

Friction in Equity Work for Product Development

A Human-First Approach to Getting Unstuck

MARINA KOBAYASHI, Google NOELLE EASTERDAY, Google REALITY CANTY, PHD, Google ALEXANDRE ZANONI, Google

As part of an internal UX team, researchers at a multinational tech corporation were tasked with improving the Equity of products through product development practices within the company. However, the researchers had to first define the space and assess the friction their colleagues felt when trying to do Equity work. What followed was an ethnographic "noticing" of colleagues feeling "stuck" followed by an accounting of social and organizational blockages at three levels: institutional, interpersonal, and intrapersonal. But to even capture these signals, the researchers themselves had to first get "unstuck" and reframe our UX-centric understanding of internal "users" back to ethnographic-centric "humans". Based on the findings of mixed ethnographic and UX methods, this case study explores the multidimensionality of Equity work for the individual, questions the boundaries of what "counts" within the professional sphere, and argues for new strategies for Diversity, Equity, and Inclusion (DEI) solutioning. The first half of the paper lays out the fraught landscape of product building for Equity and the challenges practitioners face when business constraints intersect with top-down DEI goals. How did we account for the many causes of friction in Equity work? How were our colleagues blocked, slowed down, or paused within the minutiae of their day-to-day? The second half identifies opportunities for Equity-focused UX praxis within organizational structure. How did storytelling create space for productive discomfort? What were the calls-to-action for individual contributors, managers, and leadership? And how did we define success within our own work? In the end, this case study demonstrates how, when experiencing friction ourselves, we got unstuck by stepping back and simply asking ourselves, "Why is this so hard [for us right now]?"

OUR ETHNOGRAPHIC CONTEXT

We are user experience researchers (UXRs) at Google, on a central Product Inclusion & Equity team (fka "Equity Engineering") under a broader 'Products for All' (P4A) division that aims to improve the equity, inclusion, accessibility, and internationalization of current and future products.

A CATALYST FOR EQUITY

In May 2020, the death of George Floyd triggered a global reckoning on race, equity, and justice in the public sphere. Leaders and organizations galvanized by "a newfound institutional commitment to equity ... initiated discussions about how the team might better incorporate the needs and perspectives of underrepresented user

groups within our product development cycle..." (Mendonca, 2022). Enter the Equity Engineering (EE) team at Google – the team was originally founded in 2018 to prevent the launch of products or features that create or perpetuate potential inequities through "engineering" (e.g. innovating) a way forward. Our team is particularly tasked with improving the Equity of products through product development practices within the company.

AN EARLY SUCCESS WITH A NEW WAY OF KNOWING

At that same time, we were engaged on a project that became a methodological provocation, challenging the "correctness" of industry researchers' over-reliance on "representative" sampling and evaluative research methods. Members of our team orchestrated a comparative study where in-parallel, the product team UXR followed an oft-relied upon "representative" recruiting process with our central UX infrastructure team's participant database (n=12), while the Equity Engineering team UXR elected to take "practical significance" focus with a community-participatory approach - reaching out to Employee Resource Groups (ERGs) to recruit members of an intersectional identity group that has historically seen disadvantaged experiences in tech (n=23). Both groups participated in in-depth interviews (IDIs) that used the same protocol and questions, but the results of that comparative study laid bare a stark contrast in the lived experiences of the ERG members and the underlying motivations that would prompt them to engage with the target Critical User Journey (CUJ). The Equity Engineering team recommended halting product development due to the major differences in findings across the two study groups. Despite the relatively small sample size and comparing across the "representative" group vs the "most impacted" group, stakeholders were persuaded by the findings from the non-traditional ERG recruited sample – and agreed to the recommended course to halt development. As UXRs, we reflected on the dramatic contrast in findings between the groups – the study revealed how woefully insufficient representative sampling alone could be, and like Mendonca, the practical challenges for operationalizing diversity and inclusion in research, representing people in personas, and developing KPIs.

EVOLVING EQUITY-BUILDING EFFORTS

Two years into the EE team's nascent existence, the team had more requests to consult than our small (>10 person) team could field. The team began a strategic transition to scale equity-building by turning inward to reflexively discover product teams' challenges in the space, then developing methods, approaches, and tools to be applied in product development. Part of this mandate includes digging deeper into how tech workers do Equity work: how they begin, how they incorporate Equity considerations into designing products at different stages of development, and how

they navigate Equity goals as part of a team aiming to improve the lives of end users through technology.

Our identity as a horizontal team focused on the thematic problem-space of "equity" began to take shape. Our "designs" would be used by product teams within our own company - those internal teams are our "users". From mid-2021 to late-2022 our team engaged directly with "priority partners" (select product teams within our PA) for a series of weeks-long consultations (Bargna and Santanera 2020). In our early research efforts, we worked with partner teams at the company to improve the Equity of their products. One tool we utilized was called an Equity Posture Assessment. This included a hands-on workshopping to determine where the product needed improvement and was followed with guided evaluation of potential solutions. As we facilitated these sessions, the researchers would discuss how the sessions felt difficult - "like walking in sand" - despite the usefulness of the workshop framework. We brainstormed modifications and revisions to the workshop structure as well as the content. Despite our efforts to provide a flexible and tailored framework to elicit smooth and straightforward product improvement, we still noticed "stuckness". At that point, we asked ourselves, "Why is this so hard?" and "Why are we all feeling so stuck?" This was an honest question, a stepping back to gain perspective. We, as researchers, needed to get ourselves "unstuck".

EQUIPPED WITH ETHNOGRAPHY

This corporate context is what led to "short-term" (Pink and Morgan 2013) insitu observations. In the midst of these limited engagements, embedded in select product team activities, our researchers reflected on the "show" and recognized the need to adopt an "ethnographic sensibility". We were primed to leverage the immersive nature of our partnerships to observe, unpack, and interpret the challenges and pain points of the teams endeavoring to ensure the equity of their products (Simons and Smith 2019, 341). Those observations and perspectives on the priority partners – were immediately an effective alternative way of developing deep "knowing" of the product team dynamics and mental models. Our ethnographic "noticing" (Kim 2017) of frictions – where Googlers felt "stuck" when attempting to do equity work emerged as a profound revelation. Through "anthropology of design, that takes design as its object of study... anthropology of design can shed new light on design as a social process" (Murphy 2016)

When we first came together as a research unit, we set out to define the Equity space itself within the context of a tech organization. We recognized that there are end users, consumers, who use and are affected by the products we bring to market. However, what was also important to recognize was the community of users that comprise the product development teams themselves: the program managers, engineers, UX designers, etc. To address Equity in tech, industry must address the

needs of two overarching user populations: external consumers and internal product developers. The former requires intentional consideration of the diverse identities and context humans around the world bring to their tech usage; the latter requires pathways to building for Equity within industry processes. In other words, in order for products to be experienced in equitable ways by consumers, tech workers have to build Equitable design and features into the products themselves.

To account for what we had overlooked, we reframed our UX-centric characterization of our tech worker colleagues away from the known aspects of their professional identities. Yes, we were all working for a tech company, building products for billions of people around the world. However, we were people with emotions and thoughts beyond the nuts and bolts of our job roles. We recognized that our colleagues were feeling "stuck" too. That they were, perhaps, unfamiliar with how to discuss Equity issues with subject matter experts, or unsure how to utilize inclusive language, or scared they might get it wrong. Professionals are people who do their job. They are people who carry their past experiences, social programming, and somatic responses to the workplace. And in order to help people build Equity into products, we must account for the human aspects of doing this work.

FORTIFIED ETHNOGRAPHY

Yet, we were concerned that the findings of frictions recognized through the practice of "noticing" would appear too "anecdotal," lacking in validity, or significance. Would leadership agree to infrastructure and organizational investment to address frictions that impede equity work?

Since "friction is a function of the everyday" (EPIC2023 Theme) and can permeate many forms of work – what might set apart the friction employees experience in doing equity work? To better understand the frictions we had observed, we decided to gather quantitative data in addition to the qualitative observational data. We devised a survey to triangulate between these different ways of knowing. The study aimed to assess the frictions our colleagues were experiencing when trying to do Equity work. We defined "friction" as "the conditions that cause you to pause, slow down, feel stuck, or be blocked." Producing the survey started with simply writing down all the frictions that we had observed, experienced ourselves, or surmised based on constraints that are felt cross-industry. That exercise alone produced over 20 friction points. In Q2/Q3 2021, we ran a small-scale pilot survey among our closest product partner teams (N=15). The data showed that everyone was experiencing friction and in multiple ways. Colleagues reported frictions in the survey and through coding them, we identified multiple levels of frictions occurring: intrapersonal, interpersonal, and institutional.

We were able to build upon the pilot survey and included 34 different friction points that respondents could select. Respondents were given checkboxes that were organized by a theme per page (Equity fundamentals, potential harm, resourcing, business constraints, burn out, and other). After analyzing these initial signals, we expanded the study to launch a large-scale survey (n=472). The survey was nine questions long and consisted of check boxes and open-ended text boxes. We distributed the survey among cross-functional product team roles (such as product manager, software engineer, UX designer, etc.). To promote everyone sharing their most candid responses, we configured the survey to collect responses anonymously. Our research objectives were 1) capture at what points tech workers feel "stuck" in the Equity building process, 2) segment along job roles to understand different friction points, and 3) determine where friction is felt most so our team can target problem solving.

EQUITY WORK FRICTIONS

Based on the findings of mixed ethnographic and UX methods, this case study explores the multidimensionality of Equity work for the individual, questions the boundaries of what "counts" within the professional sphere, and argues for new strategies for Diversity, Equity, and Inclusion (DEI) solutioning. We "...work as researchers, facilitators and co-creators of the design process, in multidisciplinary and transdisciplinary projects" (Bargna and Santanera 2020, p.29)

One other important insight was that frictions could be categorized into three levels: intrapersonal, interpersonal, and institutional. **Intrapersonal** frictions are emotional and personal. We found that tech workers are often reluctant to take the first step (for many reasons) toward Equity building. **Interpersonal** frictions are practical and social. We found that tech workers are often inexperienced in navigating Equity work with colleagues. **Institutional** frictions are organizational and structural. There are often industry-related constraints and practices that slow Equity building. In recognizing these different levels we were able to better recognize how frictions were showing up both inside and outside our workshopping.

KEY FINDINGS

Just as general frictions are expected and permeate many aspects of work, 98% of Googlers reported experiencing friction when trying to do Equity work. On closer examination, we categorized the frictions Googlers reported experiencing and of the 34 different frictions listed, the most selected friction categories were: competing business constraints, being unfamiliar with Equity fundamentals, lack of resourcing, concern of potential harm, and burn out. On average, Googlers reported experiencing 9.6 friction points out of the 34 listed frictions. Some of the top ranked frictions were about not knowing how to start equity work, being unfamiliar with thinking about equity issues, inexperience prioritizing Equity amongst other requirements, not knowing how to measure Equity, and not knowing how to do it

"right." A commonality of these top ranked frictions is that they can form a "friction funnel" effectively diverting or deterring would-be Equity-builders from applying equity practices on their product teams.

ABOUT THE AUTHORS

Marina Kobayashi is a User Experience Researcher Manager on the central Product Inclusion & Equity UX team (PIE-UX) at Google, working out of San Francisco, CA. Prior to the PIE-UX team, she worked on products ranging from hardware to video games to software, websites, and apps.

Noelle Easterday is a cultural anthropologist, educator, and a UXR of Product Inclusion & Equity at Google. Noelle advances ethnographic approaches to Equity-building, centering the everydayness of human experiences in her work. She's committed to pragmatic, data-driven solutioning for individual contributors alongside systems-level interventions. When not working, you'll find Noelle in the garden with her kitty, Turnip.

Real Canty is committed to building equitable socio-technical interactions through inclusive design practices. As Senior UX Researcher of Product Inclusion & Equity at Google, he is intentional about the voice and verve in his thought and expression. At the heart of his presence is a pluralistic appreciation for the potential that multiple knowledge systems hold for developing equitable and just futures for all living things.

Alexandre Zanoni is a Google UX Researcher dedicated to making technology more accessible. He has a bachelor's degree in social sciences and a master's degree in Sociology from the Federal University of Paraná in Brazil, where he is currently a doctoral student researching the emergence of solidarities in digital work platforms. In 2021, he received the Best Book Award from the Brazilian Association of Labor Studies. He is interested in the intersection of work, culture, and the digital life.

NOTES

Special thanks to our colleagues on the Product Inclusion & Equity team for supporting our pursuit of such research opportunities as ethnography of equity-building within our workforce. Thank you to the wider Alphabet UX team and our cross-functional inter-disciplinary product team partners for inspiring us to conduct our research on Frictions in Equity Work and for responding to our survey.

The opinions and views expressed in this case study are those of the authors alone. The authors of this case study do not represent the official position of the employer (Google).

REFERENCES CITED

Cohen, Kris R. 2005. Who We Talk About When We Talk About Users. https://doi.org/10.1111/j.1559-8918.2005.tb00005.x.

Kim, Eleana J. 2017. "The Arts of Noticing." Current Anthropology 58, no. 1 (February): 138-140.

Mendonca, Karl. 2022. "Beyond Representation: Using Infrastructure Studies to Reframe Ethnographic Agendas and Outcomes." ISSN 1559-8918 (October), 220-230.

Neese, Megan. 2016. "How "the User" Frames what Designers See: What Cultural Analysis Does to Change the Frame." In Handbook of Anthropology in Business, edited by Rita Mary T. Denny and Patricia L. Sunderland, 521-539. N.p.: Taylor & Francis Group. https://doi.org/10.4324/9781315427850.ch27.

Pink, S., and J. Morgan. 2013. "Short-Term Ethnography: Intense Routes to Knowing." Symbolic Interaction 36, no. 3 (August): 351-361.

Simons, Erica S., and Nicholas R. Smith. 2019. "The Case for Comparative Ethnography." Comparative Politics 51, no. 3 (April): 341-359