Delegated Power

The Ethics of Nudging in Building More Equitable Product Experiences

Timothy Bardlavens[1]

The ethics of design and technology have been discussed for years, yet digital products can still create harm and negatively impact marginalized and underinvested communities. As the world recently woke up to the existence of racism, "equitable product development" became the new trend; but what does it mean? Is it possible to build equitable products while still questioning the ethics of products? By interrogating how the industry has framed ethics through the lens of digital products, an interesting intersection between behavioral public policy (BPP) ethical frameworks and digital design emerges. In tech, the goal is to solve human needs. In reality, however, designers create digital pathways for people to follow, making critical decisions about their mental and physical health, financial wellbeing, or social interactions. In BPP, this is referred to as nudging—"any aspect of the choice architecture that alters people's behavior in a predictable way."[2] Nudges in digital design are products, design systems, patterns, and more. Digital designers nudge in directions they believe are "best for the user" to complete a task, reach a goal, or find fulfillment. These digital nudges are sanctioned through explicitly and implicitly gained power delegated by the people for whom (not with whom) digital designers create. Centered in this is the understanding of how power and its delegation play a critical role in designers' everyday decisions. By challenging their sensibilities around power and its privileges, designers can move beyond building reactive digital products—created after harm has been caused—to building proactive or even transformative, equitable products. The "Challenge": How is it possible to leverage BPP ethical frameworks as mechanisms to reposition the view

1 Adobe, US.

2 Richard H. Thaler and Cass R. Sunstein, *Nudge: Improving Decisions about Health, Wealth, and Happiness*, Revised & Expanded edition (New York: Penguin Books, 2009), 8.

of ethics and show designers how to leverage (or share) delegated power to create products with more equitable outcomes?
— *Timothy Bardlavens, US*

Over the past decade, my vocabulary on whiteness has evolved. What began as an awareness of my personal experience with micro- and macro-traumas has expanded to include an understanding of systems and how they were designed to be the conduits, purveyors, and protectors of whiteness.

Now, "Whiteness" refers to how white people, their customs, culture, and beliefs operate as the standard by which all other groups are compared. But it also surfaces in the systems navigated to articulate "good design," accessibility, and, yes, ethics. These systems are layers of interlocking tendrils built from centuries of sociopolitical decisions. They are traditions, reactions, protections, and causes meant to create the perception of order, morality, and rightness. Systems themselves are the societal fabric connecting policy, economics, and justice. These systems are complex and overwhelming, but by beginning to understand them, you start the root cause analysis work to more clearly see the world we all navigate.

In thinking about navigating whiteness through the lens of product design, inevitably, the notion of the "ethics of design" emerges. These ethical exercises are meant to reduce harm to the people who use our products, yet we continue to cause it—especially to those most historically excluded.

When discussing the ethics of anything, one must also come to terms with **power**. Who has the power to impose a set of ethics or morals within a space or community? Are the ethics or morals culturally representative and expandable? Do they impose undue expectations or restrictions on those who lack the resources or language? Many of the people we lean on to speak about the ethics of design or artificial intelligence in the US are white men, frequently based out of Silicon Valley, Seattle, or New York. They are privileged individuals with limited lived experiences related to the impact of unethical, inequitable products and have enough financial or institutional capital to have been given the space and platform to pontificate on such matters. They are our moral white saviors.

Yet, those whom we should lean on, who have the lived and acquired experience, are institutionally abused, ignored, tokenized, and fired for their

efforts,[3] or are exhausted and jaded by the emotional and psychological toll they experienced for daring to consider the muddied, bloodied experiences of the oppressed, marginalized and underinvested. Thus, the ouroboros of whiteness continues.

So, where do we begin? How do we think about building more equitable products? Over the past few years, I have been increasingly intrigued by the field of behavioral science and the intersection of sociology and anthropology as it relates to society, culture, social organizations, and inequality. Through this intersection, I stumbled across frameworks from behavioral public policy (BPP)—the study of human behaviors as it relates to policy and policymakers. BPP offers the concept of "nudging."

Nudging is defined as "any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives."[4] Policymakers, leaders, and people in power design nudges to predictably steer people in specific directions. At its core, this is product design—jobs to nudge people into certain directions. "Nudges" can be products, experiences, design systems and patterns, experience paths, and more. As designers, we nudge people in directions we believe are best for them to complete a task, reach a goal, or find fulfillment. This is referred to as "digital nudging" where the use of user-interface design elements to guide people's behavior in digital choice environments.[5] To further understand the correlation between the two disciplines, let us examine the MINDSPACE and EAST frameworks.

In 2010, the Institute for Government, in the United Kingdom (UK), was commissioned to study the implications of behavioral theory for policy-making. In doing so, a team of researchers identified nine non-coercive influences on human behavior. MINDSPACE was created as a checklist of those influences to aid policymakers in effectively implementing policies. This acronym breaks down into:[6]

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3 Karen Hao, "We Read the Paper That Forced Timnit Gebru out of Google. Here's What It Says," *MIT Technology Review*, December 4, 2020, https://www.technologyreview.com/2020/12/04/1013294/google-ai-ethics-research-paper-forced-out-timnit-gebru.

4 Andreas T. Schmidt and Bart Engelen, "The Ethics of Nudging: An Overview," *Philosophy Compass* 15, no. 4 (2020): e12658, https://doi.org/10.1111/phc3.12658.

5 Markus Weinmann, Christoph Schneider, and Jan vom Brocke, "Digital Nudging," *Business & Information Systems Engineering 58* (2016), 433–436.

6 Paul Dolan, Michael Hallsworth, David Halpern, Dominic King and Ivo Vlaev, "MINDSPACE: Influencing behaviour through public policy," *Institute for Government*,

Messenger: we are heavily influenced by who communicates information
Incentives: our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms: we are strongly influenced by what others do
Defaults: we "go with the flow" of pre-set options
Salience: our attention is drawn to what is novel and seems relevant to us
Priming: our acts are often influenced by subconscious cues
Affect: our emotional associations can powerfully shape our actions
Commitments: we seek to be consistent with our public promises and reciprocate acts
Ego: we act in ways that make us feel better about ourselves

The year following the development of MINDSPACE, the Behavioural Insights Team was formed to spread the understanding of behavioral approaches across the UK's policy community. In doing so, they had the challenge of MINDSPACE being too complicated, so they sought to develop a framework that was easier to understand. Thus, in 2012, the EAST framework was developed with the assertion, "if you want to encourage a behavior, make it Easy, Attractive, Social, and Timely."[7] The Behavioural Insights Team went on to develop a method for developing a project with four main stages: 1) Define the outcome, 2) Understand the context, 3) Build your intervention, 4) Test, learn, and adapt. It sounds hauntingly similar to what we define as effective product design and development—1) Defining the problem to solve, 2) Developing user understanding 3) Designing and iterating 4) Testing and learning.

The problem with both MINDSPACE and EAST frameworks is that they inform policy makers on *how* to nudge, but neither whether or not they *should* nudge or whether or not it is accessible, inclusive, and equitable. Much like design, some of these nudges have different or opposing effects on various people, cultures, and classes.

As a result, Leonhard K. Lades and Liam Delaney penned a paper entitled *Nudge FORGOOD* to address this absence. FORGOOD is an acronym for

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2010, https://www.instituteforgovernment.org.uk/sites/default/files/publications/MINDSPACE.pdf.

7 Owain Service, Michael Hallsworth, David Halpern, Felicity Algate, Rory Gallagher, Sam Nguyen, Simon Ruda, Michael Sanders with Marcos Pelenur, Alex Gyani, Hugo Harper, Joanne Reinhard & Elspeth Kirkman, "EAST: Four Simple Ways to Apply Behavioural Insights," *Behavioural Insights Team*, April 11, 2014, https://www.bi.team/publications/east-four-simple-ways-to-apply-behavioural-insights.

Fairness, Openness, Respect, Goals, Options, Opinions, and Delegation.[8] This framework connects to a series of questions centered on policy, but it is observable that we can replace "behavioral policy" with "product," and the questions are still relevant in understanding the impact of the products built.

Fairness

"Fairness" questions whether a product has undesired redistributive effects. In essence, fairness assesses whether or not a nudge will have a disparate impact on other groups. This typically occurs when we assume a specific path is right for everyone. These assumptions are reinforced through user research that unintentionally prioritizes whiteness, then accepts that as the general case for all people. Consider the launch of Bank of America's "Keep the Change" program,[9] where they automatically rounded up purchases to the nearest dollar and transferred that change into your savings. This program was great for those with plenty of "cushion" in their bank account, but for many lower-income families, this meant that their bank accounts were consistently overdrawn. In fact, a 2016 *Pew Charitable Trusts* study on "Heavy Overdrafters"[10] showed that most low-income bank account holders, particularly Black and Latinx, know exactly how much money they have in the bank and typically spend based on that amount. Thus, having just enough money for a purchase plus the rounded-up amount would result in a negative balance and a $35 fee. While this nudge might lead to "optimal behavior" (saving), it ultimately resulted in a negative consequence for those not considered or prioritized. For a product to be "Fair," it must be able to measure the effects on *all* the people using it. When considering the "Fairness" dimension, the questions to consider are:[11]

- Does the product focus too much on one group and neglect another group that is in more need of the product?

8 Leonhard K. Lades and Liam Delaney, "Nudge FORGOOD," *Behavioural Public Policy* 6, no. 1 (January 2022): 75–94, https://doi.org/10.1017/bpp.2019.53.

9 Bank of America, "Keep the Change® Savings Program from Bank of America: How It Works," accessed June 27, 2022, www.bankofamerica.com/deposits/keep-the-change.

10 The Pew Charitable Trusts, "Heavy Overdrafters: A Financial Profile,"April 20, 2016, www.pewtrusts.org/-/media/assets/2016/04/heavyoverdrafters.pdf.

11 Lades and Delaney, "Nudge FORGOOD," 75–94.

- Does the product lead a subset of the population to behave against their preferences and best interests?
- Does the product lead to a reallocation of resources (positively or negatively)?

Understanding the fairness of a product or product experience requires a realistic understanding of its impact on those who use or are prevented from using it. Altruistic intentions are no substitute for unfair harms.

Openness

Following "Fairness" is "Openness," which delves into whether a product is overt and transparent or covert and manipulative. For example, how often have you gotten a "free" subscription that ultimately charged you? Or agreed to allow an app to gain access to your information only to learn through other sources it is being used in ways you agreed to only by the extension of it being buried in a user agreement? Continuing on the financial sector theme, consider a scenario where a small business owner is a first-time popular invoice-processing company, for the first time. Because there was no clear indication of fees, I thought it would be an easy tool to keep track of my business finances.[12] It was not until the full amount was deposited into my account and a subsequent charge labeled "fee" was taken out, that I realized it was not a free tool that came with my subscription to the platform. While I have some level of financial stability, imagine a small business that cannot afford a 3 percent fee. For some, it is nominal, but for others, it is the ability to ultimately pay the mortgage or rent.

For a product to be "open," key features, costs, and implications of usage must be communicated clearly and be easily acknowledged by people using the platform. When considering the Openness dimension, the questions to consider are:[13]

- Does the product have the potential to be manipulative?

12 Arvind Narayanan, Arunesh Mathur, Marshini Chetty, and Mihir Kshirsagar, "Dark Patterns: Past, Present, and Future: The Evolution of Tricky User Interfaces," *Queue* 18, no. 2 (2020), 67–92.

13 Lades and Delaney, "Nudge FORGOOD," 75–94.

- Does the public have the chance to scrutinize the product?
- Is it possible for the person who is influenced by the product to identify its influence and impact?

Openness is a critical factor in digital nudging as it highlights the potential for digital manipulation, regardless of altruistic intent. In this, respect for human autonomy and consent is key as it provides users of our products with the opportunity to opt-out of experiences misaligned with their needs, values or expectations.

Respect

Respect is arguably one of the most interesting FORGOOD dimensions. It questions if the product respects people's autonomy, dignity, freedom of choice, and privacy. Today, so many tech companies are reckoning with this topic in needing to define and ban misinformation,[14] develop the implementation of privacy transparency, and more.[15] The Respect dimension is minor as downloading an app and having the ability to skip a tutorial or onboarding experience because *we know how apps work* (autonomy), or as big as perpetually wading through racist tropes being blasted across a platform, all for the sake of "free speech" and "open discourse"[16] (dignity).

Freedom of choice is unique as it encompasses a person's right to privacy and control over their personal data, as well as the ability to navigate a space the way you want regardless of what others may see as the optimal path (fairness). If we go back to the Bank of America example, upon roll-out, the bank defaulted people into the "Keep the Change" program, forcing account holders to opt out. This is a compounding problem of not considering the distributive effects of a product (fairness), not communicating clearly what the impact would

14 Shannon Bond, "Facebook Widens Ban On COVID-19 Vaccine Misinformation In Push To Boost Confidence," *NPR*, February 8, 2021, https://www.npr.org/2021/02/08/965390755/facebook-widens-ban-on-covid-19-vaccine-misinformation-in-push-to-boost-confiden.

15 Apple Newsroom, "Data Privacy Day at Apple: Improving Transparency and Empowering Users," January 27, 2021, https://www.apple.com/newsroom/2021/01/data-privacy-day-at-apple-improving-transparency-and-empowering-users.

16 Colby M. Everett, "Free speech on privately-owned fora: a discussion on speech freedoms and policy for social media," *Kan. JL & Pub. Pol'y* 28 (2018): 113.

be (openness) and not giving an option to opt in vs. forcing people to opt out (respect).[17] When considering the "Respect" dimension, the questions to consider are:[18]

- Does the product respect people's autonomy?
- Does the product respect people's dignity?
- Does the product respect people's freedom to choose?
- Does the product respect people's privacy?

In many ways the "Respect" dimension connects well with pre-existing ethical frameworks which question the degree to which a product or service adheres to well-defined ethical guidelines regarding fundamental values, such as individual rights, privacy, non-discrimination, and non-manipulation. It is through policy interrogation, rigorous user research and usability testing that a product team can best understand how respectful their products are and what the impact of a lack of respect can have on the person using their product.

Goals and Options

The "Goals and Options" dimensions are quite simple: does the product serve good, legitimate goals, and do people have an option regarding how they navigate the space? "Goals" question if there is a purpose for the work you do, or is it merely for metric gain or to beat the competition? Are you making product decisions for a "quick win" to hit an arbitrary metric created for the illusion of progress over real and clear human needs? The "Goals" dimension forces us to take a critical look at our motivations and intent while also requiring us to clearly define expected outcomes. This gives us a success criteria while also gauging whether or not we have met the needs of "the lowest common denominator" or the worst-case scenario.

Quite plainly, the "Options" dimension questions whether or not the person has options regarding how they navigate a space or if they must follow

17 Yee-Lin Lai and Kai-Lung Hui, "Internet opt-in and opt-out: investigating the roles of frames, defaults and privacy concerns," Proceedings of *The 2006 ACM Sigmis Conference On Computer Personnel Research: Forty Four Years Of Computer Personnel Research: Achievements, Challenges & The Future* (2006), 253–263.

18 Lades and Delaney, "Nudge FORGOOD," 75–94.

a predefined path—likely to meet our internal goals of metric gains vs. their goal of accomplishing a particular task.[19] This is okay for *some* experiences where following a set of key actions is imperative compared to the success of a particular task. However, in other ways, we as designers use this form of forced syntax—or an imposed system that does not allow people to navigate experiences in a manner natural to them—to push people through a path we have defined as "optimal."

I pair these two dimensions together because they both force us to think beyond ourselves, understand our goals, and be realistic about whether they are legitimate or simply corporate fluff, while also deeply considering the needs and pathways of individuals who will have the *worst* time navigating the space and creating for them *first*.[20] When considering the "Goals and Options" dimension, the questions to consider are:[21]

- Does the product serve ethically acceptable goals?
- For products that aim to improve people's lives, do these products really make people better off? How do you know, and how is this "better off" defined?
- Are there other pathing or experience options?
- Is one path the best amongst all of the options? Why?
- Does the experience divert attention away from better experiences?

The "Goals and Options" dimensions can be interpreted as accountability measures. Their intent is to not only to define desired outcomes, but to interrogate whether those outcomes are, or can be achieved. Product designers and developers must consistently ask themselves, are we accomplishing what we intended and do we have mechanisms to see the tangible impact?

Opinions

"Opinions" question if people accept the means and the ends of the product. In other words, do they accept both the intent and the impact of a product? Too

19 Debbie Stone, Caroline Jarrett, Mark Woodroffe, and Shailey Minocha, *User Interface Design and Evaluation*, (San Francisco, CA: Elsevier, 2005).

20 John A. Powell, "Post-Racialism Or Targeted Universalism," *Denv. UL Rev*. 86 (2008), 785.

21 Lades and Delaney, "Nudge FORGOOD," 75–94.

often, we center our work in whiteness (the majority), get our hands slapped, and then beg the world to consider our intent regardless of the impact. For example, Twitter's algorithm prioritized white faces when selecting images.[22] The communication surrounding this was that it was not the platform's intent, regardless of the feature's impact—therefore ignoring the opinions of the public, and those who must experience the product.

That said, with the advent of Twitter Spaces,[23] X (formerly known as Twitter) has also begun efforts to create collective awareness of and gather feedback regarding their new products. This is important because the "Opinions" dimension challenges product designers to create systematic ways to identify public opinion.[24] More concisely, "Opinions" are most satisfied when the product development process is co-creative. It resists the notion that innovation is created in a silo by a few, but is rather a collection of many to ensure broad, diverse needs are being met. When considering the "Opinions" dimension, questions to consider are:[25]

- What is the public opinion about the product?
- How does the public view the goals of the product?
- How does the public view the means used by the product?

At its core, equitable product development requires co-creation, which takes form through investing in understanding the needs and expectations of historically underinvested and ignored communities. In doing this, product teams can more consistently identify novel product solutions or opportunities, drive stronger product implementation, and expect deeper market penetration.

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22 Abeba Birhane, Vinay Uday Prabhu, and John Whaley, "Auditing saliency cropping algorithms," *Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision*, (2022), 4051–4059.

23 Twitter, "About Twitter Spaces," accessed June 27, 2022, https://help.twitter.com/en/using-twitter/spaces.

24 Karl, Lang, Richard Shang, and Roumen Vragov, "Consumer co-creation of digital culture products: business threat or new opportunity?," *Journal of the Association for Information Systems 16*, no. 9 (2015), 3.

25 Lades and Delaney, "Nudge FORGOOD," 75–94.

Delegation

The "Delegation" dimension is unique because it does not question the product but the product designer and broader development team. It is a question of power. As designers, we have the power to create for the world, and as Lades and Delaney point out, that power does not come from the ether. Power is consciously and unconsciously delegated to us by the people for whom we create. Do the product designers and developers have the right and ability to nudge using the power delegated to them? This actually goes back to the example of Twitter Spaces. The product team identified the importance of creating community experiences; they do not have all of the right inputs, people, or lived experiences to leverage the power delegated to them, so they shifted to a co-creative process in which the public can provide insight into products being built for them (opinions). To understand our own power, we must also question: Do we have the right competency? Do we come with any level of cognitive bias, and how does it show up? What are our organizational biases, and how have or will they harm people? We must assess products on a case-by-case basis and, in doing so, always self-reflect on our power and its impact on people.[26] When considering the Delegation dimension, the questions to consider are:[27]

- Do the product designers/developers have biases or conflicts of interest?
- Do the product designers/developers have the competency to design, implement, and evaluate the product?
- How do those potential biases or conflicts of interest and lack of competency influence the assessment of a product?

Delegation centers on reflection of self and team, it is likely the most difficult of dimensions as it requires introspective analysis of our biases, interrogation of our approaches and an understanding of our power. None of which are achievable without maturity and humility. While that may seem overwhelming, the FORGOOD framework is just one of many approaches to thinking about ethical design practices, but how does that lead to more equitable products and outcomes?

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26 Tania Anaissie, Victor Cary, David Clifford, Tom Malarkey, and Susie Wise, "Liberatory design: Mindsets and modes to design for equity," *Liberatory Design*, 2021.

27 Lades and Delaney, "Nudge FORGOOD," 75–94.

First, there is no agreed-upon definition for an "equitable product." Is it one that is made with everyone considered in the product development process? Or at least the most marginalized? An equitable product is one that reduces harm, increases access, and is co-created to first meet the needs of the historically excluded, then augmented to meet the broader population's needs. That said, the lack of definition and examples often results in designers relying more on their own moral intuition than on a widely-accepted theory or set of best practices.

I define equitable products, more specifically *product equity*, as the state in which every person, regardless of human difference, can access and harness the full power of digital products, without bias, harm or limitation. In this view, product equity is both a practice and an outcome. As a practice, product equity considers all forms of human diversity and difference throughout the product design and development process, acknowledges systemic inequities that limit or prevent equal access and value to digital products, and solves for those imbalances; resulting in products that first meet the needs of historically underinvested and ignored, and also creates more fair outcomes.

There are very few examples of proactive, or transformative, equitable products—products built with historically excluded social identities in mind. These are different from reactively equitable products that were augmented after causing harm to a specific group. There are many reasons why there are so few examples, but a dearth of frameworks to propel more equitable design is not one of them. With frameworks like Creative Reaction Lab's *Equity Centered Community Design* pioneered by Antionette Carroll,[28] or equityXdesign[29] developed by Caroline Hill, Michelle Molitor, Christine Ortiz —and so many more, the options and opportunities are endless.

That said, people continue searching for ethical and equitable frameworks without addressing their own core sensibilities. Understanding how we navigate whiteness within systems and using equitable design frameworks are important, but they do not make the crux of the work the design community needs to do. Seeing systems helps designers to understand the context of their work, while equitable design frameworks offer mechanisms to guide

28 Antionette D. Carroll, "Equity-Centered Community Design," *Slow Factory*, accessed June 27, 2022, https://slowfactory.earth/courses/equity-centered-community-design.

29 Andrew Plemmons Pratt, "Designing for Race Equity: Now Is the Time," *NGLC* (May 15, 2020), https://www.nextgenlearning.org/articles/designing-for-race-equity-now-is-the-time.

the inception, production, completion, and implementation of product work. However, the underlying systems and frameworks are our preconceptions, and addressing whiteness in products means addressing the internalized sensibilities of whiteness we see as normal. So, how do we begin addressing internalized whiteness in ourselves, our disciplines, and our organizations?

Bias as Our Default

All people have biases, and most people exhibit it unconsciously. While not intentional, bias enforces and promulgates existing stereotypes. Even if we want to do the right thing, we might not recognize our own biases. By the same token, teams must also recognize that bias exists "as our default" within the products that are made and shipped globally. This means that we have sometimes failed to represent users equitably within our products, with launches that did not focus enough on underinvested groups.

"Bias as our default" means digital product teams expect every part of their process and products to contain some potential to create or exacerbate harm. By assuming all products are biased from their inception means teams must establish bias mitigation strategies to reduce bias. This begins with having an open and honest culture in which individuals in teams can document and discuss their bias, in addition to creating mechanisms to identify bias—whether it's homogenous search results, an inaccessible user experience, or a subscription model that lacks socioeconomic context. This becomes even more difficult with some technologies, like machine learning and artificial intelligence, where data sets are so expansive that a human's ability to accurately and impartially review all data is nearly impossible. In these scenarios, technologists must question, "how can we do more good than harm?" and "what processes do we need to implement to review, diagnose and remedy problems in an ongoing manner?"

Managing bias is a distinctly different set of actions to promote user trust and safety. It is consistent work to interrogate and address our thoughts, actions, and approaches to building products. This internal work is never complete—it is lifelong and uncomfortable.

Rejecting the "Right to Comfort"

Second, we must accept that dismantling unjust systems is uncomfortable, especially to those who benefit from them most. If you are to develop or adapt to more equitable systems, you cannot protect your comfort. In the equitable design world, we call this resistance "the right to comfort."

The right to comfort appears in design through the oversimplification of work. For example, in many cases, making products more accessible, inclusive, and equitable means relegating essential framing to checklists, which we use to make work simpler and more efficient. We see this in the accessibility space: Web Content Accessibility Guidelines (WCAG) checklists abound, and while the strides that the World Wide Web Consortium has made in building the WCAG guidelines to help designers make more accessible products is appreciable, there is a long way to go in terms of connecting what is on these checklists to designers' understanding of their guidance. Accessibility checklists can dehumanize the process of understanding human needs as it relates to those living with disabilities or who are neurodivergent; they replace understanding with rules for type, size, color, and alt-text—much of which only scratch at the surface of a person's need to navigate physical and digital space comfortably.

A checklist is, among other things, a mechanism of comfort. Checklists make whiteness feel at ease while offering a sense of accomplishment for "being the ally" in doing the minimum work with little or no understanding of the work.

When considering how to address equity in products, the prioritization of white comfort also dictates who, how, and why these efforts should exist. I have seen senior product engineering and design leaders prioritize engineering costs or metric gains over improving the quality of our products and, by extension, the quality of people's lives. Demma Rosa Rodriguez, Senior Anti-Discrimination & Equity Modeling Lead at Airbnb, said, "At its core, this is a quality problem. When we build products that are inaccessible and inequitable, they are of low quality; they do not meet the bar for shipping."[30] Through this lens, how many products exist today that are of low quality?

30 Demma Rodriguez, "Engineering for Equity," O'Reilly, accessed April 16, 2023, https://www.oreilly.com/library/view/software-engineering-at/9781492082781/ch04.html.

Vivianne Castillo, Founder of HmntyCntrd, sums up the need to change our sensibilities about comfort by asking: "are you willing to suffer?"[31] Black, Latinx, and Indigenous designers have disproportionately suffered and experienced organizational trauma in driving towards more equitable cultures, systems, and products—it would be nice if others shared the load.

Step Outside Yourself

Be thoughtful and get out of the way. Step outside of yourself, your experiences, and your biases and truly, deeply learn about, absorb, and consistently consider the human condition of the most ignored, traumatized, and marginalized. This is bigger than empathy; it is humility. In her talk, "Design No Harm: Why Humility is Essential in the Journey Toward Equity," Antionette Carroll described "empathy without humility often shows up as judgment… if empathy does not have humility, it is still about you."[32] She goes on to quote Emily Rowe Underwood, Community Initiatives Specialist at the Missouri Historical Society who described that, "Humility asks us to step outside of ourselves, listen and absorb someone else's truth, even if it makes us feel defensive."[33] This means identifying and addressing the internalized whiteness we all have absorbed simply by living in a commercial, capitalistic society.

In developing digital products, "stepping out of yourself" typically arises in four key areas: 1) participant recruiting phase of research, 2) insights interpretation, 3) strategic development and 4) the design phase. Each of these areas may be highly dependent on a person's role as to how much control they have over the outcomes. In recruiting for research, it is imperative for researchers to ensure that participant selection is over indexed on racial/ethnic, gender, age, ability status and geographic diversity.

The interpretation of insights is a multidimensional challenge in which researchers create themes based on their understanding of participant feedback. These insights are then passed to product owners and designers who further filter participant goals, experiences and challenges through their own interpretations, typically anchoring on data that is seen as achievable,

31 HmntyCntrd, "What We Do," accessed June 28, 2022, https://hmntycntrd.com.

32 Antionette D. Carroll, Design No Harm: Why Humility Is Essential in the Journey Toward Equity, In/Visible Talks 2020, 2020, https://vimeo.com/389018075.

33 Rodriguez, "Engineering for Equity."

desirable, or favorable to predetermined outcomes. While many of these individual disciplines' jobs are to interpret data to create solutions and strategies, "gut check" mechanisms must be put in place with living experts, for instance, people who have lived experience of a particular problem or scenario, to ensure product outcomes actually align with human need—beginning with those who are historically underrepresented and marginalized. In developing product strategy, it is imperative product owners to balance qualitative and quantitative data, to highlight the outlier and opportunity as opposed to only focusing on "the majority."

In the design phase, designers must seek out ways to co-create experiences with real people, and this can be done in partnership with research. All too often, designers make assumptions about how people approach product experiences based on their own rationalizations, then test those assumptions through usability testing, thus resulting in a confirmation bias. Designers must first work with living experts on whether the solution a design presents is actually solving the core problem, and then work towards whether the product is usable for people living with disabilities and other limitations (financial, geographic and otherwise).

Stepping outside of yourself is a call to step outside of your comfort, to interrogate your approach and, in doing so, interrogating the system in which digital products are developed.

Question the "Master Approach"

Different products require different considerations and ask as often as possible how product designers can take a more nuanced, case-by-case approach to researching, planning, designing, launching, and assessing products. Because many of us work in for-profit companies, efficiency has a significant hand in crystallizing our approaches into repeatable "mechanisms," but there is no singular, master approach that will meet the needs of every person or product.

For example, can we free ourselves to question the use of "people problems" or problem statements as mechanisms for identifying the gap between a person's current and desired experience or to clearly articulate a person's unmet needs? These mechanisms oversimplify human needs and do not consider the implications of age, gender identity, race/ethnicity, ability, health, and socioeconomic status on people's experience of products. Persona-based design can be effective, but it must take into account social identities and

context as a part of the overall user journey and narrative.[34] This is not a new idea, of course, but one many before me have said.[35]

Reassess Innovation

We should reassess our definition of "Innovation." Consider product development wholly for a moment. The past several decades of product development has largely remained the same. A select few people identify gaps in the market, they create "a thing" to fill that gap, over time they add new features and capabilities based on a vocal majority, and a competitive advantage. A company's desire to be innovative leads to a culture of secrecy, a rush to be first to market, and the "big reveal". This sense of urgency, paternalism, and individualism inevitably leads to the needs and perspectives of those who make the products trampling on those who may use or want to use them. Innovation means nothing if it causes harm, ignores whole populations, or negates the experiences of the historically excluded and marginalized.

Reassessing innovation means to interrogate the process in which digital products are developed. To not only see gaps in an industry or specific behavioral patterns, but to understand the context of those inputs and the system which creates them. True innovation can be achieved through understanding and integrating the experiences of those who can't fully access digital products—financially, geographically, mentally, physically or emotionally—into product solutions. This is a co-creative process in which organizations do not hide their digital products, but create openness, access and mechanisms for feedback; where outlier feedback is respected as equally as majority feedback and investigated to understand its root cause.

Reducing whiteness in products begins and ends with redefining innovation to be co-creative, accessible, and equitable. It is our job to redistribute power back to communities and not only include them in the

34 Saul McLeod, "Social Identity Theory," *Simply Psychology*, October 24, 2019, https://www.simplypsychology.org/social-identity-theory.html.

35 Also see Yashasri Sadagopan, "How To: Make the Persona Work," *Medium*, November 8, 2019, https://uxdesign.cc/how-to-make-the-persona-work-5cd636cd1db7; Patricia Rodriguez, "How to Reduce Bias in Your UX Practice with Persona Scenarios," *Kalamuna*, July 17, 2019, https://www.kalamuna.com/blog/how-reduce-bias-your-ux-practice-persona-scenarios.

product design and development process, but also ensure they are heard, respected, and paid.

Reassess Success

Last, let us open up to different ways of measuring progress. In for-profit companies, such things as metric gain, more customers, and higher revenue are prized. But if we are to do the hard work of designing for everyone, we cannot chase those carrots alone.

The reassessment of success is also a conversation about power, power to influence policies, metrics, goals and outcomes. It's a question of, "are we willing to feel the pain?" This pain is metaphorical, but it's a provocation to interrogate leaders' ability to articulate what guardrails exist, to be clear about the amount of risk they're willing to take when balancing potential metric loss for societal gain. Metric loss is not always the outcome of more equitable practices, but it is typically the fear. This fear is inextricably connected to a business culture focused on short-term gains and market wins over long-term impact. When considering the long-term impact of these approaches, leadership must consider benefits such as an increase in brand trust and legitimacy, increased market penetration, new market segments, as well as efficiency and cost reduction. While these are not easily or quickly quantifiable, each are direct results of focusing on previously ignored communities and building digital products with those communities in mind and within the process.

A Provocation, not a Panacea

This chapter addressed complicated topics, and many of us have fallen into the trap of seeking out the simplest of solutions. Systems are broad and deep, with tendrils stretching back hundreds of years.

Frameworks are general and flexible tools meant to create a foundation for navigating your work. You can understand the systems and leverage the frameworks, but without understanding how your sensibilities connect to the micro- and macro-systems and how they can influence frameworks, you run the risk of causing harm.

Checklists and boxes will not work here. A two-hour inclusivity workshop or a book on white fragility is not enough. Commitment to removing whiteness from the products we build is ongoing work for the rest of our natural lives—and for generations to come.

Acknowledging that we all navigate—or make space for—whiteness within larger systems necessarily means acknowledging the problem's scale, and hopefully provoking us all to question the efficacy of quick performative fixes (i.e., adding more skin colors choices for emojis, creating profile stickers, etc.). Such band-aid solutions are trivial in the face of the real work required to drive more equitable outcomes through digital products. It would also be remiss not to say that this is big talk coming from a person working in "big tech." This is a provocation for us internally and externally—we are all accountable.

Progress is comfortable, and change is uncomfortable—you better get comfortable with being uncomfortable.