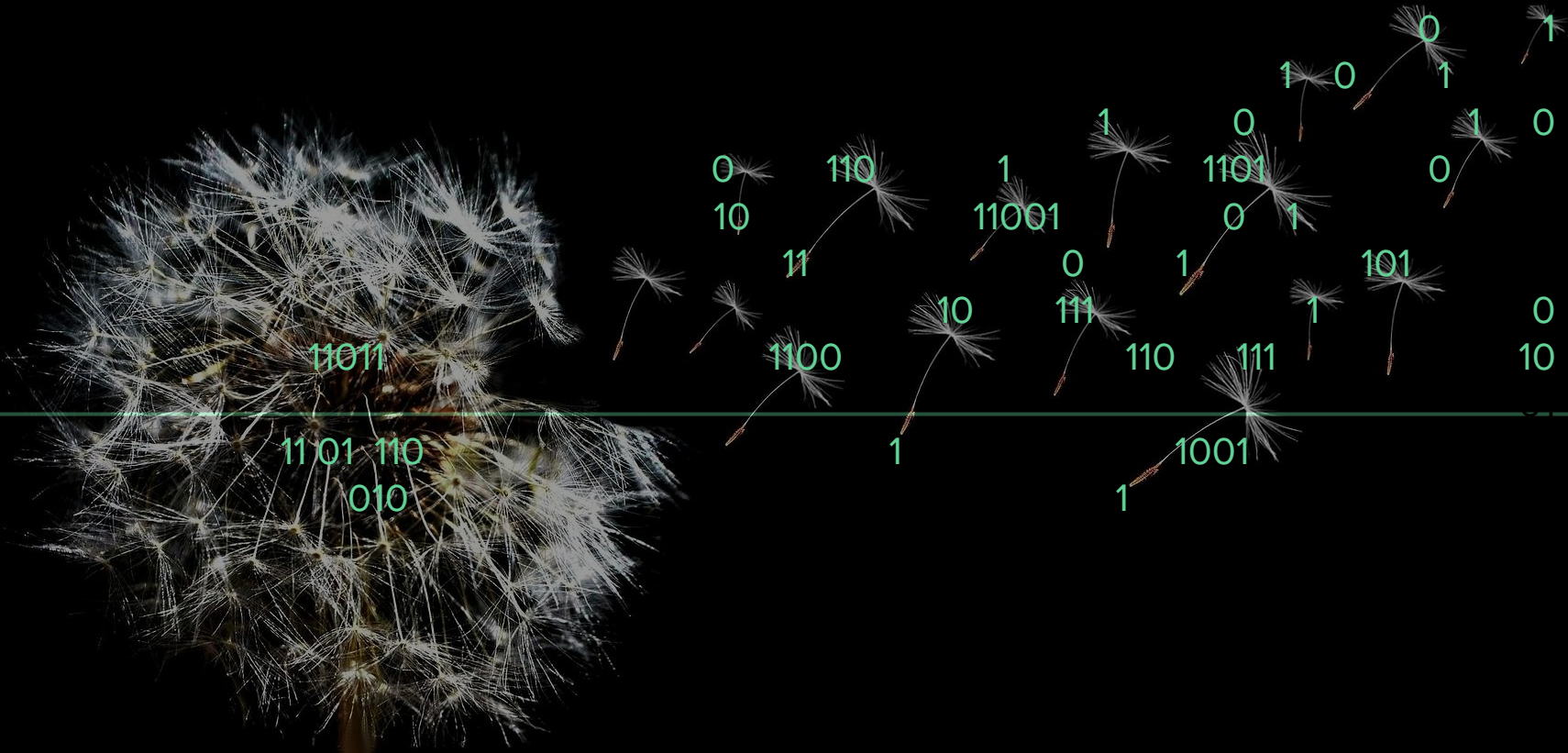




Preventing Digital Harm

By Noreen Whysel
Decision Fish
UX Lisbon
May 26, 2023





Your Relationship with Technology

We're committed

Do you have a Personal Relationship
with technology?

Yep.

... a Binding, legal relationship?

...a what now?

It's kind of Complicated, right?

Heck, Yeah.

Do No Harm

3 Laws of Robotics

First Law

A robot may not injure a human being or, through inaction, allow a human being to come to harm.

Second Law

A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.

Third Law

A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.^[1]

Source: Asimov, I. (1950). *I, Robot*. Gnome Press.

3 Laws of UX Designers

First Law

A Designer may not injure a human being or, through inaction, allow a human being to come to harm.

Second Law

A Designer must **obey the orders** given it by other designers, clients, product managers, etc. **except** where such orders would conflict with the First Law.

Third Law

A Designer must **protect its own existence** as long as such protection does not conflict with the First or Second Law.^[1]

Source: Asimov, I. (1950). *I, Robot*. Gnome Press.

And yet, there is harm

Four Truths of Digital Harm*

1. There is digital harm.
2. There are conditions that create digital harm.
3. We can reduce digital harm.
4. There is path to reducing digital harm.

Respectful technology

*Credit for this idea goes to Lisa LeVasseur, Executive Director of Internet Safety Labs.

Dark Patterns

~~Dark~~ Harmful UI Patterns

What are some Dark* Patterns?

*We'll switch back to “Harmful UI Patterns” after the history lesson.

Deceptive Design Patterns

Dark Patterns are tricks used in websites and apps that make you do things that you didn't mean to, like buying or signing up for something.

—Harry Brignull, darkpatterns.org



How Designers Destroyed the World by Mike Monteiro — An AEA Video

6 years ago | More



Jeffrey Zeldman PLUS

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“Facebook’s privacy settings, which have outed gay teens to their conservative parents, are working exactly as designed.”

Monteiro, Mike. (2014). How Designers Destroyed the World. An Event Part. <https://vimeo.com/122022963>

Privacy Zuckering

You are tricked into publicly sharing more information about yourself than you really intended to. Named after Facebook CEO Mark Zuckerberg.



Spotify Premium

Your subscription will automatically renew on 5/11/16
and you'll be charged \$12.99

Payment details

Your account at PayPal is used for payment.

UPDATE DETAILS

Would you like to **cancel your subscription?**

One of four
clicks to
complete
cancelation

How do I close my Stamps.com account?

We are sorry to hear that you want to discontinue your Stamps.com service. In order to do so, please call us at our toll-free number 1-855-608-2677 Monday through Friday, 6 a.m. to 6 p.m. and Saturday, 6 a.m. to 3 p.m. Pacific Time. One of our Customer Care Representatives will be happy to assist you.

Roach Motel

You get into a situation very easily,
but then you find it is hard to get out
of it (e.g. a premium subscription).

Purdue UXP2. <https://darkpatterns.uxp2.com>



Stevie Martin. March 25, 2021. Every time you try and go on a website. Twitter.

<https://twitter.com/5tevieM/status/1375116382770171906>

Trick questions

While filling in a form you respond to a question that tricks you into giving an answer you didn't intend. When glanced upon quickly the question appears to ask one thing, but when read carefully it asks another thing entirely.

Types of Harmful UI Patterns

- Trick questions
- Sneak into Basket
- Roach Motel
- Privacy Zuckering
- Price Comparison Prevention
- Misdirection
- Hidden Costs
- Bait and Switch
- Confirmshaming
- Disguised Ads
- Forced Continuity
- Friend Spam

The thing is...None of this is New

These Deceptive Patterns get you to:

- Buy stuff
- Buy extra stuff
- Share information about you
- Share information about others
- Launch or click on ads
- Avoid logging out
- Avoid canceling accounts
- Spread malware

So you can:

- Buy stuff
- Buy extra stuff
- Share information about you
- Share information about others
- Launch or click on ads
- Avoid logging out
- Avoid canceling accounts
- Look good, feel good
- Have more status
- Get personalized service
- Connect with a community
- Get free content
- Have a seamless experience
- One less thing to worry about

This is all simply
Bad Behavior

Real World Consequences

The joys of Pokémon Go: exercise, the outdoors and 'full-on escapism'

Fans from San Francisco to New York extol the benefits of the monster-catching craze - while trying to avoid walking into poles



📷 A group of friends play Pokémon Go in New York. Photograph: Drew Angerer/Getty Images

Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show

Its own in-depth research shows a significant teen mental-health issue that Facebook plays down in public



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PUBLIC DISCOURSE IN THE U.S.
2020 ELECTION: MARCH - MAY

Published Oct 29, 2020

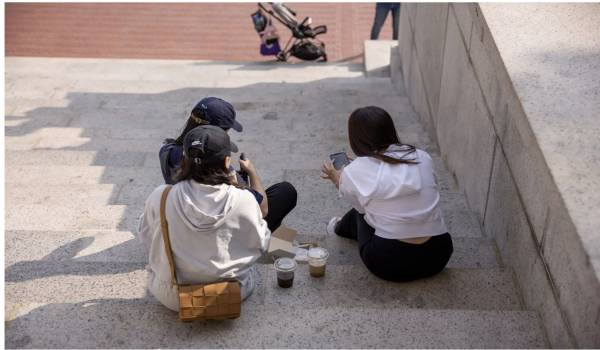
MEDIA, DEMOCRACY, & PUBLIC DISCOURSE

Real World Consequences

Teenagers Resent Social Media. They Also Resent Efforts to Take It Away.

After the surgeon general warned that social media harms young people, young New Yorkers agreed. Some also said that the government — and their parents — should back off.

 Give this article  



Teenagers around New York City on Tuesday said they hate aspects of social media, but many said they also can't imagine living without it. Benjamin Norman for The New York Times

By **Troy Closson, Olivia Bensimon, Wesley Parnell and Michael D. Regan**
May 24, 2023

Surgeon General Warns That Social Media May Harm Children and Adolescents

The report by Dr. Vivek Murthy cited a “profound risk of harm” to adolescent mental health and urged families to set limits and governments to set tougher standards for use.

 Give this article    787



Dr. Murthy testifying before the Senate Finance Committee on Capitol Hill on youth mental health in 2022. Susan Walsh/Associated Press

By **Matt Richtel, Catherine Pearson and Michael Levenson**
May 23, 2023

Digital Harms Dictionary

ICP: Information Collection practices **without consent** or knowledge

IUP: Information Use Practices involving use and sharing information in ways the consumer hasn't agreed to

ISP: Information Sharing Practices, **misuse of voluntarily shared information**

IPDB: Inverse Privacy/Data Brokers: sharing data in a data brokerage network the consumer can't control

LICA: **Supplier Lock-In** and Contract of Adhesion terms that make ending difficult

IDPR: Identity Practices that allow loss or misuse of personally identifiable data

ISL Digital Harms Dictionary <https://www.internetsafetylabs.org>

Digital Harms Dictionary

EOLA: Inadequate Management of End of Life/End of Account, **loss of control over ending an account**

SP: Security Practices, poor authentication practices, false sense of security, phishing

IRLH: In Real Life Hybrid practices, **physical tracking**, bait and switch

BODM: Burden of Decision Making, hidden cookie consent, clickwrap

SURV: Surveillance, always listening, zombie cookies, keystroke tracking, fingerprinting, **facial recognition without consent**

ISL Digital Harms Dictionary <https://www.internetsafetylabs.org>

Digital Harms Dictionary

TRCO: Transparency and Communication, hidden privacy policies, **overly technical** or legalistic

DSGN: Designing **Harmful UI Patterns**, eliciting addictive behaviors, COPPA/HIPPA violations, reinforcing gender biases and sexual violence

MNIP: **Manipulation**: social gravity, forced action, emotion detection and manipulation, nudging

AIMC: AI Modeling and Computation bias, citizen scoring, automation bias

FID: Information Fidelity, **biased search engine filtering**

EOR: Employer OverReach, requiring sharing PII such as DNA, genetic predisposition to disease, prior salary history in some jurisdictions

ISL Digital Harms Dictionary <https://www.internetsafetylabs.org>

Respectful Technology

What we want?
A Little Respect.

It's Personal

People feel they have a relationship
with technology

- It's emotional
- It's embodied
- It's very, very personal

How Personal?

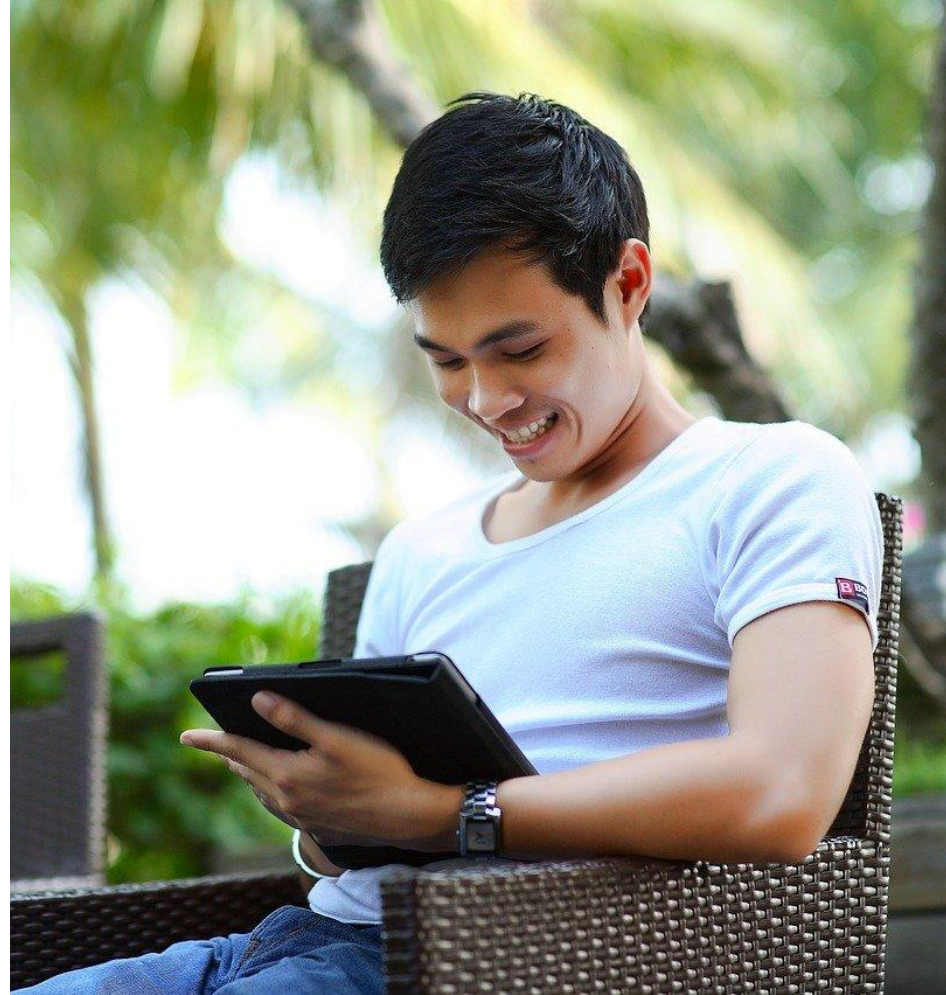
- Name
- Email address
- Gender
- Birthday
- Highest Attained Degree
- Gender Identity
- Physical location
- Where you work
- What you read
- What you ate for breakfast
- What you bought last Tuesday
- Whom you're dating
- That you're thinking of breaking up with them...



If your shop assistant was an app (hidden camera),
Forbrugerrådet Tænk (Danish Consumer Council), December 2014
<https://www.youtube.com/watch?v=xYZtHIPktQg>

Me2B Relationship

The way in which people (**Me-s**) experience our connection to products and service providers (**B-s**)—in both the physical and digital worlds—are **Me2B Relationships**. These relationships begin where technology and humanity meet.

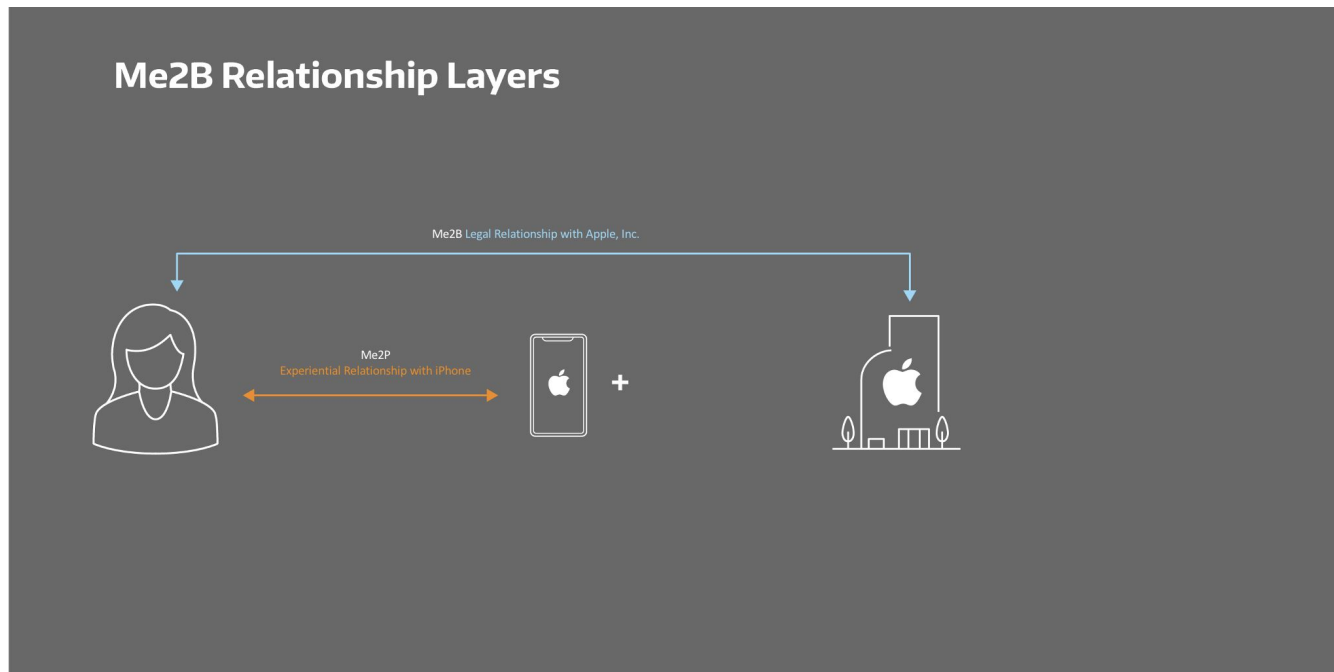


Internet Safety Labs' Safe Tech Specification

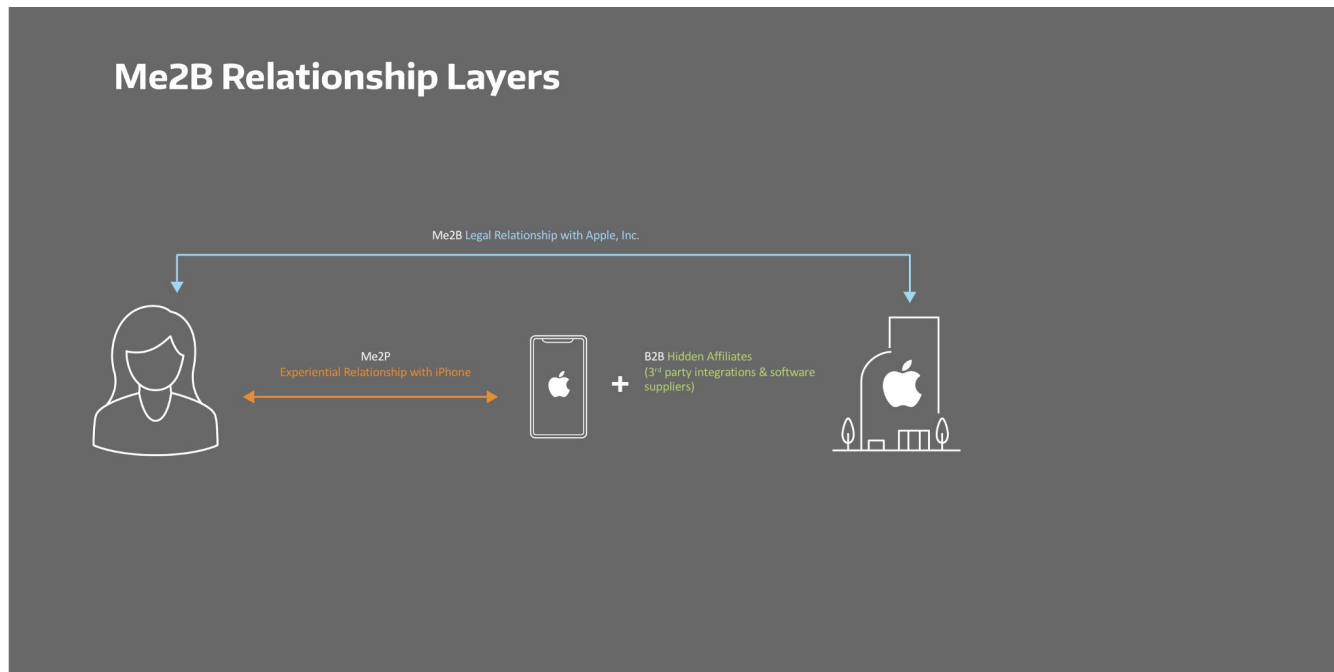
“Just like a good relationship between people, the Me2B Relationship is based on respect. The [ISL] is working to build respectful behavior into the technology we use every day. Our efforts bring into balance the rights and responsibilities of people and technology.”

Internet Safety Labs

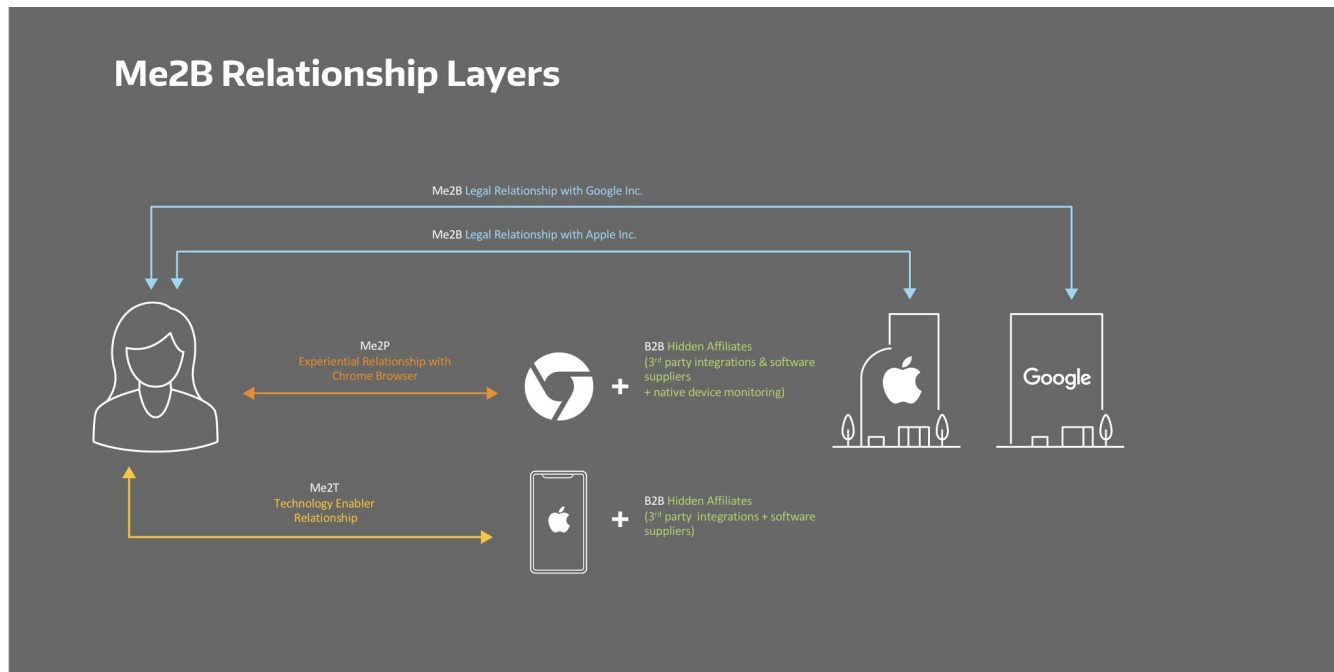
Me2B Relationships are Layered



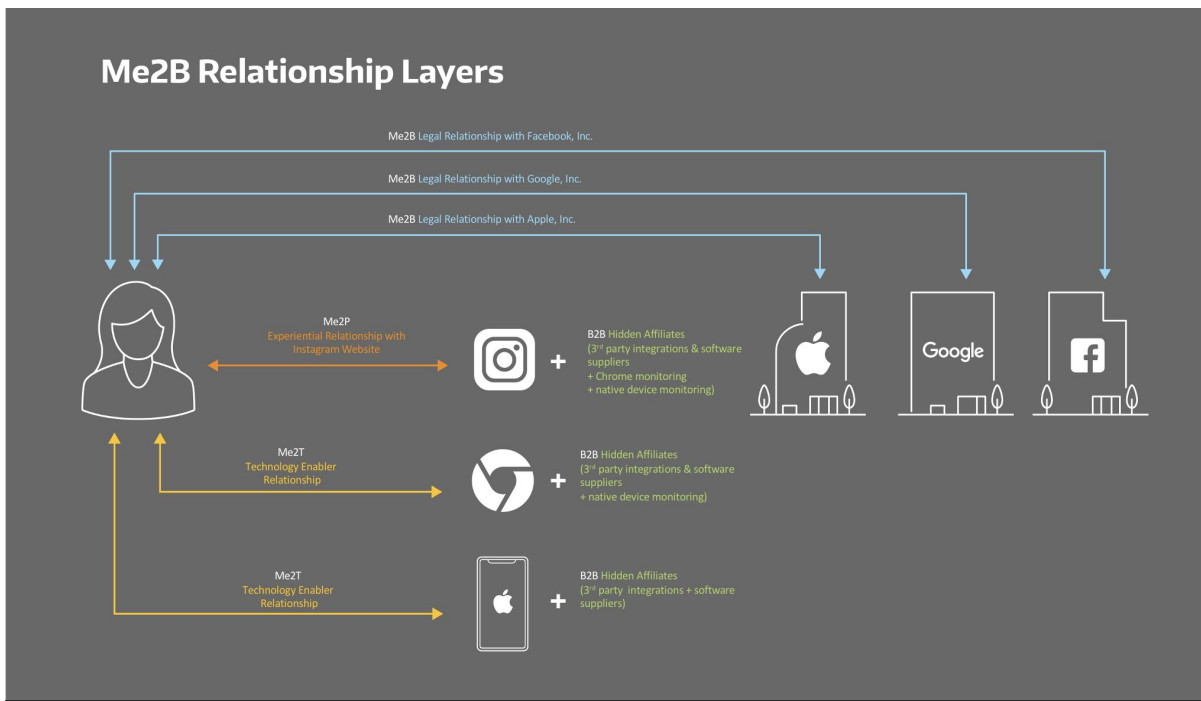
Me2B Relationships are Layered



Me2B Relationships are Layered



Me2B Relationships are Layered

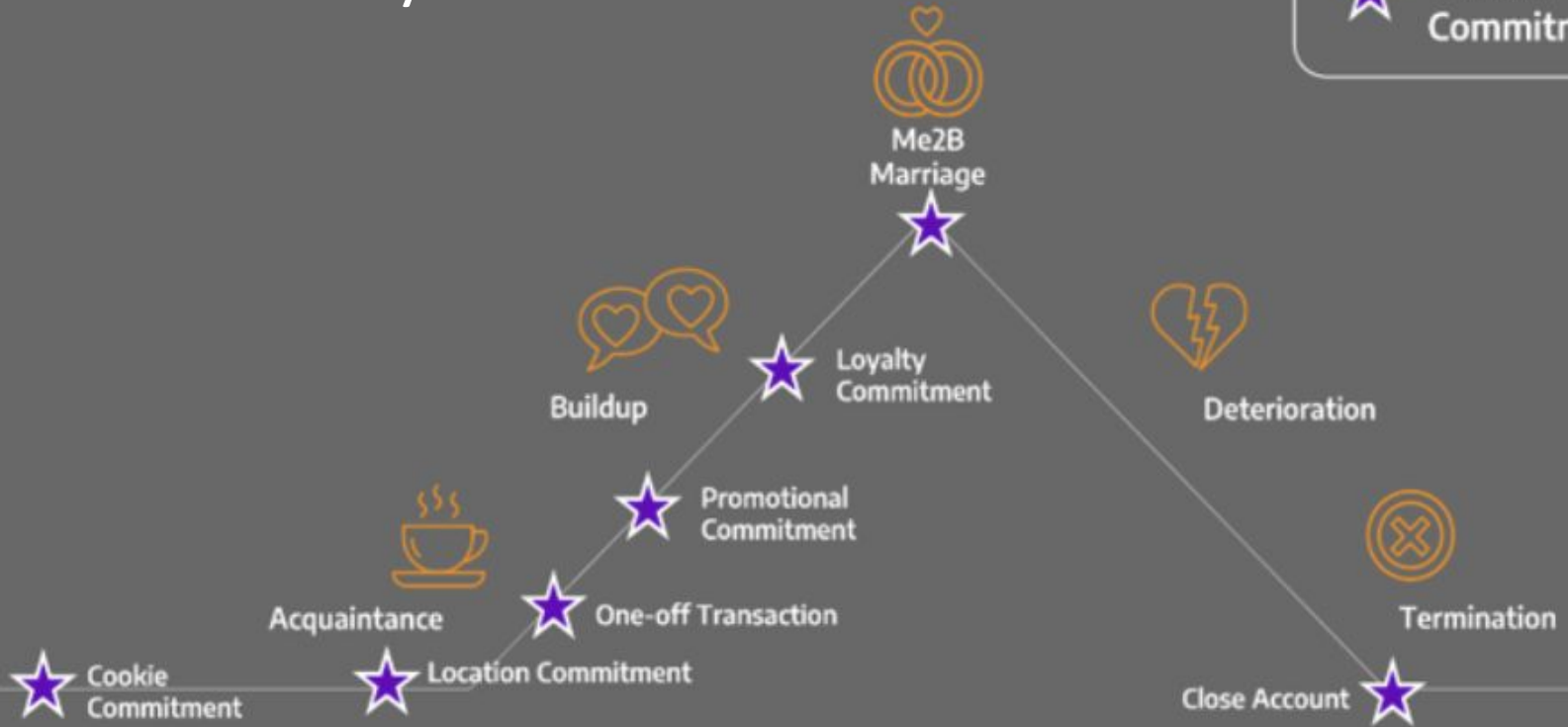


So Many Touch Points

Do everyday people
understand
this layered relationship?

The Me2B Lifecycle

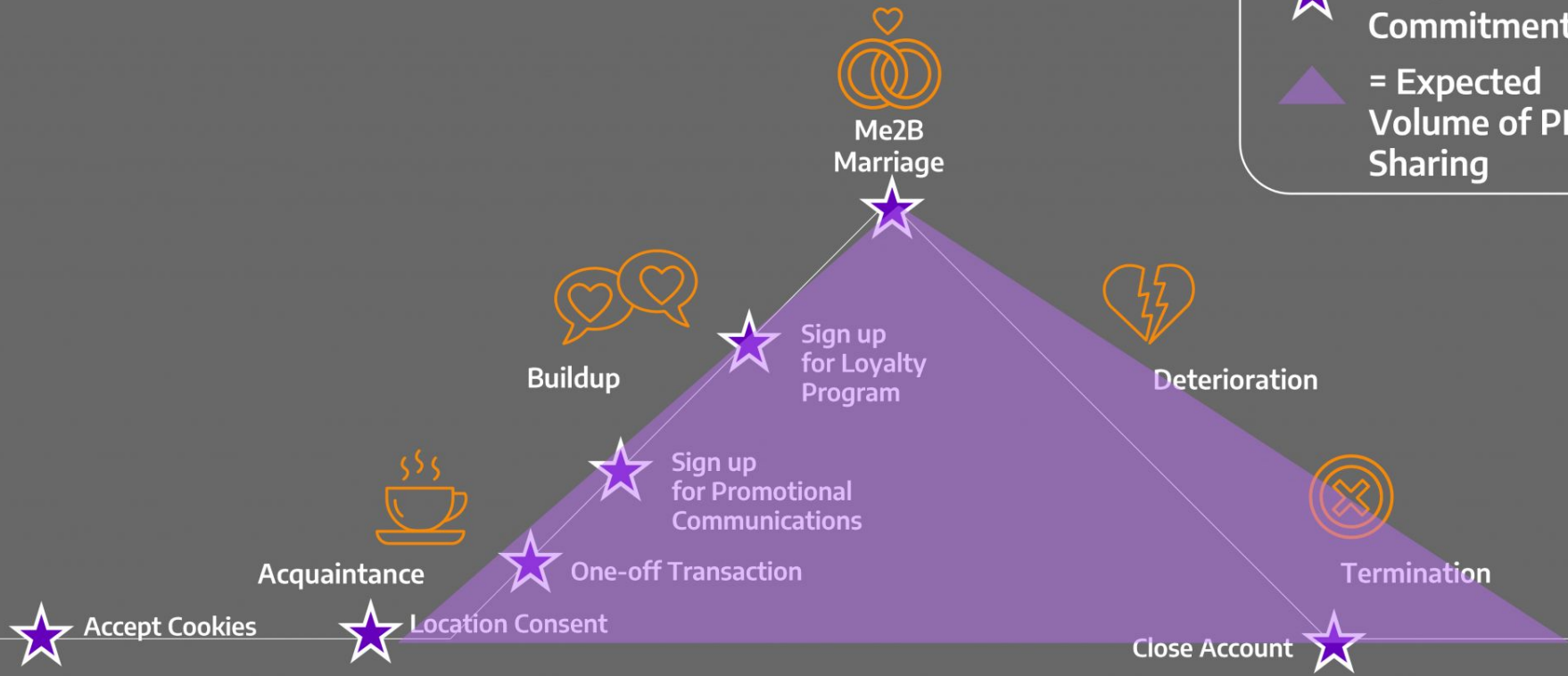
Legend
★ = Me2B Commitment



The Me2B Lifecycle

Legend

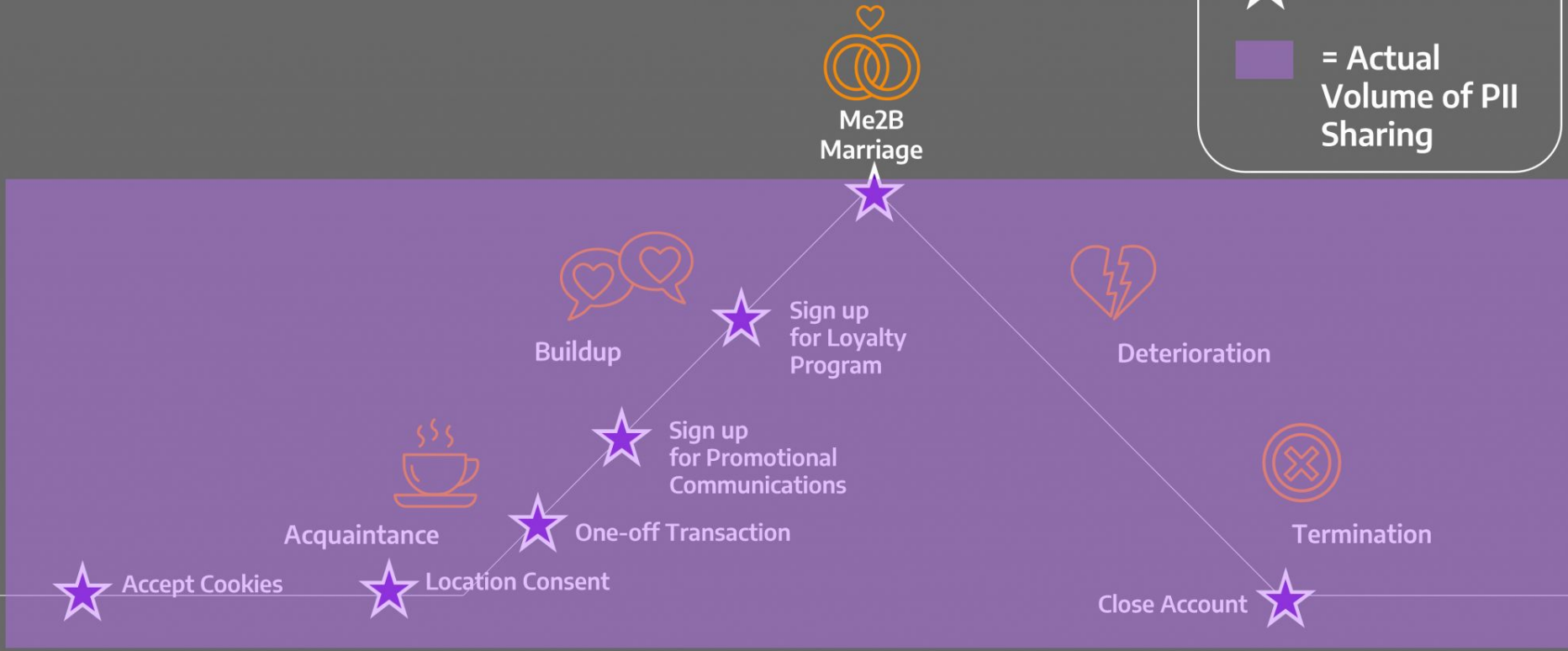
- ★ = Me2B Commitment
- ▲ = Expected Volume of PII Sharing



The Me2B Lifecycle

Legend

- ★ = Me2B Deals
- = Actual Volume of PII Sharing



Would you close your account if there was bad news?

“No.”

“No, **the damage is already done.**”

“I would seriously consider closing my account, but **maybe now they will be more diligent.**”

“**I would close my account and then open a new one.**”

“I would remove my credit card from the account.”

“Yes. I’ve closed my account when I learned about something bad they did, like something racist.”

A Safe Tech Specification

Respectful Relationships

No Gossip

No Eavesdropping

No Stalking

No Manipulation

No Coercion

Progressive Consent

All Touch Points Should Be Respectful



Respectful Relationships

No Gossip

No Eavesdropping

No Stalking

Data
minimization

No Manipulation

Individual
control and
autonomy

No Coercion

Respectful
defaults

Progressive Consent

All Touch Points Should Be Respectful



Product Validation - Are You a Spy?

- Are we spying on our users? Do they know what information we are collecting about them? Or how we collect that information?
- Are we manipulating users? How much information is really needed? Are we gathering more than we need, just because we can? Are we using it to force actions the users wouldn't normally make?
- Are we keeping our promises? Are we being good custodians of our user's information? Who are we sharing it with? Do we know what they do with our user's information?

Developing the Specification

Data Analytics

Product Integrity

Legal Policy

Security

Safe Technology Audits

The ISL will audit data collection and stewardship, product integrity and security.

Data Integrity: To what degree is the consumer' data collected, stored and shared with third parties? If there is a third party agreement, how are they accessing the data?

Product Integrity: Does the user experience communicate what is happening with the consumers data?

Legal Integrity: Are all consents and disclosures clear and understandable to the average consumer?

Security Integrity: Is access to the consumer's data protected?

Product Integrity Testing

Cookies: who is using the browser? Has the user given consent?

Forced account creation: Must the user create an account before they can even see what the website is about?

Data Minimization: What information is required to create an account?

One-Off Transactions: Can people browse or buy something without creating an account?

Legal Assurances: Is there a missing or hidden Privacy Policy?

Terms of Service: Is the TOS easy to understand or is it "click wrap"?

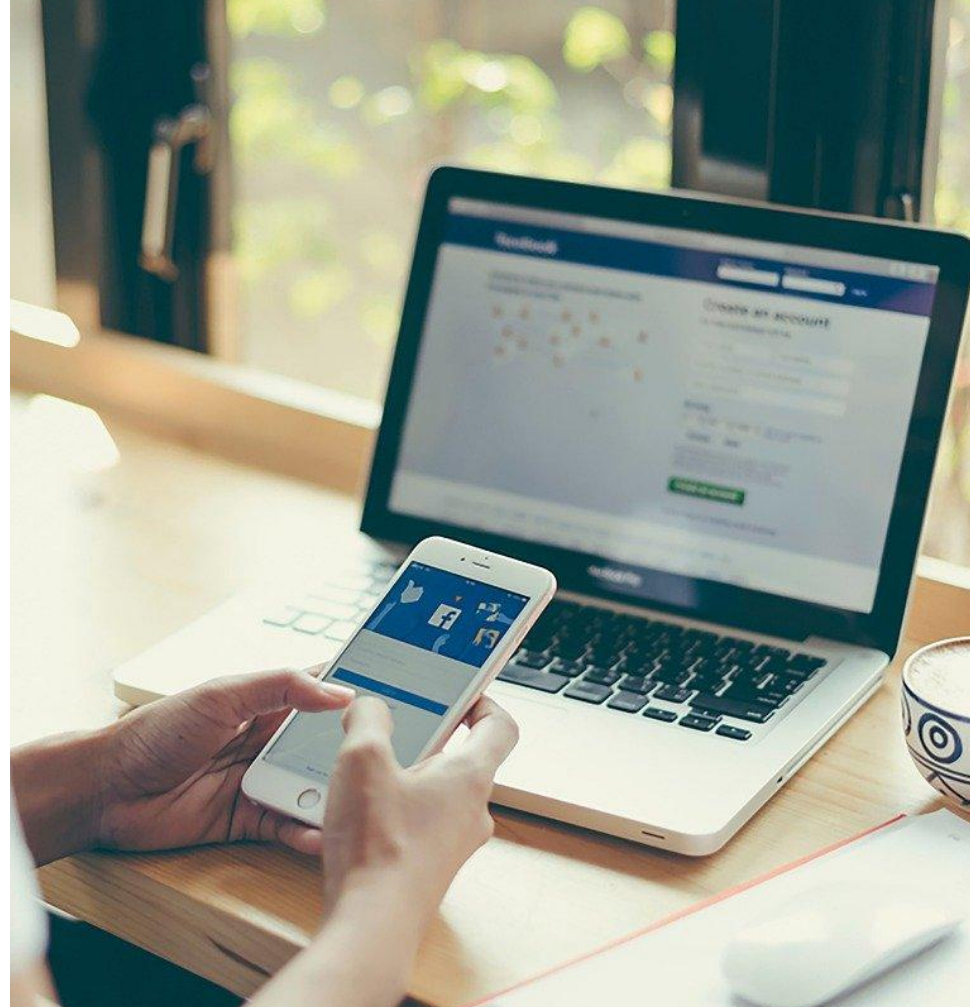
Product Integrity Testing

For each item in the **testing rubric**:

- Which digital harm is an issue?
- Supported by which Harmful UI Pattern?
- Preventing which IA Heuristic* from being realized?
- Causing what result for the consumer/product relationship?

*Abby Covert's IA Heuristics:

<https://www.abbycovert.com>



Product Integrity Testing

For each item in the testing rubric:

- Which digital harm might be an issue?
- Supported by what UI pattern?
- Preventing which IA Heuristic from being realized?
- Causing what result for the Me2B Relationship?

Example:

- Individual Control and Autonomy
- Sneaking: Forced Continuity
- Controllable, Communicative, Delightful
- Deterioration of Trust, Customer Support calls

Product Integrity Test

Findings: Brief description of findings relative to the user state, including what was observed on the page and any potential dark patterns or other errors that may affect the user experience.

Evidence: Description of what the user sees on the page that indicates a potential problem or good practice. Screenshots are indicated if taken.

User Experience: How the user may experience the component or task flow. This includes how the website experience either serves or blocks them from meeting their goal and how it makes them feel.

Recommendation: Ideas to improve the experience

Impact if Corrected: How the corrected problem may improve the user experience.

Product Integrity Test

IA Heuristic: Which information architecture heuristic is affected? Examples include Usable, Findable, Clear, Controllable, Delightful, Accessible, Credible

UXP2 Lab Pattern: Which harmful UI pattern may be occurring? These can be instances of sneaky and blocking behaviors like Redirection, Hidden Information, Forced Action, etc., that typically leverage biases and psychological states and serve to interrupt or change users from their goal.

Severity: How bad is the problem? Does it appear to cause harm or risk?

Notes: Additional comments, future testing

Want to Play?

Digital creators—designers and developers alike—need to unlearn some practices.

There is a path, but it isn't going to be easy.

Yet, the motivation toward good customer relationships is leading the way.



Research of Consumer and Technology Behavior



Reports
Dec 13, 2022

2022 K12 Edtech Safety Benchmark: National Findings – Part I



Reports
Jan 17, 2022

Spotlight Report #5: Me2B Alliance Validation Testing Report: Consumer Perception of Legal Policies in Digital Technology



Reports
Nov 16, 2021

Spotlight Report #3: Me2B Alliance Validation Research: Consumer Sensitivity to Location Tracking by Websites and Mobile Apps



Reports
Jun 2, 2022

Spotlight Report #6: Proffering Machine-Readable Personal Privacy Research Agreements: Pilot Project Findings for IEEE P7012 WG



Reports
Dec 13, 2021

Spotlight Report #4: Me2B Alliance Product Testing Report – Deeper Look at K-12 School Utility Apps Uncovers Global Advertising Company From CBS/Viacom, Unexpected Security Risks



Reports
May 15, 2021

Spotlight Report #2: Rebuilding Respectful Relationships in the Digital Realm

Treatment of consumers by Internet-enabled businesses: Ethnographic pilot study

Prepared by Melanie McComsey, PhD
Sponsored by Me2B Alliance



Consumer Perceptions of Their Relationship with Digital Technology: An Ethnographic Study

Prepared by Noreen Y. Whyssel
November 16, 2020



Treatment of consumers by Internet-enabled businesses: Assurances calibration

Prepared by Melanie McComsey, PhD
Sponsored by Me2B Alliance
April 2020



Respectful Technology

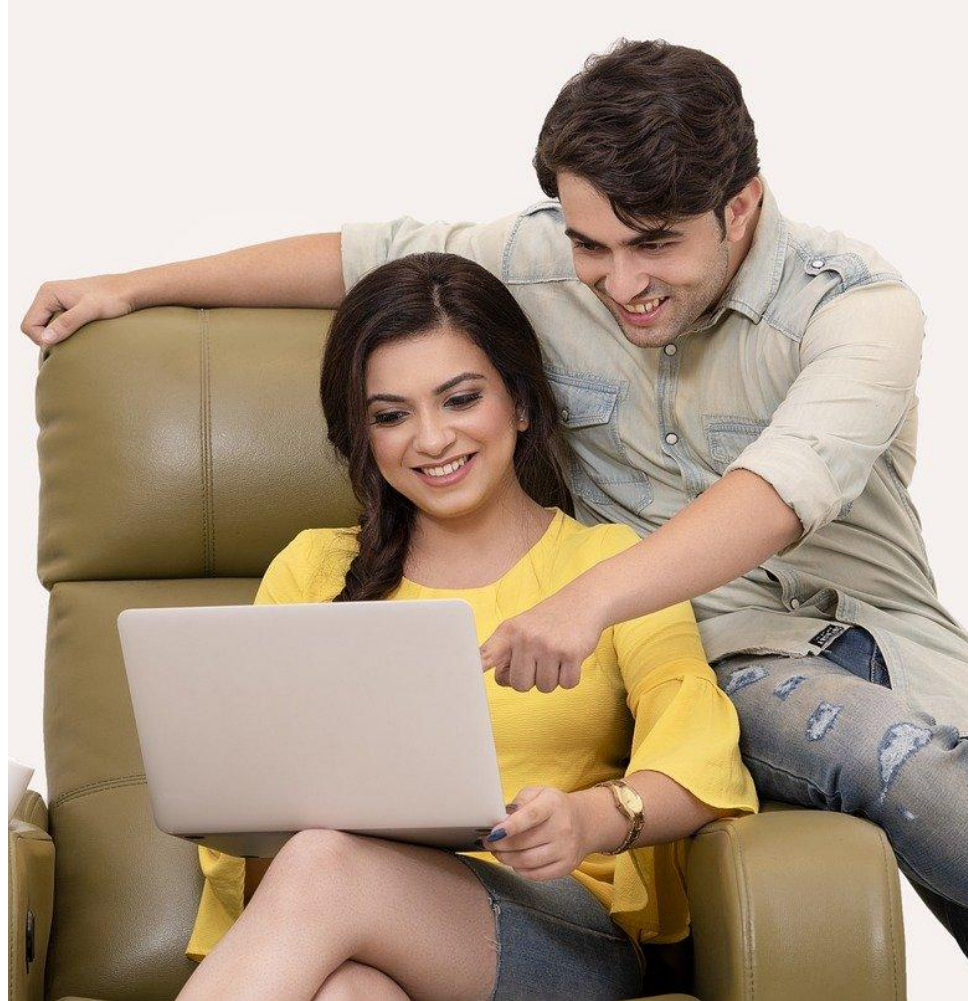
Digital Harms Dictionary

A deep dive into online harms and what you can do about them.

<https://internetsafetylabs.org/resources/references/digital-harms-dictionary-2-0/>

GoodTech.wiki

An online reference for B-s and Me-s interested in learning about respectful technology companies, products and services.



Thanks!

Noreen Whyse

nwhyse@gmail.com

View my work in Safe and
Respectful Technology:

www.internetsafetylabs.org



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