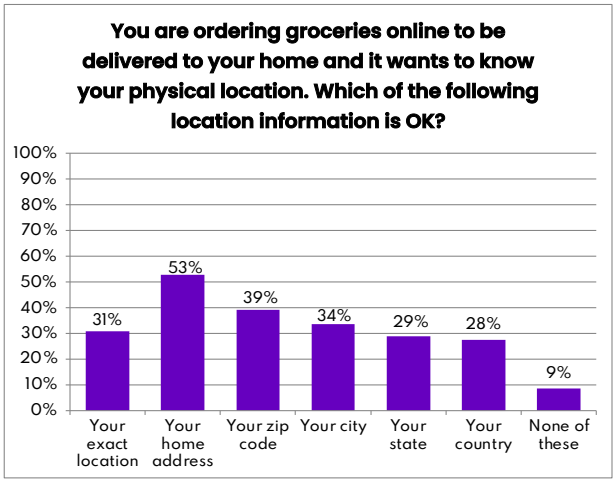

Figure 21: "Is Location Awareness OK?" Ordering Groceries

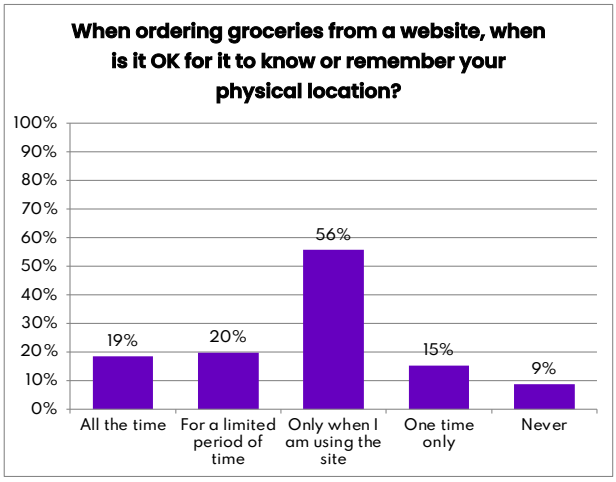

Figure 22: "Ok to Remember Location?" Ordering Groceries

When ordering groceries online, respondents were pretty specific about what was acceptable. For instance, over 50% of respondents found it acceptable for the technology to know one's "home address", while all other choices were selected by fewer than 40% of respondents. In particular, only 31% thought having one's "exact location" known was OK. Similarly, most respondents (56%) said it was OK for the site to know or remember their physical location "only while they were using the site," and the remaining options were all chosen by fewer than 20% of respondents.

Scenario 2: Weather and traffic in vacation location

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The assumption is that your vacation location is outside your local vicinity, and the website or mobile app does not need to know your physical location if you want to see weather or traffic reports there. However, your physical location may be relevant if a map of your route is being mapped.

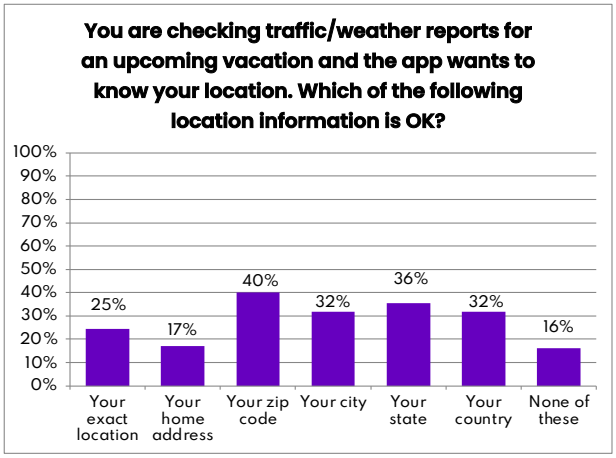

Figure 23: "Is Location Awareness OK?" Traffic/Weather

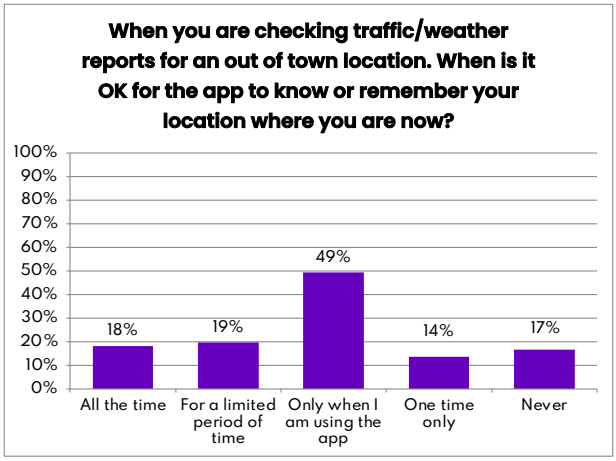

Figure 24: "Ok to Remember Location?" Traffic/Weather

When checking weather or traffic reports at an out-of-town location, less than 25% of respondents thought that it was acceptable for the site to know their "exact location," and even fewer, about 17% thought it was OK for the site to know their "home address". Most (40%) found knowing the zip code to be acceptable, while "state" (35%) and "country" (32%) were chosen by a slightly lower percentage. Almost 50% of respondents found it acceptable for the app to know or remember their location "only when I am using the app." Other options were chosen by less than 20% of respondents. People may be tolerant of location awareness in this type of app because they also use it to check local conditions as they move about an area.

Scenario 3: Sending a Gift

If you are buying a gift to send to an out-of-town friend, the assumption is that the technology does not need to know your physical location.

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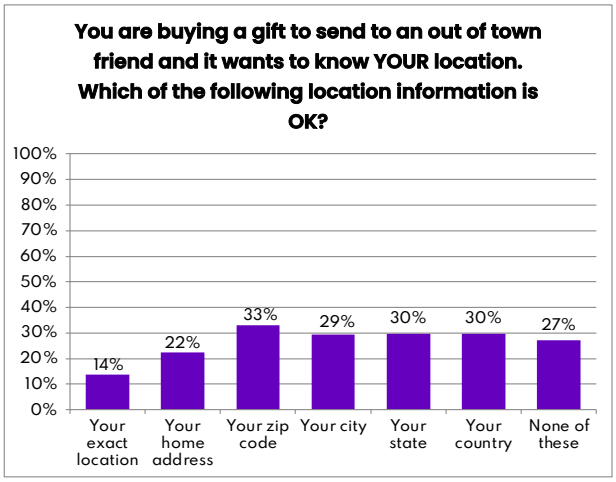

Figure 25: "Is Location Awareness OK?" - Gift

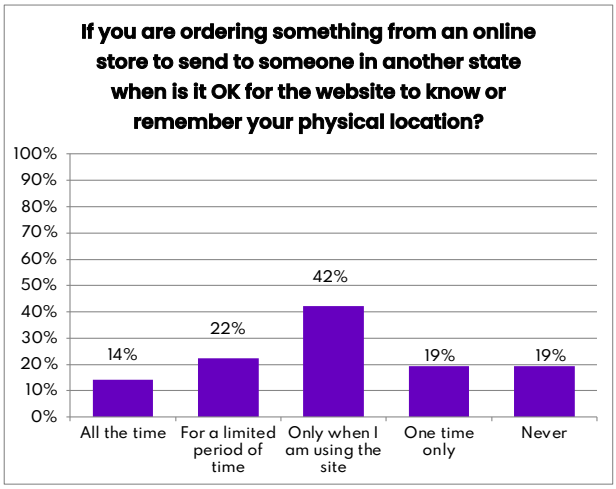

Figure 26: "Ok to Remember Location?" - Gift

When buying a gift to be delivered to a friend in a different town, respondents found that it was acceptable for the technology to know their physical location pretty infrequently – about 22% chose "home address" and around 15% chose "exact location." The other choices – zip code, city, state and country – were chosen by around 30% of respondents. And finally, 27% chose "None". In this scenario, the biggest percentage of respondents - 42%- indicated it was OK for the site to have their info "only when I'm using the site." Three of the remaining categories – "For a limited period of time," "One time only," or "Never" - were chosen by around 20% or respondents, while only 14% indicated it was OK for the site to know or remember their location "All the time".

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4.3.1.1. Comparing Across 3 Location-Necessary Scenarios

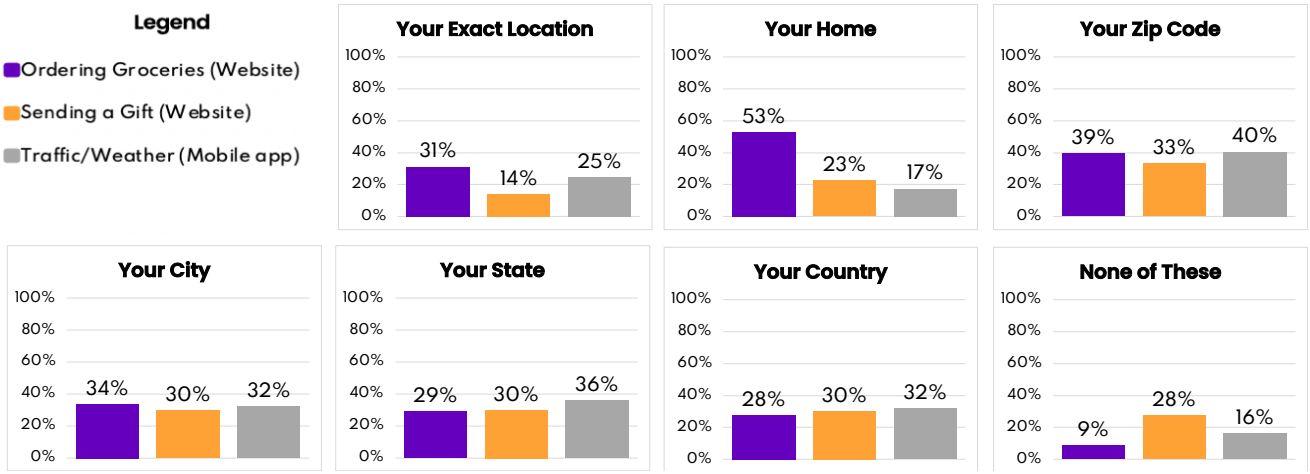

Figure 27: Location Acceptance Across Location-Necessary Scenarios by Location Data Type

Table 18: Location Data Acceptance Across Location-Necessary Scenarios

	Your exact location	Your home address	Your zip code	Your city	Your state	Your country	None of these
Ordering Groceries	31%	53%	39%	34%	29%	28%	9%
Sending a Gift out of town	14%	23%	33%	30%	30%	30%	28%
Traffic/Weather out of town	25%	17%	40%	32%	36%	32%	16%

Comparing across these three scenarios, we find that having the technology know one's home address was acceptable to the most people (53% of respondents) when ordering groceries – which makes perfect sense, as the home address is where the groceries most likely need to be delivered. Outside of this particular case, roughly 28 – 40% of respondents generally found it acceptable in these scenarios for a website or app to know their zip code, city, state or country. Respondents were the most sensitive to giving out their exact location information when sending a gift out of town. In that scenario, having the site know a "Your exact location" was chosen by only 14% of respondents, and 28% - the highest percent of the three scenarios - indicated that "None" of the choices were acceptable.

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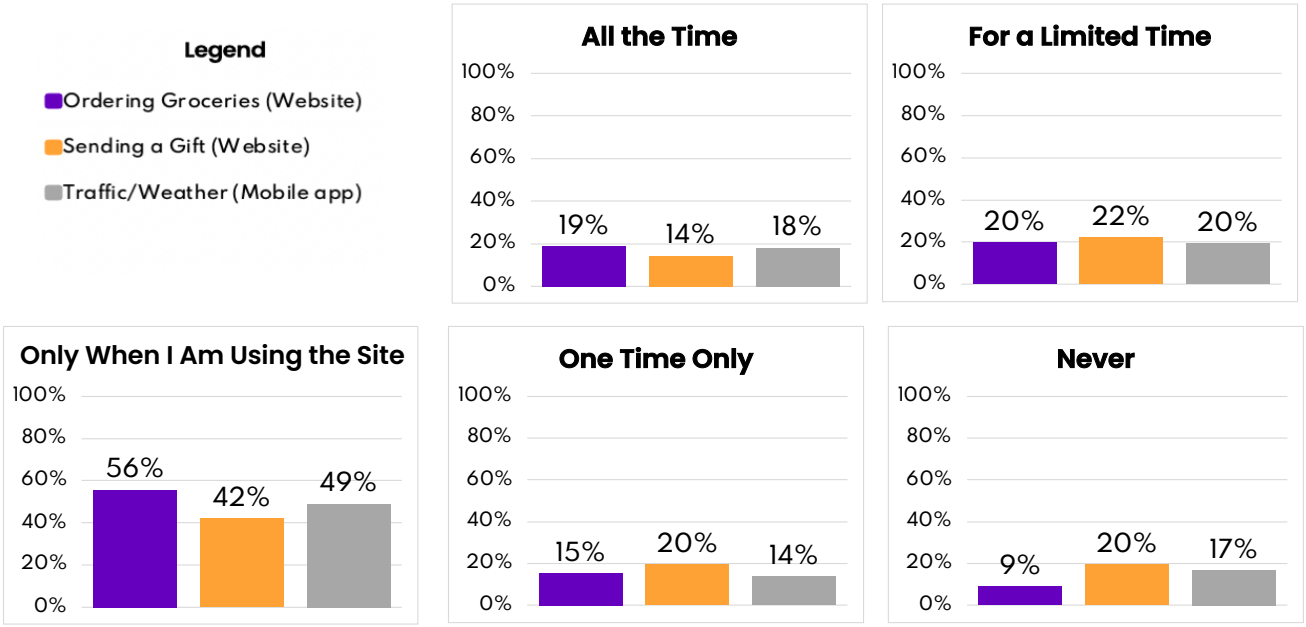

Figure 28: Location Acceptance Across Location-Necessary Scenarios by Duration of Use

Table 19: Location Duration of Use Acceptance Across Location-Necessary Scenarios

	All the time	For a limited period of time	Only when I am using the site	One time only	Never
Ordering Groceries	19%	20%	56%	15%	9%
Sending a Gift	14%	22%	42%	20%	20%
Traffic/Weather	18%	20%	49%	14%	17%

Most respondents, when presented with these three scenarios, indicated a preference for the site to remember or know their location "Only when I am using the site" – this option was selected by 42-56% of respondents. In other words, in these scenarios, roughly half of shoppers would prefer that sites not know or remember their location information when they are not using it. The remaining options – "One time only", "For a limited period of time", "Never" and "All the time" – were generally selected by around 20% of respondents. Again, respondents were the most tolerant of location awareness in the ordering groceries scenario, where only 9% found it to be "Never" OK for the site to know their physical location, and 19% felt that it was OK "All the time".

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4.3.2. When Location Awareness is Not Necessary

Scenarios 4 – 8 in the survey involved cases where a website or mobile app may request location information even when this information does not appear necessary. These scenarios included: (1) when you are watching a video, (2) creating a new email account, (3) using an online coupon at a new e-commerce site, (4) downloading software and (5) downloading educational software for a child. This final scenario was included due to our recent research on mobile apps developed for schools, which found that many of these apps exposed student information.[8] The response choices presented in these scenarios were the same as with the earlier scenarios – people were asked about the degree and duration of location awareness, with the option to select multiple answers.

Scenario 4: Watching a Video

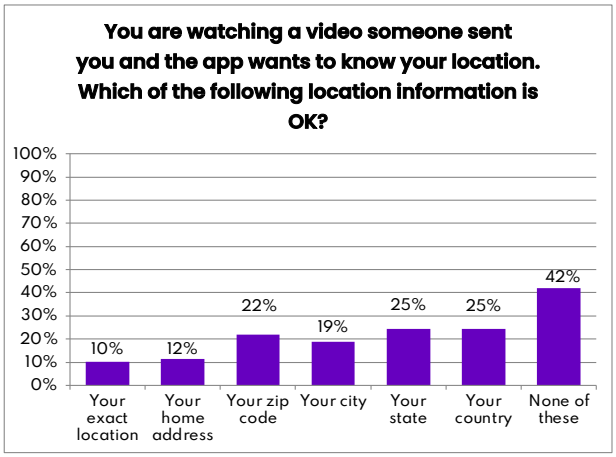

Figure 29

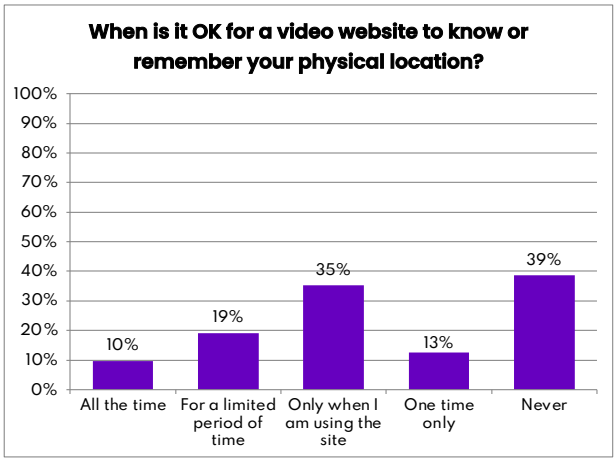

Figure 30

[8] *LeVasseur, L., Edwards, Z., & Alexanyan, K. (May 4, 2021). "Me2B Alliance Spotlight Report #1: Me2B Alliance Product Testing Report: School Mobile Apps Student Data Sharing Behavior." https://me2ba.org/school-mobile-apps-student-data-sharing-behavior/*

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Scenario 5: Creating an Email Account

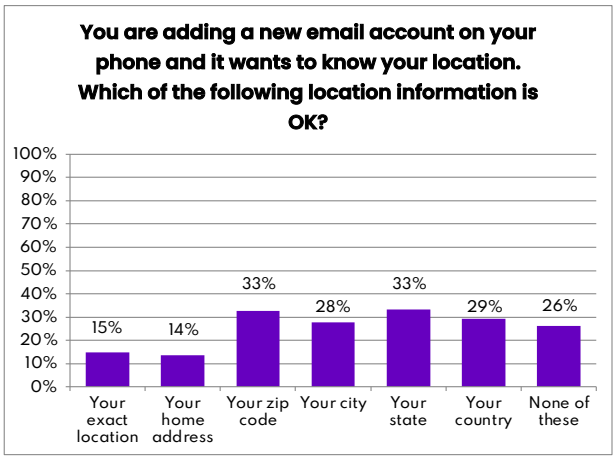

Figure 30

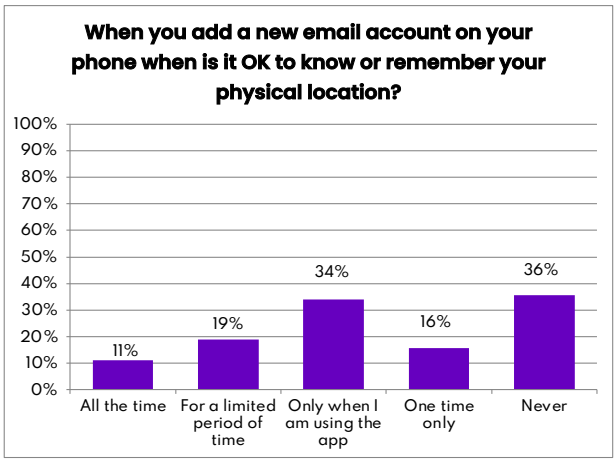

Figure 31

Scenario 6: Using a New E-commerce Site

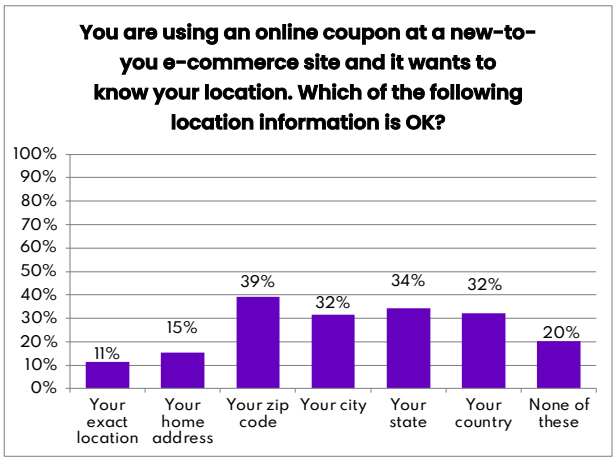

Figure 32

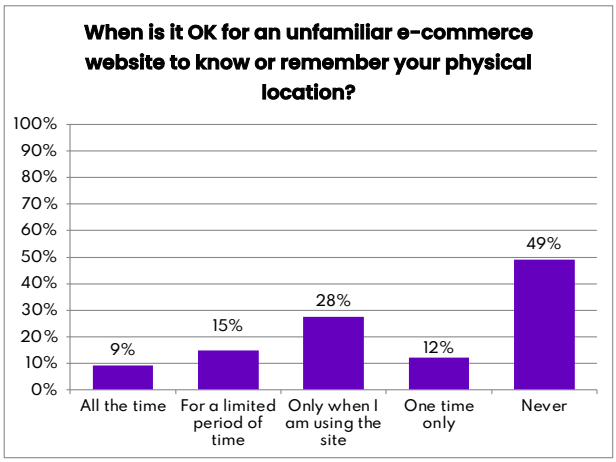

Figure 33

Scenario 7: Downloading Software

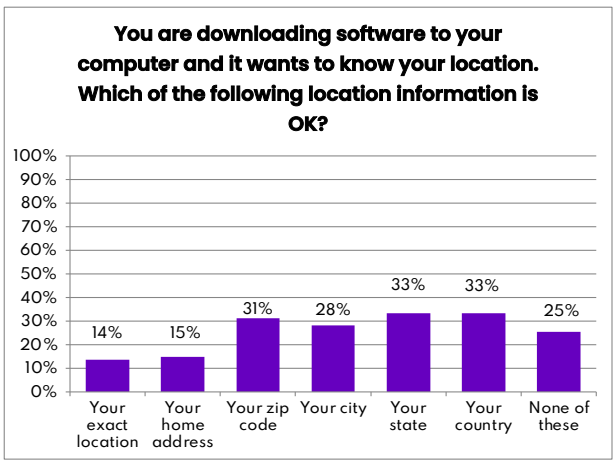

Figure 34

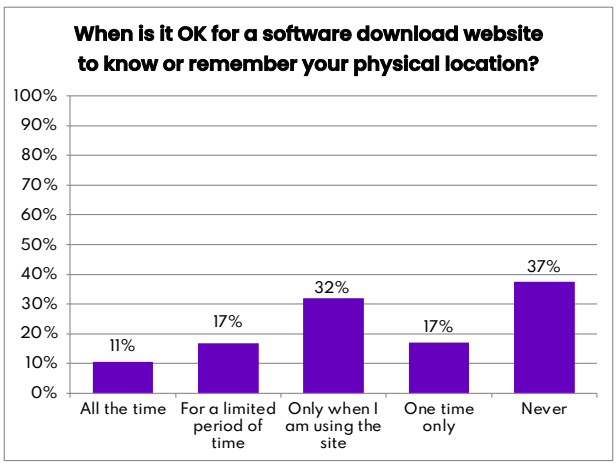

Figure 35

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Scenario 8: Downloading Educational App for 4th Grader

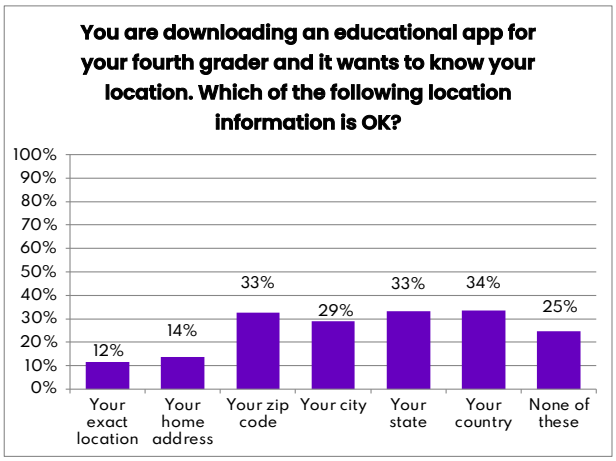

Figure 36

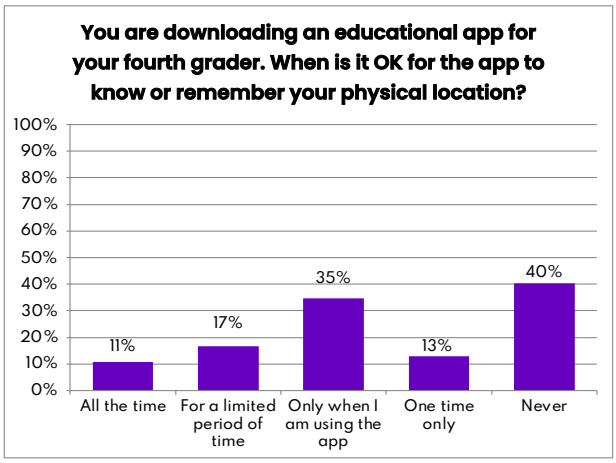

Figure 37

4.3.3. Comparing Across 5 Location-Not-Necessary Scenarios

4.3.3.1. Location Acceptance by Location Data Type

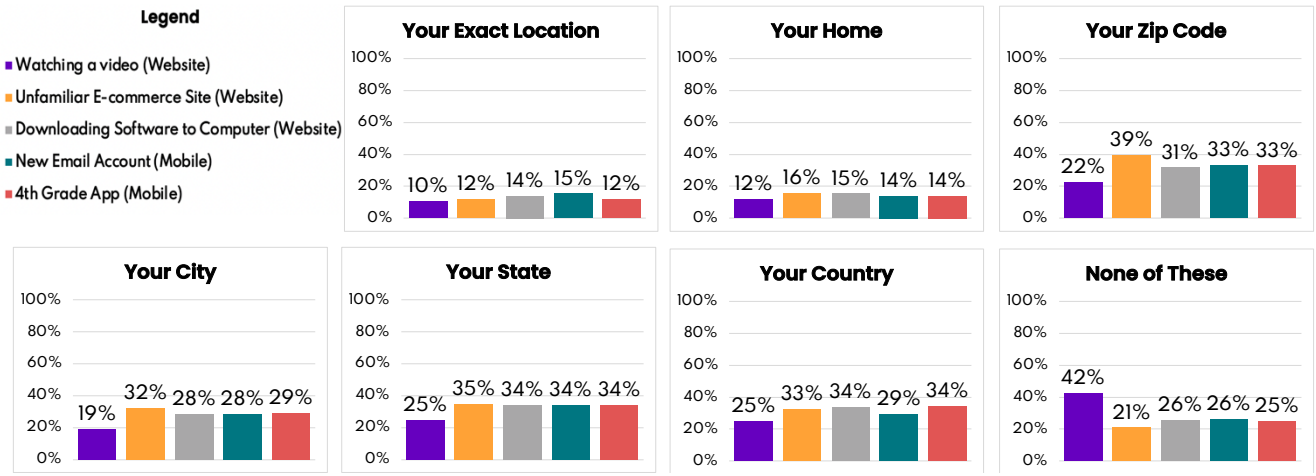

Figure 38: Location Acceptance in Location-Not-Necessary Scenarios by Location Data Type

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Table 20: Location Data Acceptance Across Location-Not-Necessary Scenarios

	Your exact location	Your home address	Your zip code	Your city	Your state	Your country	None of these
Watching a video	10%	12%	22%	19%	25%	25%	42%
Unfamiliar E-commerce	12%	16%	39%	32%	35%	33%	21%
Downloading Software to Computer	14%	15%	31%	28%	34%	34%	26%
New Email Account	15%	14%	33%	28%	34%	29%	26%
4th Grade App	12%	14%	33%	29%	34%	34%	25%

4.3.3.2. Location Acceptance by Location Use Duration

The percentage of responders choosing how long it was acceptable for a technology to know or remember location was also relatively consistent across scenarios. A majority of responders (65-84%) felt that it was either "Never" acceptable for a service provider, website, or mobile app to know or remember their location, or acceptable "Only when I am using the site". Specifically, roughly 36-49% of respondents selected "Never" and 28-35% selected "Only when I am using the site". The most sensitive case was the unfamiliar e-commerce site – almost 50% of respondents felt that it was "Never" acceptable for a new e-commerce site to know or remember their location information. In the first set of scenarios, where location awareness was reasonable, up to 19% of respondents felt that the technology could know or remember their location "All the time". In contrast, in this set of scenarios, not more than 11% of respondents found that acceptable.

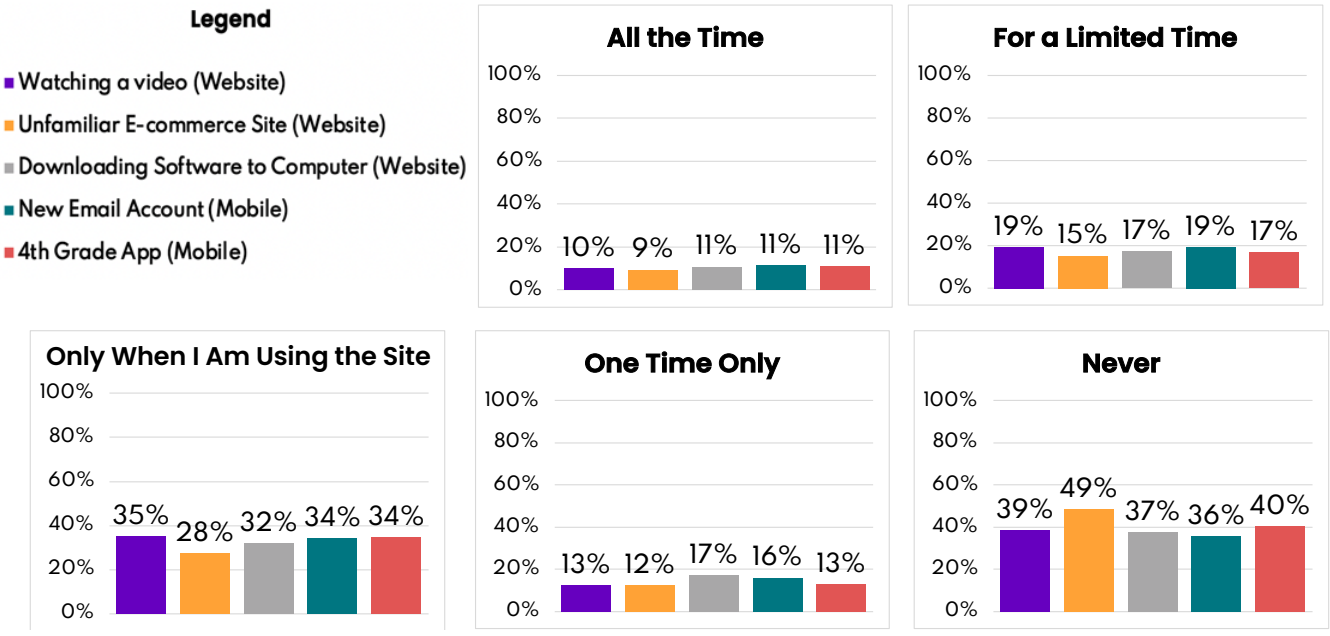

Figure 39: Location Acceptance Across Location-Not-Necessary Scenarios by Duration of Use

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Table 21: Location Duration of Use Acceptance Across Location-Not-Necessary Scenarios

When is it OK to know your location?					
	All the Time	For a limited period of time	Only when I am using the site	One time only	Never
Watching a video	10%	19%	35%	13%	39%
Unfamiliar E-commerce Site	9%	15%	28%	12%	49%
Downloading Software to Computer	11%	17%	32%	17%	37%
New Email Account	11%	19%	34%	16%	36%
4th Grade App	11%	17%	34%	13%	40%

4.3.4. Comparing Across All Scenarios

We found some interesting similarities and differences in how participants responded to scenarios where location awareness seemed more relevant (scenarios 1-3), versus where location awareness was not as necessary (scenarios 4-8) – especially when looking at how sensitive respondents were to the level of location detail provided.

1. Ordering groceries
2. Weather and traffic in a vacation location
3. Sending a gift to an out of town recipient
4. Watching a video
5. Creating an email account
6. Using an e-commerce site/app
7. Downloading software
8. Downloading an educational app

For example, the geographic information – country, state, city and zip code – had a relatively similar percentage of responses (20-40%) for all eight scenarios (figures 27 and 38, tables 18 and 20). On the other hand, participants were more comfortable sharing their "home address" or "exact location" for scenarios where location awareness was relevant (scenarios 1 –3) and the range in those cases was quite

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large – from 14% - 53% - depending on scenario. In those scenarios where location information was less relevant (scenarios 4-8), participants were consistently less comfortable sharing “home address” or “exact location” (chosen by around 10-12% of respondents) (figure 38, table 20). Similarly, in scenarios where location awareness was less relevant, 20-26% of participants consistently felt that “None of these” location options were acceptable to share (figure 38, table 20). In the first three scenarios – where location information was more clearly relevant - the percentage of participants who specified “None of these” location options were acceptable varied quite a bit - from 9% - 28%, depending on the specific scenario (figure 27, table 18) These differences indicate that location awareness is something respondents are sensitive to, and the specific context in which this information is requested – and how apparent the need for location information is – makes a difference. These findings reveal how people prefer to have control over the degree and duration of location sharing.

4.4. Open-Ended Survey Comments

The final question on the survey was open-ended, asking: “Generally, what needs to happen for it to be OK for a website or a mobile app to know your physical location?” Most respondents reiterated their recognition that the website or app’s need for location information to function was a reasonable condition for providing that information. Additionally, many responses (see sample below) indicate that people want to have the ability to explicitly allow location awareness through actively opting in or providing permission.

“I do feel like my location is always tracked, through numerous sites. You disclose your location to strangers on eBay and other sites all the time. You also disclose it to numerous businesses routinely**. I don't want my location to be tracked, but I give my location out constantly.**

“Why does this app need my location? For marketing or is the information stored in a database? Our personal information is sold to companies all the time. Why wouldn't our locations be as well?”

“If they’ve disclosed clearly that is a condition of use, and it confirms it will no longer track, if I [can] opt out of it, then it’s acceptable.”

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“It is only ok when I am fully aware that it is tracking me. If I don’t feel comfortable, I should have the right to deny it’s access.”

For a deeper look, we used the Carrot2 Clustering Workbench program to identify word clusters and highlight common themes in the responses. The following image indicates the prevalence of various terms and phrases:

57 clusters were created from 361 responses. The most common terms were “Ask” (39 responses) or “Ask Permission” (23 responses), indicating that individuals are by far more comfortable with location awareness if they have been asked to give permission. “Allow” (12 responses), “Access” (11

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responses) and “Consent” (9 responses) also indicate potential action on the part of the individual to allow access to location information. Other terms that were frequently used included “Service” (13 responses) “Reason” or “Good Reason” (16 responses) and “Purpose” (5 responses), which indicates that if the service had a reason to use the location information it would be acceptable for the website or app to know it. Terms such as “Delivery” (12 responses) and “Ordering” (11 responses”) indicate specific scenarios where the app or website might need to know the location in order to deliver a product. Terms such as “Weather” or “Weather app” (13 responses), “Directions” (6 response) and “Map” (5 responses) also indicate scenarios where a specific location might be required. Clusters including “Security” (10 responses), “Trust” (10 responses), “Privacy” (9 responses) and “Safe” or “Safety” (10 responses) indicate a concern around risk. A complete list of cluster terms and phrases can be found in Appendix F.

4.4.1. Qualitative Analysis – Focus Groups and Interviews

We also drew quotes from interviews and focus groups that were relevant to the location awareness topic. Detailed information about the focus group participants is in Appendix D.

One focus group participant described their perception of tracking behavior, expressing a preference for location tracking on a computer, because *“on your computer…you’re just in that one location anyway,”* whereas on a mobile phone, once consent is given *“that might stay there and they’ll keep tracking you forever.”* (Janice, 7/19/21)

One respondent was explicit about the intrusive nature of location consent, and the importance of relevance: “I do feel like the location consent is…very intrusive because a lot of times whatever I might be looking at, the locations shouldn't be relevant. If I want to take it to the next step and map out directions, or find a store in my area or something like that, I can see why they might want to confirm my location… But when it's upon opening up a new app or a new website, I find it very frustrating, especially when it's a website and I'm on a laptop... I might be Googling something real quick at work, and I'm like, “why do they need to know my work location?” (Tammy 7/19/21)

Many respondents felt that location awareness acceptability depended on the purpose of the website or mobile app, and whether the location awareness was necessary to provide useful information: “*Like if it's a shopping app to locate a store closest to you” or “...if I'm using any type of ride-sharing program, they*

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need to kind of know where I'm at" (Kristin 7/19/21) "*GPS type apps, they're gonna need my location, you know? So, is it kind of a level playing field? Depending on what the app is, because some of them would have to have information about you.*" (Janice 5/26/21)

More than one respondent noted the persistent tracking behavior of Google, especially related to having an Android phone. "I once a month now get an email from Google, which tells me my itinerary of places…. And I never asked for that. And so they're obviously just tracking me…. You know, but it's **unnecessary and I never asked for it."** (Janice 7/19/21) "I've gone to the store and then within 15 minutes of getting home, Google [is] sending me a consumer feedback opinion survey asking me: Was I at this store and did I buy anything and "Can you take a picture of your receipt? ... I mean their confidence isn't high enough to say, "Yes, this was [Walter],' but if you fill out the survey then they can close that gap and they now have 100% confidence…. And they'll give you…$0.75 of Google Play store credit, so "see, it was totally worth it now," right? ….Sometimes it'll be a day or two later. But this morning I literally had one like 10 minutes after I got home. I had a notification it's like 'Hey, where were you out here and which one of these stores in this plaza did you stop at?' So it was a physical purchase. Yep, just by having an Android phone in my pocket, you know." (Walter 7/18/21)

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5. Insights

The research described in this report was developed to explore consumer perspectives towards location sharing with digital technologies and to validate passing criteria of specific location tests in the Me2BA Respectful Technology Specification. Two primary research questions guided our work:

1) How do people feel when a website or mobile app automatically knows their location?
2) When is it acceptable for a website or mobile app to know one's location?

Key insights from our research include:

1. **Participant sentiment is more negative than positive towards a website or app that "knows your physical location when you first open it".** The terms used to describe websites and apps that are immediately location aware were more often negative than positive. In addition, four of the top five terms used were negative (Creepy, Scary, Annoying and Bad), with "Convenient" being the one positive. 65% of respondents had an overall negative sentiment towards a website that knew their location upon first open; 52% of respondents had an overall negative sentiment towards a mobile app that knew their location upon first open. **30% of respondents indicated that it was "Convenient" for a mobile app to know location information upon first open**; this may reflect the element of agency involved in selecting and installing apps creating more tolerance around location awareness in apps versus websites. **Android users were slightly more likely to use negative terms to describe location aware apps and websites than iPhone users, and age appears to be a better predictor of sentiment than gender.** We found very little difference in sentiment between male and female respondents. When looking at sentiment by age group, we found that, in general, the older the cohort, the more likely they were to select negative adjectives to describe website and app location awareness. Notably, however, **the 30-44-year-old cohort were the most tolerant to immediate location awareness** – even more so than those younger than them.

2. **About 70% of respondents indicated it was unacceptable for either a website or an app to know their location before the creation of an account - a "Me2B Marriage".**

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3. **Respondents were more tolerant of location sharing if they had an account than if they did not.** If they *did* have an account, respondents were more comfortable with mobile apps knowing their physical location (45% Yes) than websites (34% Yes). 45% of respondents, however, still felt it was still unacceptable for websites to know their location even with an account. For both websites and mobile apps, "Maybe" responses jumped from 4% (website) and 5% (mobile app) to 20% (both) when respondents have an account, which suggests that having an account increases tolerance for location awareness. **Even though we weren't testing for it, these findings validate the importance of the Me2B Marriage state as meaningful context for how people experience their Me2B relationships.**

4. **The specific context in which location information is requested – including the website/app's need for location information – makes a difference in how accepting or tolerant people are towards sharing that information.** **P**articipants were more comfortable sharing their "home address" or "exact location" for scenarios where location awareness was relevant. **Depending on the scenario, respondents preferred that websites or mobile apps know or remember their location either not at all ("never"), or "only when I am using the site".**

5. **Terms used in response to a general question about when location awareness is acceptable highlighted agency and permission, as well as issues of trust and safety, and the importance of specific contexts.** The two largest term clusters were "Ask" and "Ask Permission," while other leading clusters were around related terms such as: Allow, Access, Consent, Reason or Good Reason, as well as: Security, Trust, Privacy, Safe and Safety. Context specific popular terms included: Delivery, Ordering, Weather, Directions and Map. **Specific quotes from interviews and focus groups also illustrate the significance of permission, relevance, and control in order for a digital technology to feel respectful.** These include:

"I don't want my location to be tracked, but I give my location out constantly."

"Location consent is intrusive - often the locations shouldn't be relevant."

"If I don't feel comfortable, I should have the right to deny it's access."

"I might be Googling something real quick at work, and I'm like, "why do they need to know my work location?""

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“So they're obviously just tracking me…. it's unnecessary and I never asked for it.”

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6. Conclusion

Our research demonstrates that location awareness is something people are sensitive to, and that people prefer to have control over the location data being shared. Website and mobile app consumers are aware in most cases that technologies may track their location. The specific context in which this information is requested, and, in particular, the relevance of the location information to the task, affects how accepting people are of sharing their location information – and to what degree, and for what length of time.

People are more negatively inclined towards a website or mobile app that automatically knows their location – but, again, context matters. Convenience is a primary factor, while such sites are also seen as "Creepy, Scary, Annoying and Bad." Key variables that make location awareness acceptable are asking permission and having a valid reason for needing this information.

Based on this research, we find that, in order for people to consider it acceptable for a digital product to know their location, two essential conditions must be met:

1. The person must have agency over granting access to location information, and
2. There needs to be is a legitimate and understandable need for location info.

Finally, and perhaps most importantly, our research supports the scoring used in the Me2BA Respectful Technology Specification. Based on this work, we are confident that the current passing/failing behavior related to a website or mobile app's location awareness in the Me2BA Respectful Technology Specification accurately reflects the tolerances and sensitivities of individual Me-s, and indeed defines respectful behavior relating to the collection and use of location information.

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Appendix A: Definitions

B: The "B" in Me2B represents the businesses, vendors and service providers that individuals interact with, both online and offline. In GDPR terms, this is the Data Controller.

Location Awareness: A digital technology's awareness of the user's current physical location.

Location Tolerance: The degree to which a Me will accept their location information being remembered or stored by the digital technology.

Location Access: The ability of a digital technology to establish a Me's physical location.

Location Behavior: The actions taken by a digital technology to access, use, or track a Me's location.

Location Use: The use of location information by a digital technology.

Me: The "Me" in Me2B represents the individual actor – the "Data Subject" in GDPR terms. In this report we are referring to the individual consumer or user of a digital technology.

Me2BA: An acronym for the Me2B Alliance.

Me2BA Commitment: the specific commitment or bargain – such as agreeing to cookies or signing up for a newsletter – that Me's enter into with a vendor or service provider over the course of most Me2B relationships. These commitments represent inflection points in the relationship trajectory. See "Flash Guide #8: Digital Me2B Commitments and Deals", https://me2ba.org/flash-guide-8-digital-me2b-commitments-deals/ .

Me2BA Respectful Technology Specification: a collection of tests that provide an objective measure of technology behavior. The tests are designed to measure how safe and respectfully a service or product is behaving. The specification is produced by the Me2B Alliance's Respectful Tech Specification Working Group.

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Appendix B: Survey Questionnaire

Location Awareness Acceptance Survey - Full

Location Awareness - Scenarios

We are interested in learning about your experiences with websites and mobile apps. In particular, we would like to know when it is acceptable for a website or mobile app has access to your location.

Please review the following scenarios. When is it OK for the app or website to know your location?

1. How would you describe a WEBSITE that knows your physical location when you first open it? Check all boxes that apply.

- Friendly
- Creepy
- Convenient
- Scary
- Annoying
- Bad
- Smart
- Confusing
- Helpful
- Good

2. How would you describe a MOBILE APP that knows your physical location when you first open it? Check all boxes that apply.

- Helpful
- Creepy
- Scary
- Confusing
- Smart
- Good

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- Friendly
- Convenient
- Annoying
- Bad

3. If you have an online account on a WEBSITE and the site appears to know your physical location, is this acceptable?

- Yes
- No
- Maybe (please specify)

4. Let's say you have an account on a MOBILE APP, and the app appears to know your physical location. Is this OK?

- Yes
- No
- Maybe (please specify)

5. You download a new mobile app and before you create an account, it appears to know your physical location. Is this acceptable?

- Yes
- No
- Maybe (please specify)

6. You visit a website for the first time and before you create an account, it appears to know your physical location. Is this acceptable?

- Yes
- No
- Maybe (please specify)

* 7. You are ordering groceries online to be delivered to your home and it wants to know your physical location. Which of the following location information is OK? Check all that apply.

- Your exact location
- Your home address
- Your zip code

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- Your city
- Your state
- Your country
- None of these

8. When ordering groceries from a website, when is it OK for it to know or remember your physical location? Check all that apply.

- All the time
- For a limited period of time
- Only when I am using the app
- One time only
- Never

* 9. You are downloading software to your computer and it wants to know your location. Which of the following location information is OK? Check all that apply.

- Your exact location
- Your home address
- Your zip code
- Your city
- Your state
- Your country
- None of these

10. If you are ordering something from an online store to send to someone in another state when is it OK for the website to know or remember your physical location?

- All the time
- For a limited period of time
- Only when I am using the app
- One time only
- Never

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* 11. You are checking traffic/weather reports for an upcoming vacation and the app wants to know your location. Which of the following location information is OK? Check all that apply.

- Your exact location
- Your home address
- Your zip code
- Your city
- Your state
- Your country
- None of these

12. When you are checking traffic/weather reports for an out of town location. When is it OK for the app to know or remember your location where you are now?

- All the time
- For a limited period of time
- Only when I am using the app
- One time only
- Never

* 13. You are using an online coupon at a new-to-you e-commerce site and it wants to know your location. Which of the following location information is OK? Check all that apply.

- Your exact location
- Your home address
- Your zip code
- Your city
- Your state
- Your country
- None of these

14. When is it OK for a video website to know or remember your physical location?

- All the time
- For a limited period of time

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- Only when I am using the app
- One time only
- Never

* 15. You are buying a gift to send to an out of town friend and it wants to know YOUR location. Which of the following location information is OK? Check all that apply.

- Your exact location
- Your home address
- Your zip code
- Your city
- Your state
- Your country
- None of these

16. When is it OK for an unfamiliar e-commerce website to know or remember your physical location?

- All the time
- For a limited period of time
- Only when I am using the app
- One time only
- Never

* 17. You are adding a new email account on your phone and it wants to know your location. Which of the following location information is OK? Check all that apply.

- Your exact location
- Your home address
- Your zip code
- Your city
- Your state
- Your country
- None of these

18. When is it OK for a software download website to know or remember your physical location?

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- All the time
- For a limited period of time
- Only when I am using the app
- One time only
- Never

* 19. You are watching a video someone sent you and the app wants to know your location. Which of the following location information is OK? Check all that apply.

- Your exact location
- Your home address
- Your zip code
- Your city
- Your state
- Your country
- None of these

* 20. When you add a new email account on your phone when is it OK to know or remember your physical location?? Check all that apply.

- All the time
- For a limited period of time
- Only when I am using the app
- One time only
- Never

* 21. You are downloading an educational app for your fourth grader and it wants to know your location. Which of the following location information is OK? Check all that apply.

- Your exact location
- Your home address
- Your zip code
- Your city
- Your state

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- Your country
- None of these

22. You are downloading an educational app for your fourth grader. When is it OK for the app to know or remember your physical location?

- All the time
- For a limited period of time
- Only when I am using the app
- One time only
- Never

* 23. Generally, what needs to happen for it to be OK for a website or a mobile app to know your physical location?

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Appendix C: Screening Survey

Question 1 (Pick one)

Do you have reliable Internet service in your home?

- Yes (accept)
- No (reject)
- Not sure (reject)

Question 2 (Pick one)

What kinds of computing devices do you frequently use?

- Computer (accept)
- Smartphone (accept)
- Tablet (accept)
- Smart TV or Smart DVD/Blueray player (accept)
- Connected device (accept)
- Connected wearable (accept)
- Smart speaker or personal assistant (accept)
- Other (accept)
- None of the above (reject)

Question 3 (Pick one)

In which of the following sectors do you work?

- Banking or finance (accept)
- Business management (accept)
- Healthcare (accept)
- Law (reject)
- Manufacturing (accept)
- Retail/Wholesale (accept)
- Technology (reject)
- Media (accept)
- Education (accept)

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- Other/none (accept)

Question 4 (Pick one)

Do you live or work in any of the following locations? Austin, Boston, Chicago, Los Angeles, New York City, Raleigh-Durham, Redmond (WA), San Francisco Bay Area, Seattle?

- Yes (reject)
- No (accept)

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Appendix D: Participant Snapshots

Table 1:Focus Group Study Participants' Demographic Information

Pseudonym	Sex	Age	Race/Ethnicity	Residence	Employment
Walter	M	34	White	Hazlet, NJ	Trainer (business)
Tammy	F	42	Black	Philadelphia, PA	Faculty Coordinator
Kristin	F	50	White	Trafford, PA	Disabled
Janice	F	54	White	Pittsburgh, PA	HR Analyst

Snapshots

Walter

Snapshot: Self-Described "Nerd" / "Still a Kid"

Walter is a 34-year-old business trainer in Hazlet, NJ. He expressed himself with humor, answering questions gleefully or with wry cynicism at times. He said that he has "too many" accounts; when asked how many he selected the option for between 51 and 100. He stood out for the sheer number of products and services he could name at once that he uses. He understands that they all track him and is moderately cynical about most of it. In one-on-one interviews he was the most opinionated about the imbalance between consumers and technology producers.

Relevant Quotes:

"I've gone to the store and then within 15 minutes of getting home, Google [is] sending me a consumer feedback opinion survey asking me: Was I at this store and did I buy anything and "Can you take a picture of your receipt? ... I mean their confidence isn't high enough to say, "Yes, this was [Walter],' but if you fill out the survey then they can close that gap and they now have 100% confidence…. And they'll give you…$0.75 of Google Play store credit, so "see, it was totally worth it now," right? ….Sometimes it'll be a day or two later. But this morning I literally had one like 10 minutes after I got home. I had a notification it's like 'Hey, where were you out here

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and which one of these stores in this plaza did you stop at?' So it was a physical purchase. Yep, just by having an Android phone in my pocket, you know."

Devices regularly used: Windows based home computer with webcam; Android phone; Windows tablet computer; Chrome and Firefox browsers

Key connected products and services discussed: Gmail, Google Calendar, Google "personal database builds", work email, Hotmail, Android Auto, Reddit (the only social media account he uses regularly), Facebook (disengaged some time ago), Twitter; Fidelity, Robin Hood, Bank of America, multiple credit cards; medical, dental, auto, insurance; Work Dropbox, OneDrive, Google Drive; Zoom, Rodeo, GroupMe; Amazon, Target, Instacart (Aldi, Shoprite); Netflix, Hulu, HBOMax, Disney, XBOX, Playstation, Switch. No online newspaper or magazine accounts, mainly paper comic books. "I guess I'm still a kid."

Tammy

Snapshot: The Skimmer

Tammy is a 42-year-old faculty coordinator from Philadelphia, PA. She estimated that she has somewhere in the range of 51 to 100 accounts, most personal accounts but manages many accounts for her university. In that role, she is responsible for reading online policies, but for her personal use she typically just skims privacy policies and terms of service for items specific to the use of her financial information, credit cards and her email address. Her understanding of her technology relationships appears to be typical of an educated consumer. She Is aware that she is being tracked—she used the term "virtual footprint"—and is skeptical of how companies might user her Information. She worries about credit card breaches, but generally is complacent about what she needs to do to get onto a website or app.

Relevant Quotes:

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"I do feel like the location consent is…very intrusive because a lot of times whatever I might be looking at, the locations shouldn't be relevant. If I want to take it to the next step and map out directions, or find a store in my area or something like that, I can see why they might want to confirm my location… But when it's upon opening up a new app or a new website, I find it very frustrating, especially when it's a website and I'm on a laptop... I might be Googling something real quick at work, and I'm like, "why do they need to know my work location?"

Devices regularly used: MacOS computer with webcam; iPhone; iPad; Firefox and Internet Explorer browsers

Key connected products and services discussed: Yahoo, work email, Slack, HBO Max, Amazon.com, Amazon Fresh, Macy's, Old Navy and other retails sites for household items and clothing

Kristin

Snapshot: Cynical Survivor

Kristin is a 50-year-old, retired woman who lives alone in Trafford, PA (near Pittsburgh). When she was working she processed property and casualty insurance claims. She suffers from Multiple Sclerosis. Her disability causes her to rely on delivery services since her mobility is limited. She is an avid Amazon customer and refers to it as her "personal assistant." She says that she is unconcerned about online fraud or digital harms because she has few assets to lose and feels she needs to live online to survive. She frequently participates in paid marketing studies including programs that pay her to track her technology use. She considers her relationship to technology to be "not good" because her phone and other devices often break on her. She spends a lot of time trying to set up her phone personalization the way she wants "as opposed to what the phone wants me to do" and finds over time this can cause problems.

Relevant Quotes:

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"Like if it's a shopping app to locate a store closest to you" or "...if I'm using any type of ride-sharing program, they need to kind of know where I'm at."

"...my side hustle that I'm doing in addition to my disability [benefit] is I've sold my soul...to marketing companies, [so] that they can monitor my online activity."

Devices regularly used: Cell phone, Kindle, laptop computer

Key connected products and services discussed: Amazon Prime, student account; Alexa, Sam's Club, bank app; uses virus checkers and ad blockers

Janice

Snapshot: Secret Shopper

Janice is a 54-year-old HR Manager in Pittburgh, PA. Savvy about privacy and tracking cookies, even though she doesn't think she is very informed nor understands the subtleties and legalese of the digital agreements. She frequently interrupted to apologize that she wasn't answering my question, but hers were often the more interesting responses. Janice does not use cloud accounts except for her phone backup at Verizon and says that she rarely creates accounts at online stores, other than Amazon, which she uses a lot.

Relevant Quotes:

"...on your computer…you're just in that one location anyway," [whereas on a mobile phone, once consent is given] "that might stay there, and they'll keep tracking you forever."

"GPS type apps, they're gonna need my location, you know? So, is it kind of a level playing field? Depending on what the app is, because some of them would have to have information about you."

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"I once a month now get an email from Google, which tells me my itinerary of places…. And I never asked for that. And so, they're obviously just tracking me…. You know, but it's unnecessary and I never asked for it."

Devices regularly used: Chrome OS and Windows computers with webcam; Android phone; Chrome and Windows tablets; Chrome, Firefox and Internet Explorer browsers.

Key connected products and services discussed: Gmail, AOL, Outlook (work), work software; Facebook Twitter Instagram; credit cards, checking account, investment, insurance; Verizon Cloud; she uses Zoom, Google Meet, Adobe Connect but does not have her own Zoom account. Amazon.com (not a Prime Member); several retail store accounts ("If I buy anything I create an account."); Netflix, Kanopy, Uber Eats, Uber, The Walnut Grill loyalty app; Pittsburgh Post Gazette (online).

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Appendix E: Interview Participant Consent Form

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. Noreen Whysel 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 Noreen Whysel, and one additional Me2B volunteer may 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:

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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.

Ms. Whysel has explained this study to you and answered your questions. If you have other research related questions or problems, you may reach Ms. Whysel at noreen.whysel@me2ba.org.

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Appendix F: Cluster Analysis

Ask (39 docs)

Ask Permission (23 docs)

Ok (17 docs)

Website (15 docs)

Know my Location (13 docs)

Service (13 docs)

Allow (12 docs)

Delivery (12 docs)

Reason (12 docs)

Access (11 docs)

Ordering (11 docs)

Security (10 docs)

Trust (10 docs)

Consent (9 docs)

Getting (9 docs)

Weather (9 docs)

Address (8 docs)

Approve (7 docs)

Info (7 docs)

Privacy (7 docs)

Tracked (7 docs)

Depends (6 docs)

Directions (6 docs)

Don T (6 docs)

Person (6 docs)

Safe (6 docs)

Specific (6 docs)

Acceptable (5 docs)

Maps (5 docs)

Purchase (5 docs)

Purpose (5 docs)

Absolutely (4 docs)

Good Reason (4 docs)

Important (4 docs)

Permission to Access (4 docs)

Safety (4 docs)

Share (4 docs)

Weather App (4 docs)

Account (3 docs)

Feel (3 docs)

Given Permission (3 docs)

N (3 docs)

Physical Location (3 docs)

Send (3 docs)

Sent (3 docs)

Absolutely Necessary (2 docs)

D (2 docs)

Don T need to Know (2 docs)

Emergency (2 docs)

Enter (2 docs)

Function Properly (2 docs)

Getting something Delivered (2 docs)

Google (2 docs)

M not Sure (2 docs)

Personal Information (2 docs)

Settings (2 docs)

Other topics (143 docs)

361 Responses:

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requires my permission

I want to have the option of them knowing or not. For some things like grocery deliveries of course they need your location! When I am the one looking for a specific website of app, I am more likely to give location info

The person using the app should be given the option to opt into sharing location.

It's disclosed that knowledge of my whereabouts are a condition of use

It needs to be specifically allowed and then I will judge based on the circumstances. Any app or website that tries to do so without permission is automatically untrustworthy.

Secure and safe that nobody can hack and have some privacy

It needs to tell me what it needs the location for in the app and depending on the use (weather app, survey app I trust) I will accept it. It will also depend on whether I trust that company with my address or not.

when I need directions from where I currently am to where I want to go

when sending items on e-commerce. whenever your using GPS or tracking miles ran/walked.

There has to be a compelling reason and a business need to know.

ask permission

getting directions, baNking, shipping

Has to be a reason I find reasonable

Depends on privacy policy and trustworthiness.

only when using the app

my permission

only if you confirm they can have access to that info

It needs to be location specific for weather or maps/gps/traffic.

Emergency reason only

I need something delivered in person.

To allow it

If something ordered is being delivered to my home.

strong security and trust of website/app

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Ok

when it is critical for the app to work

with need to know event.

I look back at my answers and I feel like I'm inconsistent. I do feel like my location is always tracked, through numerous sites. You disclose your location to strangers on eBay and other sites all the time. you also disclose it to numerous businesses routinely. I don't want my location to be tracked, but I give my location out constantly. why does this apps need my location? for marketing or is the information stored in a database? our personal information is sold to companies all the time. why wouldn't our locations be as well?

Feel secure with that

If you purchase the app or when you are using it

I need to give consent

That I actually get to allow to set the settings myself

If that is useful for me.

none

Ask permission

If it asks how much you want to have your location tracked

It needs to be on a case by case basis and only upon my approval

If it really needed, if it safe people will say yes . My kids are little so unnecessary I don’t want to share all my data or address.

Ask permission

Explicitly ask and explain in plain English all the ways it will be used.

When you are getting a delivery

I need to be asked permission and knowing my location needs to be necessary

It needs to request permission to collect that data and I will decide if it is acceptable for that specific situation

When I'm searching directions

no,what if they use it to there bad intentions

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the service must need my location to function (like a GPS) or for info it needs to verify eligibility or maintain legal requirements (like regional laws, GDPR) and it provides a prompt for me to grant access

I don’t think they should

I need to be purchasing something that is dependent on my location (i.e. Placing an order to be delivered to my location)

If you give them permission or it’s vital for function

I need to be able to give permission, and have several choices about how much info and when it is available

Na

it has to be a trusted and reputable site that won't misuse my information

it needs to only be for apps where it makes sense that they need that information.

The app or services should ask for permission to access your location and for how long

It needs to ask, and more importantly RECEIVE approval from me to have access to any of that information

Ask permission

they need a reason that is beneficial to me, not them.

100% safe app

safety is important

Getting deliveries

If it’s an app or website that needs to know. A website just to buy things doesn’t need to know my location just the shipping location. Apps that have as nothing to do with location (like an arcade game(don’t need to know where I am or what country I’m in even.

they need to disclose why location is needed and permission to access location information to be granted

If I have chosen to share my info

Your permission

Safe and have a purpose

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I don't think it is okay for a website or an app to track my address.

Never

If something is being delivered to me, for the time, weather, or gps

If I’m getting something delivered

It needs to provide me with a service that depends on location

Upfront information with the legal right to not sale you information to third parties without your consent each and every time

I am ordering something to be delivered. An educational App need to k ow state standards not physical Location

information as to why and how it would use the info

If the situation needs my physical location such as weather or delivery

Giving permission and an actual beer such as shipping and delivery

anytime.

If it’s using that location to send me something or download correct information.

Data should be private.

Not much

They need to make sure you are safe with yourself

Only if I'm ok with it. Period.

Delivery the goods

It needs to be useful to me. If not why does it need it.

My explicit consent

i is a time to get to work with me today and

When I decide it’s necessary to provide it

Yes

if it ask

i don't know

No comment

When they are trying to locate u

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if I ordered something and it will be sent to my home

It to ask if I approve.

ask permission

It must have my permission to do so.

None

Only when I put in my address and then only that time

My insurance

For me to allow it

For u to give access to ur location

ask permission before accessing location

In the danger

If I am confident the website is secure and I only need to share my location one time

Thank you so much

Never ok

Nothing

Nothing it’s not ok

it needs to have privacy for customers

None

Have an account with them and only if you give permission

n/a

good

Has to be a need

be trustworthy. have a good reason to need it.

only when I'm on it

Expressed written permission

Not if it’s require to function properly, such as a navigation or weather app

Ask to allow

Backed by somthing

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None

Trust for Privacy!

Ordering to your residence

N/a

Consent

No

it has to go through rigorous regulations

bgtv

Jjjuh

If I need to provide it

None

Only when knowing directly helps me and does not hurt me

Livd

it needs to be necessary for the app to function properly.

Comedic hey I don’t

It is only ok when I am fully aware that it is tracking me. If I don’t feel comfortable, I should have the right to deny it’s access

nothing

Ask permission/send alert

O

never

Have a proven account on the site.

great

Need for accuracy

If given permission

They need to be transparent and offer rewards or compensation

Tell me exactly what they do with the info.

No

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j

Ok

To give permission or allow to know your location

not sure

No

Yes it’s good

need to be asked permission

They have good reviews.

NA

XXX

For a contract to be put in place so the person knows what is happening.

Sometimes good to know

The email email I sent you

n

I make purchase

if delivering purchase

Allow notifications should be on

none

Background security check

Depends on how useful it is for me

good safety measures and the location is actually needed and not there for some other reason

notbkng

nothing

Allow me to approve it

when consent for knowing location has been made

privacy is needed

To get deals and information around where you are to serve the apps purpose

They ask

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They need to

it has to be necessary

If it needs to be on

all information is encrypted and private

uddiuejrri

It needs to ask for permission, and there needs to be a good reason to need the location

not sure

not sure

if they ask

If the location is pertinent to website purpose, ie delivery of goods and/or services, billing for goods or services provided

Give me accurate information about themselves.

.

never

good

When it asks my permission

Full disclosure

yes

maps

Good

safety

when they are given permission

when it is necessary for it to know my location such as ordering something to be delivered.

bing. curgle

No freezing up

When they need to in order to complete a request

no no no

yuhfddc

only when using app

that they ask previously or for a purpose

I need to want to visit the site and trust it enough to even go on it or download it in the case of an app and then it's ok

When I specifically grant permission

when it has permission

When im ordering something for delivery

Nbfr

request my permission, only remember 1 time OR when in use

Only if is ok'd by me

never

Never

permission

Where the information requested is vital to the completion of the task.

An item being delivered to my home

You enter is and save it

Ordering something that will be delivered or when I need something from a certain store

This is only OK if the website is a hospital or anything that can be of emergency resources.

To have a better app

If it will help with the website or apps performance and will benefit my experience on the website or app

No jn

When you are doing something that you location is need for example buying stuff online.

when you have an account

there is no reason for a website to know my location

if we allow it

Ddm

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It's important for use of the app.

if I give permission

Ask for permission

it must ask every time first

ask permission first

Just monomial

ok

if the service depends on my location

Right to forget

I give specific permission based on value I see and then it forgets it until I give permission again

I need to give consent in some way, all my devices block any attempts to get location access by default so I already have this ability. However I see it as a red flag if a non location-based app (like a video app) asks for my location at ALL.

Gio

With permission, when it related to location need around you, and when settings are preset

maps

profits

Google

Great

it has to have some sort of use or security associated with the use of that information

it needs to ask permission first and to give a valid reason for needing it that relates to the site or app.

it needs a good reason related to the service it is providing.

To know my personal information is not being sold to analytical companies.

Needed to know for transaction

Just make sure the app is trusted with that information

a pop up and request for permission

limited time only

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Explicit permission.

If I'm shopping, getting something delivered, looking up local news, events, stores. Social media

To be when something is being sent to me

never. the consumer can just put the address

Trusted site mostly

When you are picking something up.

Hdhd

I'm not sure

Tge website or mobile app needs to have a real reason to know my address that is tied directly with what the service does (like a shipping address). The website or app should not remember my location without asking and I allow it. The app or website should really have an actual need for my location for purposes other than ads, collecting personal data, etc.

must be important and not sketchy

permission

nothing.

Security

I can trust them

Honestly, only map apps and similar need your location.

It's only ok if my data is secured

when I turn it on and enter it.

it needs to ask permission first.

Hehe

Jenner rjjrnr torment rRNA rant r tntnr. T band f f f f

The user needs to trust that the website/app needs to know the users location in order to function as intended.

Only needed when something is being physically delivered to the house.

when u approve the app

Only one time

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Ask for permission

Dmsmskakanamamwkwmwmsosjsnsnskwmwn never

not acceptable

Gg

exactly

When it's a service provided or the information/ laws / product change per state or exact location.

(I.e looking for a product at a store that might be out of stock at another location)

When I give it permission, and only when I am using the app.

Ask permission

Keep it privacy

Good

the app needs to ask and be given permission to access that information

privacy check

Never for a website and for apps only when it is absolutely necessary like for weather apps

The need of requiring your location needs to make sense- like things that involve shipping require addresses, but e-commerce and educational apps don't need to know your exact address

None

You Need To Fill Out A From For Them To Know Your Physical Location.

Consent

very good

it needs to ask permission

I have to give permission

If I am purchasing goods and need in delivered to my location

only of it is necessary for the function of the app or website

just ask

When it is absolutely necessary, like for mailing

Location-based reason should be provided. Transparency.

must be a trusted source

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when it is needed like weather or food but only at the moment im using the site or app

Not to track all the time and then spam with emails or phone calls.

When i say so

Google

Ok.

None

I need to be asked

It’s only ok when you are aware of then tracking your location and you approve them doing so

looking for stores near me

.

permission asked. when location is needed for the service

Dbdnsnshsgx d d dbdbdbdhd

ok

If there is anything beneficial for the user (convenience, curated content relevant to location, etc)

Only ok if delivering to my location

If you approved it and understand what it’s doing by hitting accept giving it permission to know where you are..

Allowed access

hahaha

permission

Security

if it's safe

For it to ask permission and only allow it when I'm using the app/site

Me to give permission

Maps and delivery services

I need to give consent beforehand and know exactly how descriptive their location details are.

When something is being delivered to me.

I'm ordering something

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My permission

make sure that the user agrees first

Safety stuff

When the service offered need the locational data to be effective

none

If they absolutely need it like let's at Amazon they need your location so they can deliver their product. Also a tennis tournament website they need to know your address to find local tennis tournaments near you.

If my location is germane to what we are doing.

I dont believe an app should ever use your location.

Permission

If they are a trustworthy, first party brand.

deliveries

extra security

if it is delivering something to me or showing me weather traffic or local news

gps

amazing

Ok let

If my location is absolutely needed to provide a service

It would have to be a delivery service

No

ask first

it needs to ask and I will say yes or no on a case by case basis if I agree with the need at that point.

If it has something to do with the location such as weather or directions or when it's a shopping site.

needs to ask permission

need to know

Yes

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Consent to give location first before pinpointing our location.

Nothing. It will never be acceptable

For delivery only.

Is it really necessary

Just agree to it, only needed if it’s pertinent to what you’re trying to do

Opt in

iyes

It’s not ok

I’m not sure

...

Protect my info

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Appendix G: Open Ended Responses from scenarios 3-6

Let's say you have an account on a MOBILE APP, and the app appears to know your physical location. Is this OK?

Maybe (please Respond)

If I know I've put my info in or have agreed to them knowing my location Only when asked If they've disclosed clearly that is a condition of use, it's acceptable

Depends on the app and purpose of locating Depends on what it is using it for

if is being used to track my miles when running can be acceptable when in used and allowed p

Okay for directions app while it's being used Depends on privacy policy and trustworthiness.

You're on the go so it makes a little more sense. But I could be on my phone at home so it wouldn't make a difference in that way

If it is for gps/directions

If asked When I give explicit permission.

Same answer as the previous question

if it requested and was given permission previously

Same as above

if you allow your location to be known shopping apps, yes. streaming apps, I understand.

If i have allowed it to know my location.

Same answer as above it depends on whether I have a reason for wanting or needing the app to know my location. if you entered your location its ok

For apps that need my location but it should ask first every time

Depends on if I agreed to that

Still depends on why it needs it and what it's using it for.

Yes

Weather app is fine others I don't know

maps

If I let it

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If I have granted permission

If u allow access

depends

depends on if location is necessary for the app to work.

O

Depends on how useful it is for me depends on what the app is used for

Only if I allow

If I allowed it

if i allow it

If I have given permission

only if I allow it

Na

only ok if I have previously given location permissions

Same as above

If it’s like social media and we want to post where we are, insurances that want to know how we drive, app that track miles to get rewards, or a game like Pokémon go.

if I allow it

If it's necessary in order to use the app.

again, if I think it is okay then it is okay. if I dont give permission it is annoying if I gave it permission in the sign up process

only if I've specifically let them know my location.

Only if I gave explicit permission

depends on if its a food app or rewards app like this

You obviously want your GPS to know your location, but that's more information than some random app needs.

If I have allowed to app to know my location

if u set the setting for it

only if I gave the app permission

Ok

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It depends on why I am using that website

Permission based

Convenient but not preferred.

if I give it permission

If I have allowed it

If I have enabled location services in the app that is fine, and usually I select only when I use the app is running GPS/location OK Depends on whether I have given them permission to know. Helpful for map locations

Depends on the app, okay for apps that requires location for proper service such as google maps. Not okay for apps that has no business in knowing my location such as offline games

If I have them permission

if it needs my location like amazon or a weather app Depends on purpose of app For my weather apps yes but the majority of apps do not need to know your location. needs to ask permission

tracking....why If you agree to it If you opt in

You download a new mobile app and before you create an account, it appears to know your physical location. Is this acceptable?

Maybe (please specify)

please see 1st answer

Depends on privacy policy and trustworthiness.

if you allow your location to be known

Same reason as above

I trust them

Depends on how useful it is for me

If site is for travel or location of goods or services

If I gave it permission

if it asked permission first

Depends on location settings

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Permission based

Because it's going off the actual computer

General location ok

needs to ask permission

You download a new mobile app and before you create an account, it appears to know your physical location. Is this acceptable?

Maybe (please specify)

please see 1st answer

Depends on privacy policy and trustworthiness.

if you allow your location to be known

Same reason as above

I trust them

Depends on how useful it is for me

If site is for travel or location of goods or services

If I gave it permission

if it asked permission first

Depends on location settings

Permission based

Because it's going off the actual computer General location ok

needs to ask permission

You visit a website for the first time and before you create an account, it appears to know your physical location. Is this acceptable?

Maybe (please specify)

If they've disclosed clearly that is a condition of use, and it confirms it will no longer track, if I opt out of it , then it's acceptable

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Depends on privacy policy and trustworthiness.

Thats scary

If there is a opt-out selection

if it requested and was given permission previously

if you allow your location to be known

I f you were asked permission

Depends how or why I'm looking at that app but let's face it iPhone is always located by apple products

Access

O

Depends on how useful it is for me

If site is for travel directions. or location of services

Na

did it ask for permission first?

Depends on my risk exposure. If it's an US entity, I probably don't care.

Permission based

If allowed

depends on the kind of app

if it uses the ip area...maybe....some other way sounds intrusive

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