Organizing for Radical Inclusion: Reflections from Hackathons

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Submitted to the Integrated Design and Management Program in Partial Fulfillment of the Requirements for the Degree of

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Abstract

Despite moving the world forward, technological progress has left many people behind. Science and technology industries see themselves as open to all. Yet, they lack inclusion: not involving and empowering people across a range of human differences. Hackathons are a microcosm of these industries and suffer from a similar problem. By examining hackathons, we can uncover principles for creating, what I call, radical inclusion. Radical inclusion is the interbeing with all, seeing our realities and existence as interwoven. However, existing social systems hinder radical inclusion. Thus, we have to be diligent in removing these barriers. Put simply, we have to organize for radical inclusion.

This thesis is a reflection of my lived experiences and secondary research and an investigation of ways to organize for radical inclusion. It includes lessons learned from organizing, attending, and studying hackathons and analogous experiences. These lessons culminate into five principles that ensure that a hackathon is radically inclusive.

This research has revealed five principles that can create and cultivate radical inclusion:

- Radical inclusion is not a default social state today. Be intentional about being radically inclusive. Make it an imperative for all in an organization.
- Radical inclusion is uncomfortable. Honor this discomfort and empower organizing team and participants to navigate such situations.
- Radical inclusion necessitates meeting people where they are, as they are, in their journeys. Embody deep hospitality with wide open arms to all.
- Radical inclusion comes from encouraging human transformation, a continuous process. Foster patience and encourage forgiveness for self and others.
- Radical inclusion is rooted in a ruthless search for truth. Enable all to be soft bellied: to let personal guards down. This nurtures curiosity to explore and be moved by the truth of the other.

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Table of Contents

I. Introduction 5
II. What is radical inclusion? 7
III. What are hackathons and why this thesis focuses on them? 8
IV. How to design an inclusive hackathon experience? 12
V. Conclusion 35
VI. Works Cited 36
I. Introduction

1. Sandy S. joined a management consulting firm as a Manager after finishing business school. Based out of Houston, Texas, Sandy served energy sector clients. She often found herself as the only woman in boardrooms full of white men, most of whom had been in the energy industry for their entire career. By 2012, Sandy made Partner, a milestone at her firm. As Sandy climbed the ladder at her firm, she fought gender stereotypes, microaggressions, and blatant discrimination. Now, as a Partner, she could ensure others didn’t experience the same. Unlike other Partners, she directly mentored young consultants, specially females. Given her passion and vision, the Managing Director of the office mandated her to lead the official inclusion team. The team’s flagship event was an international festival: a biannual post-work event where employees gathered to taste food and beverages from different parts of the world. *Come, taste pork dumplings from China and sip caipirinha from Brazil while listening to Bollywood music.* An opportunity to change the way employees existed in the work environment was boiled down to a happy hour, one with Japanese sake instead of old fashions. Did Sandy think this was enough to create inclusion? Did she see it as a step on a long, winding path towards inclusion? Sandy was in a position of authority and had a personal stake in creating an inclusive space. Yet, she chose to direct most of her team’s effort into organizing a superficially inclusive event.

2. Company policies often state that they hire for skills and not on the basis of race, color, religion, gender, gender expression, age, national origin, disability, marital status, sexual orientation, or military status. Yet the state of the computer science and technology industry when it comes to inclusion is bleak. Take gender representation. In 1985, 37% of computer science bachelor degree recipients were women. Today, this number is down to 19%. Only 26% of computing job positions are held by women. Only 39% of employees at Amazon are female, 33% at Facebook and 31% at Google. The picture is bleaker for women of color: 3% of these jobs are held by African American women and 1% are held by Hispanic women. Only 17% of Fortune 500 CIOs are female.

Despite brave intentions, personal dedication, and non-discriminatory policies, industry leaders fail to deliver radically inclusive spaces and experiences. Given our existing social and corporate structures, how can we organize for radical inclusion? How do we bring people across a range of human experiences together and ensure that they feel included? While there is no cookie cutter answer, this thesis provides a perspective to consider. Specifically, it looks at organizing hackathons to develop this perspective.

3. What methods are used in developing this thesis?

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1. Name and identifying details have been changed to protect the privacy of the individual
During 2017 and 2018, the author of this thesis co-organized three hackathons at the Massachusetts Institute of Technology in Cambridge, Massachusetts. All of these hackathons were organized to solve problems of discrimination and bias. These hackathons were Breaking The Mold, Hacking Discrimination, and Hack for Inclusion. Breaking The Mold was organized by MIT’s Sloan School of Management in February 2017, with 120 participants working in 14 teams. Hacking Discrimination was organized by Black Alumni at MIT in April 2017, with 100 participants working in 10 teams. Hack for Inclusion was co-organized by MIT’s Sloan School of Management and Black Alumni at MIT in March 2018, with 135 participants working in 14 teams. While Breaking The Mold was a day-long hackathon, Hacking Discrimination and Hack for Inclusion lasted two days.

This thesis is primarily a reflection of the author’s experience of organizing these hackathons and analysis of the user research conducted during the organization. Additionally, this thesis draws from observational research conducted at three hackathons at MIT, Hacking AI with IBM Watson and Hacking Arts in 2016 and Reality, Virtually in 2017. It also includes secondary research on other hackathons and events around the U.S.. The research is analyzed and synthesized into multiple guidelines and five principles.

4. How is this thesis structured?

This thesis is divided into four sections that follow the introduction. The first section paints a picture of what radical inclusion looks and feels like. The next sections provides an overview of hackathons and reasons for focusing on them. The following section, how to organize for radical inclusion, starts off with the synthesis: the five principles uncovered. Then, it is goes into the reflection and analysis, which is shared in subsections. Each subsection is an integral part of a hackathon participant’s journey. Each includes a reflection from hackathons organized by the author, select lessons and anecdotes from other hackathons as well as analogous experiences, a list of barriers to radical inclusion, a list of guidelines to check for radical inclusion, and an application of the principles. The final section is the conclusion with a summary of the five principles, some faults in the principles, and questions that remain unanswered.

5. What does this thesis not cover?

I don’t prove that a lack of inclusion is a real problem that needs to be attended to. I don’t dive deep into the structural, political, cultural, or personal reasons for a lack of inclusion. I don’t explain why the burden of fixing issues arising from a lack of inclusion doesn’t fall on the individuals facing the issue.

6. Whose experiences does this thesis not include?

This thesis primarily uses examples from experiences in the American urban society. The hackathons organized and attended by the author were at one of the leading institutions, Massachusetts Institute of Technology (MIT), in a cosmopolitan city, Cambridge. Furthermore,
this thesis doesn’t dive deep into the experience of many marginalized communities in Cambridge and at MIT, including, but not limited to, experiences of Native Americans, first-generation Americans, undocumented immigrants, transmen and transwomen, those who identify as non-binary, and those living in poverty. Ironically, a lack of time, effort and prioritization hindered more geographically, culturally, ethnically, politically and socioeconomically inclusive research.

II. What is radical inclusion?

1. What does radical inclusion mean?

Radical inclusion is being inclusive for all, at all times. The term, radical, also implies being hyper aware and constantly reflective of the topic and entrenched in its details given it is of utmost important. One may argue that this may never be possible. Perhaps that is true. However, that shouldn’t stop one from trying to achieve it.

Radical inclusion is subjective. It is dependent on an individual’s experience at a certain moment in time. This thesis doesn’t define radical inclusion in detail to do justice to the topic. The risk of constraining what inclusion is for every individual and community outweighs the benefit of drawing boundaries around the term. Instead of defining radical inclusion, this thesis, through examples, anecdotes, and research, paints what radical inclusion can look and feel like.

2. What does radical inclusion look and feel like?

Radical inclusion is what love looks like. In On Life, Leo Tolstoy describes love as “the sole and legitimate manifestation of life” and shares that “the demands of love are so many and they are all so closely interwoven.” Like the Vietnamese Zen Buddhist monk, Thich Nhat Hanh, Tolstoy understands love as the active state of interbeing with others. Thich Nhat Hanh explains that “in a deep relationship, there’s no longer a boundary between you and the other person. You are her and she is you. Your suffering is her suffering. Your understanding of your own suffering helps your loved one to suffer less. Suffering and happiness are no longer individual matters. What happens to your loved one happens to you. What happens to you happens to your loved one … In true love, there’s no more separation or discrimination.” Such void of separation is what radical inclusion looks like.

Radical inclusion is a feeling of acceptance, belongingness, empowerment, equality and respect at all times. In Subjective Social Inclusion: A Conceptual Critique for Socially Inclusive Marketing, Tana Christina Licsandrua and Charles Chi Cuib draw these dimensions as essential to social inclusion:

- Acceptance: One’s feelings that others are willing to include them in society
- Belongingness: One’s judgement of fit and emotional connectedness to society
- Empowerment: One’s feeling of control and self-efficacy within society

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4 Tolstoy, Leo. On Life. Free Age Press.
Equality: One’s feeling of having equal opportunities in society
Respect: One’s feeling of being valued and respected in society

These dimensions focus on an individual’s feelings and perception. Hence, the ingredients necessary to organize for inclusion vary from culture to culture, space to space, person to person, and time to time. Given that individuals continue to evolve themselves and their relationships, the process of organizing for inclusion is also constantly evolving.

III. What are hackathons and why this thesis focuses on them?

1. In 2015, Spencer Brown, a student at Purdue University, wrote Hackathons Are For You about his experience of attending a 36 hour hackathon, MHacks, at the University of Michigan. Anxiety overtook Spencer when upperclassmen encouraged him to apply. While he saw it as an exciting opportunity to “be one of the people changing the world over the course of a weekend”, an imposter syndrome kicked in: “were they finally going to realize that [he] barely knew how to program and not think [he] was good enough? What was everyone there going to think of [him] while they’re building crazy stuff and [he has] no idea what [he’s] doing?” Other aspects of hackathon such as “not being able to shower all weekend, having to sleep on the floor, and giving up an entire weekend when [he] was still trying to make friends” added to his worries. Despite these concerns, Spencer took the bus to Michigan and participated in the hackathon. The outcome? MHacks became a turning point as he switched his major to Computer Science, led two hackathons at Purdue University, and is, currently, a Software Engineer at a technology company, MixMax.

2. What is a hackathon?

Hackathon is a portmanteau of the words hack and marathon. Here, hack does not refer to a computer crime. Instead, it refers to using computer programming to solve problems. At hackathons, “people come together and use technology to transform ideas into reality”. Participants “start [coding] from scratch and build a working prototyping in 24 - 48 hrs.”

Think: hundreds of people in t-shirts and hoodies, eyes fixated on computer screens and fingers clattering on keyboards. Lots of coffee and soylent for productive, sleepless nights. Corporate sponsors, cash prizes, and internship offers. Dreams to form the next big company or unearth an innovative solution.

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Hackathons are seen as venues with “free knowledge.” Hackathons organizers often host workshops throughout the day and have experts available so that participants can learn new or improve existing skills. On their website, Hack The North, a hackathon at the University of Waterloo, emphasizes the importance of learning: “We’ll have talks, mentors and workshops to help you with your project; hackathons can be a great place to learn new skills in a short amount of time.” In 2016, MIT’s Hacking AI with IBM Watson had workshops on technical training and another on creative thinking. During 2018 HopHacks, a biannual hackathon at Johns Hopkins University, there were 11 workshops on topics ranging from designing a cryptocurrency to deep learning.

Hackathons are a recruiting pipeline into the computer science academic field and the technology industry. Attendees are inspired to take up or continue working on computer science and technology related degrees. Venture capitalists and headhunters sponsor and get involved in hackathons in order to spot and recruit talent.

Recently, hackathon participation has increased due to the popularity of computer science and technology fields. It has also increased because hackathon, today, open their arms to novice coders and participants from fields other than technology and computer science, lower the financial barrier to attend, and encourage people to show up with or without an idea and team. Famous student hackathons such as PennApps at The University of Pennsylvania, BoilerMake at Purdue University, and MHacks at University of Michigan make it clear on their website: they love first time hackers. BigRed//Hacks asks first time hackers to “not sweat it” as they are “partnering with Cornell AppDev to keep [first time hackers] as competitive as Hackers who may have been Hacking for a while.” At MedHacks, a medical hackathon at John Hopkins University, “students - both at the undergraduate and graduate level - with engineering, medical, and entrepreneurial backgrounds” are encouraged to apply. MHacks at University of Michigan offers buses to nearby schools and travel reimbursements as well. MHacks encourages attendance by stating “if you don’t have a team or idea, not to worry, most people don’t”.

3. How relevant are hackathons?

Today, institutions around the world, public and private, academic and non-academic, host hackathons. The word hackathon has soared in popularity, rising in search on Google worldwide since 2010.

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10 “Hack the North.” Hack the North, hackthenorth.com/.
12 “HopHacks.” HopHacks, hophacks.com/.
Hackathons have long been viewed as hotbeds for innovation in the technology industry. Facebook and Google see hackathons as part of their company culture. Facebook's chat function and "Like" button had their starts at internal hackathons. 15

Companies traditionally outside the technology industry are also getting on the bandwagon. In 2013, Chevrolet hosted a hackathon to create apps for the vehicle’s safety. Ford recently experimented with hackathons for social driving apps.

Companies are opening their doors to outside hackers. Boston Consulting Group’s BCG Digital Ventures hosted a hackathon on April 13 2018 with a global call for participants. PayPal hosted Battle Hacks in 14 cities around the world in 2014, “calling on the most talented developers to assemble teams and work for 24 hours to create something magical that incorporates the PayPal API and solves a local problem.” 16 Dice.com’s hackathon welcomed people from outside the company, asking participants to use Dice.com’s API to build solutions.

Hackathons are prevalent on university campuses and students often travel to other universities to participate. Today, there are student-led hackathon consortiums, hackathon organizer conferences, and hackathon event aggregators. In this category, Major League Hacking (MLH) is a premier name that powers 200 weekend-long hackathons, attended by over 65,000 students from around the world, every year.

Cities and government agencies are also hosting hackathons, inviting citizen to solve problems civic issues. The City of Houston is one of the key sponsors for the 2018 Houston Hackathon. The US General Services Administration hosted an Earth Day Hackathon to make the federal

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government more sustainable. NASA’s international incubator program hosts SpaceApps which occurs over 48 hours around the world.

4. Why is inclusion a problem for hackathons?

In an article on Opensource.com, Giulia Paris writes that at hackathons, “race, gender, and how much you know about coding software doesn’t matter; what matters is that you want to learn, and you want to better yourself and the world.”17 Much like the technology industry, hackathons see themselves as open to all and yet there are certain structural designs, big and small, that deter radical inclusion. These spaces are unintentionally not open to and accessible by people from all races, genders, skills, and other human differences.

Today, many of hackathons acknowledge first-time hacker anxiety, a need for sleep, and a need for better, more nutritious food than pizzas. However, there is an elephant left unacknowledged: tackling inclusion related to gender identities, sexual orientation, disability, race, religion and socioeconomic status at hackathons. DevPost is a premier website for developers to help find work and find hackathons to attend. It also provides resources for hackathons organizers. Neither DevPost nor MLH and none of PennApps, Big Red Hack, BoilerMake, or MHacks acknowledge the problem of representation at these events. MLH doesn’t talk about recruiting and creating a space for inclusion, or challenges in organizing for inclusion in their resource guides. DevPost’s organizer guides fail to mention anything about promoting inclusion at events e.g., the Four Essentials To Reach Developers guide recommends hackathon organizers to go to other hackathons, conferences and meetup to market their event. This perpetuates a cycle of lack of representation and inclusion in events.

There are other design issues. To make any hackathon a safe, welcoming, and, thus, inclusive space for hackers, MLH provides a Code of Conduct that has a strict anti-discriminatory policy. However, the Code of Conduct is not visible; one has to dig through to find this document. Similarly, BigRed//Hacks, BoilerMake, and MHacks don’t have Code of Conduct readily available on their websites.18 PennApps emphasizes “we love first time hackers”. However, they require “links, project descriptions, GitHub portfolio, demos, or participation/awards from other hackathons” in the application to attend their hackathon, which deters first time hackers from attending. At Reality, Virtually Hackathon at MIT, participants were encourage to show up with or without teams. However, for those without teams, there was little support provided. Participants were asked to form teams based on their personal or topical interest. In such a situation, predefined networks, showable skills, and being an extrovert gave certain participants a leg up. Other issues include the overnight structure of hackathons which excludes caretakers, parents or those who can’t afford babysitters and a focus on competition mixed with the pressure to produce while sacrificing sleep and rest which excludes people with certain disabilities and chronic illnesses.

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Brittany Ann Kos is the co-founder and lead organizer of T9Hacks, a female-and-genderqueer-centric hackathon. She set out to counter the inclusion challenge and started a hackathon “where women and marginalized students can learn about computing and solving compelling problems.” Brittany tackles this head on: “Creating women-only and women-centric spaces can be a controversial topic... Men dominate undergraduate computer science and computing fields. For 24-hours, we wanted to flip that ratio and create an environment where students of underrepresented genders could create and hack with people who were similar to them.”

T9Hacks initiated a Sadie-Hawkins’ style policy where men would have to be invited by women to join. Before this policy, women formed 35% of all participants. After this policy, the number jumped to 70%. Brittany and her team were mindful of being inclusive in other aspects of their organization e.g., only women were the face of the hackathons when it came to emails or speaking at social events to attract talent, vegetarian food was the default with sides of meat for those who wished to eat meat, and a Code of Conduct in addition to the one provided by Major League Hacking was put into place.

Unhackathon is another story from the same book. The goal of this hackathon is to create a inclusive place where “everyone felt safe, had good food to eat and time to sleep.” The Unhackathon gender ratio flipped when they instituted a strict, clearly defined Code of Conduct: from 20% female attendees to 50%. Their Code of Conduct is visible on the menu bar on the website. The Code aims to create a “respectful community space”. It offers agreements such as “refrain from demeaning, discriminatory, or harassing behavior and speech”. It also provides social rules to “make expected behavior more well-defined” such as “no subtle -isms: racism, sexism, homophobia, transphobia, and other kinds of bias are harmful even if subtle or unintended”. Unhackathon makes the experience less competitive and more collaborative and explorative by not offering any large prizes and instead choosing to give out smaller prizes in several categories.

IV. How to design an inclusive hackathon experience?

1. What are the key findings of this thesis?

Researcher Brené Brown uses the words “soft front, strong back, wild heart” to describe what is needed for true belonging. Emma Gonzalez, a survivor of the shooting in Stoneman Douglas High School on February 14 2018, embodied these three elements when delivering her speech during March For Our Lives in March 2018. Her wild heart enabled her to stand up against the
existing system, threatening to tear it down and daring to say “no more”. Emma stood on the stage for over four minutes in silence. In this silence, in front of over 200,000 people, she was vulnerable, soft-fronted with tears rolling down her eyes. The silence was uncomfortable. The audience, unaware of why she was silent, was cheering her on. A friend came to hold her. She stayed in her silence with a strong back, holding her ground until she proved her point. A soft front, a strong back, and a wild heart is what radical inclusion needs. Below are five principles that may allow us to build a soft front, strong back, and a wild heart and, ultimately, be radically inclusive.

**Radical inclusion is not a default social state today. Be intentional about being radically inclusive. Make it an imperative for all in an organization.** Brené Brown says that our belonging can’t be lost but it can be forgotten; “when we’re our best selves with each other, I don’t think that’s what’s possible between people. I believe that’s what’s true between people.” Similarly, radical inclusion can’t be lost since it is human nature. However, we have to be consciously intentional about removing all the things that impedes radical inclusion. A key to being radically inclusive is to make it an imperative in hackathons, other events, and businesses. What if we organized our events so that we would cancel if we didn’t meet our inclusive goals: inclusion or bust? While it is important for a dedicated leader to drive the inclusion conversation (such as a Chief Inclusion Officer), inclusion should be a priority for all decision makers and executors in the same way a company’s budget and bottom line are.

**Radical inclusion is uncomfortable. Honor this discomfort and empower organizing team and participants to navigate such situations.** Radial inclusion can be extremely uncomfortable for several reasons. It may be uncomfortable because we have to recognize our privilege in front of those who are underprivileged. It may be uncomfortable because we have to recognize a system that has benefited some in the room while taking away from others. It may be uncomfortable because we don’t have all or perhaps any answers to the big and small questions and concerns brought up during related discussions. Regardless of the reason, we can’t run away from the discomfort of radical inclusion. Instead, we have to honor the queasiness in our guts in the moment, in a raw and graceful manner. We must acknowledge, hold and play with the discomfort and have the difficult conversations that are easier to run away from. And we must empower our teams and participants to do the same in our space.

**Radical inclusion necessitates meeting people where they are, as they are, in their journey. Embody deep hospitality with widely open arms for all.** People enter our spaces unsure if they do, should or want to belong. People carry their history, sometimes with pain and wounds, into the present. Radical inclusion requires gracefully allowing people into our space as they are in that moment of time, honoring their history and current journey, empowering them to claim their identity without degrading that of others. Because society marginalizes some people, we have to level the playing field by reducing the risk and anxiety of entering a space for them and by putting rules and code of conduct in place to encourage inclusive behavior. We must be deeply hospitable i.e., welcome people before they enter our spaces and continue to connect after they have exited.

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Radical inclusion comes from encouraging human transformation, a continuous process.

Foster patience and encourage forgiveness for self and others in this ongoing journey.

Radical inclusion comes from encouraging human transformation, a continuous process that takes time, often longer than desired. As the Bohemian-Austrian poet and novelist, Rainer Maria Rilke, puts it in *Letters To A Young Poet*: “Have patience with everything that remains unsolved in your heart. Try to love the questions themselves, like locked rooms and like books written in a foreign language. Do not now look for the answers... At present you need to live the question. Perhaps you will gradually, without even noticing it, find yourself experiencing the answer, some distant day.”

Changing our norm to being radically inclusive requires a similar patience as well as urgency. *Patience* means the ability to move through the world, as it is, not as we wish it to be. *Urgency* refers to seeing radical inclusion as necessary and not subjected to delays. When holding patience and urgency together, statements such as “we don’t have the time to be inclusive to all” or “we don’t have the resources to be radically inclusion” seize to be acceptable.

**Radical inclusion is rooted in a ruthless search for truth. Enable all to be soft bellied: to let personal guards down. This nurtures curiosity to explore and be moved by the truth of the other.** Radical Inclusion requires that we accept humbly that we don’t have all the answers. Thus, we must constantly look for the truth. During this hunt for truth, being soft-bellied can help. This means letting our guards down and having an openness to “be moved by the truth of the other in whatever given situation”.

With such curiosity, co-creation becomes the best possible way to move forward.

These themes may sound too lofty. And when push comes to shove, we may throw them out. However, we must try. And if we fail, we must try again. Radical Inclusion isn’t the default today. Therefore, we have to work hard, constantly, to create radical inclusion until it becomes the norm.

2. How is this section organized?

This section is divided into subsections based on a hackathon participant’s journey. Through looking at the experience from a participant’s perspective, organizers can find moments where the feeling of inclusion is pervasive or missing for the participant. These subsections include:

Pre-Hackathon:
1. Discovery
2. Decision to participation
3. Preparation to participate

During Hackathon:
4. Arrival at and attending
5. Production & hacking

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6. Delivery of final results
7. Departure

Post Hackathon:
8. Post-event connection and community building

For each of the 8 subsections above, this thesis provides:

- **Reflections**: These are from *Breaking the Mold, Hacking Discrimination*, and/or *Hack for Inclusion*: What did we do? What successes, failures and challenges were there?
- **Analogous Inspiration**: Where else can we look for inspiration and what can we learn from them?
- **Barriers to Inclusion**: What is impeding inclusion? What should we be mindful of as we design these experiences?
- **Checking for Inclusion**: How to determine if we are being inclusive?
- **Key Principles**: What are principles for designing an inclusive moment & experience?

**Discovery of hackathon**

- **Reflections**

During Hack for Inclusion, 135 participants from across the US showed up. We had participants from various colleges around Boston. Over 70% of participants were non-Whites and 60% were female. We had gay, lesbian and bisexual participants. As well as participants of different abilities, different generations and age groups, and different nationalities. We had extremely varied skill sets and academic backgrounds. There was a female doctor over the age of 60 with no coding experience as well as a female Computer Science PhD student in her 20s. Participants of different socio-economic backgrounds were present. Getting these people into the same room was not an easy feat.

Traditionally, hackathons at MIT are advertised in and around MIT and to other peer schools. Thus, they usually attract a very specific type of person. Furthermore, the word ‘hackathon’ itself attracts people who are ready to stay up for a night or two to code and build something. This can alienate many such as those who don’t believe they have the right skill sets to code and build a working prototype in a short amount of time. We knew that how and where a hackathon is marketed will impact who shows up. Our goal was to create a diverse set of participants who are passionate about tackling problems of bias.

To broaden our recruiting sources to meet the talent where they already are, we took on a substantive recruiting strategy. We knew that our immediate outreach might be limited to universities. However, in today’s economy, coding bootcamps are becoming the new vocational training centers. We decided to advertise intentionally to bootcamps to include participants who may not be at universities and may never see our marketing or know about the event otherwise. As a result, a coding bootcamp in Boston, Resilient Coding, sent a team of 8 students.

For Breaking The Mold, the organizers reached out to the community at MIT that is often not present at hackathons such as Sloan students. We made it a point to mention that coders and non-
coders are alike were at the hackathons and that we want everyone and anyone passionate about
the topic.

For Hacking Discrimination, we reached out to certain affinity groups at MIT, black faculty and
staff, community colleges in the area, ACLU, and the Y. Often times, this was not done through
email. Our team called various organizations to develop rapport and extend an invitation.

○ Analogous Inspiration

Reality, Virtually, a hackathon for Virtual Reality, wanted to ensure that recent mothers and
fathers could participate in the hackathon. They determined that if the organizers want them to be
a part of our social narrative as our society evolves with virtual reality, young parents have to be
present at such hackathons. Thus, the organizers intentionally decided to fund childcare for two
nights for all parents participating. A parent couple, who had a three month old, participated,
who without the childcare wouldn’t have participated.

Reality, Virtually decided to include ‘preferred pronouns’ on the application and sign-up sheets.
While the organizers collecting this information may never interact with the participants or be in
a situation where they had to refer to them using their pronouns, they still chose to include this
piece of information in. It signals inclusion: *we ask because we know that we can’t always know
what someone’s pronouns by looking at looking at them. We know that it’s a privilege to not
have to worry about pronouns someone is going to use based on how they perceive another’s
gender.*

The University of Queensland in Australia is diverse and tries to ensure that everyone in their
community is invited and feels welcomed. The University recommends that all events there
advertise the different ways they choose to be inclusive such as “advertise that non-alcoholic
drinks will be available” and “advertise that vegan, vegetarian, halal, and kosher food will be
served”. The events should “consider using a number a languages in their advertising to
emphasize that all students are welcome. While it would not be practical (or possible) to use all
languages, choosing those that are known to be widely used on campus or in your area can
contribute to creating an inclusive environment.”

Larissa Holmes of Borrowell, a financial services company based out of Canada, encourages
other leaders to not blame a lack of candidates for a lack of diversity in their companies. “Just
because they aren’t applying doesn’t mean they don’t exist.” She shares that Borrowell goes
into the communities they want to hire from to actively pull people into their organization. And
once they are in, through their ambassador program, they “empower the less-represented people
to be ambassadors in their communities and pull more people in.” She calls this an
“exponential pull” that is created because people “tend to gravitate to companies where there are
other members from [their] community.”

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28 “Theory Into Practice Strategies: Culturally Inclusive Social Events.” The University of Queensland, Australia.
29 “Embracing Diversity Is Uncomfortable – and That’s a Good Thing.” The Globe and Mail, 15 Sept. 2017,
www.theglobeandmail.com/report-on-business/careers/leadership-lab/embracing-diversity-is-uncomfortable-and-
ths-a-good-thing/article36054189/.
30 ibid.
31 ibid.
Barriers to Inclusion

There are some barriers here such as time and money that need to be dedicated to reach to a wide variety of people. Often times, the people who are organizing hackathons tend to be either white, male, tech nerds, or from a certain academic background. Recruiting for a diverse audience becomes harder, requiring more priority, time and money, when the organizers don’t represent who they want to recruit. However, there are barriers when it comes to how the outreach is done as well.

Targeted marketing and communications can be counterproductive. Targeting pre-defined ethnic groups can “ignore the variety within each ethnic group and the myriad of ethnic identities that one may have”.32 The worst happens when for reaching numbers, quotas and targets, we omit the varied and nuanced lived reality of marginalized individuals.

During Hack for Inclusion, we recruited people who could share their stories with our participants. This is because we wanted all solutions to be grounded in reality and real experiences. As such, we reached out to various people asking them to be available for a conversation with our participants. However, asking them for this favor was a bit tricky. How could we say ‘we are reaching out to you because you are black and we want to hear black stories’ or ‘we are reaching out to you because you fit our low socio-economic bucket’? This would reduce people to a sliver of their identity, one they may or may not want to be associated with or at least predominantly. One of the people we reached out is a seasoned designer and a civic activist in Boston. We reached out to her so she could be available to a team focused on creating a more welcoming Boston for Blacks. In our email to her, we shared our rationale for reaching out to her: she’s an incredible professional and this group would benefit from chatting with her. However, in the subject line, however, we stated “Share your experience as a black female in Boston :))”. We didn’t know how else to say that while we are reaching out to her about her experience in general, we are particularly interested in her experience as a black person in Boston. The designer initially accepted the invitation but then later, after a change of logistics, declined it. When we asked her about why she did so, she pointed out that the subject line “reminded her that she is constantly seen as only a black person”. In doing so, we took away her agency in how she wants to be represented. We ignored the complexity and variety of her experiences as a person and reduced her to the color of her skin. “Black female, that’s the only thing people see me as”, she said. She pointed out that this form of inclusion was still “othering” as the invite perpetuated the boxes that people put her in already. Furthermore, she didn’t know how to react to the invitation at first. While she was ecstatic to be invited for a hackathon at MIT, she didn’t feel good about how she was invited. It perpetuated that feeling she usually gets in her gut when she is invited to design conferences: “Why am I here: Am I invited because the organizers are trying to be diverse now given pressure from various stakeholders or is it because I am competent?” She added, “I may never know but it is hurtful when I walk-in and realize it’s because I am black. I am here because of something that has nothing to do with my hard work. I want to be valued because of what I put out as opposed to what I was born with”. Furthermore, it irked her to be invited as the sole black voice in the room. She said: “we are not a monolith. Being a Haitian American is different from being an African American. Even a Haitian immigrant is different from a Haitian living in the mountains is different from an urban Haitian.”

We left the conversation wondering “how do we hold this and value each person for their experiences because that is what radical inclusion is about?”

○ Checking for Inclusion
- Who is not likely going to discover your event? Why? How can you reverse this?
- How will you invite communities you are not a part of?
- When reaching out to these communities, how do you respect to their boundaries and the community members’ individual experiences?
- When reaching out to these communities, are you reducing people to the color of their skin, their gender, or an associated label?
- How are you signaling that you accept people, as they are, not as you wish them to be, in your organization, at your hackathon or event?
- Have you made clear through your language, policy and actions that you will do your best to equal the playing field in your hackathon for all participants?
- Have you created a space where people feel like they can belong? What specific aspects, policies and actions will enable such a space? Are you communicating this to people when inviting them?

○ Key Principles
- Meet people where they are. Yes, it will take extra time, effort, and money
- Build rapport with communities that you’re not a part of. Go beyond traditional marketing and advertising. Reaching out to a diverse audience and community is more than marketing and advertising -- it’s relationship building.
- Ensure that marketing and communications don’t reduce people to the color of their skin, country issuing their passport, gender or other labels
- Continue to introspect and ask yourselves who you are excluding and why

○ Decision to participate

○ Reflections

Through our marketing and outreach, the organizing team of all three hackathons wanted the participants to feel like they were going to belong and succeed at the hackathon. While the previous section, Discovery of Hackathon, focused on how our marketing efforts reached a diverse audience, this section focused on how our marketing efforts enabled prospective participants to say yes.

As the organizing team, we constantly wondered what information we could provide to potential participants that would allow them to say yes to participate in the hackathon. For Breaking The Mold, we kept two types of attendees in mind: the “Leslie Knopes” who were super prepared and ready to take on the hackathon and the “Clueless Chers” who were not so prepared and perhaps intimidated by the hackathon. While our “Leslie Knopes” may have attended multiple hackathons, our “Clueless Chers” were first-time hackathon attendees. We kept these two personalities and their potential questions in mind when deciding on the information to provide that would enable them to say yes.
“Thank you for inviting us to be a part of your hackathon,” a representative from Resilient Coders said during the reception post Hack for Inclusion. Some members of the group mentioned that this was their first hackathon. They felt energized about their decision to participate in this hackathon and to be a part of the programming world via Resilient Coders. I wondered what motivated this group to show up enthusiastically to a new community. They were a group of students who had recently joined Resilient Coders to learn programming -- wouldn’t a place like MIT be overwhelming for them? I wondered if it was an emotional risk for them to show up and participate in a community where they may or may not fit due to their skill levels and affiliation. As I was in this thought, the group’s representative asked to be introduced to our organizing team member who had personally reached out to them over phone and email. And it clicked for me: a personal message and personal outreach from our team member probably made a difference.

During Hacking Discrimination, we went to community colleges around Boston and personally invited the students from those institutions. As a result, we saw participants from areas of Boston we don’t often find around MIT. What we saw as a dedicated marketing effort, the participants saw as a genuine invitation. It was the difference between a generic invite to a generic event and a personalized invite to an event where the hosts truly want you to be there.

To lower the barrier to entry to our hackathon, during Breaking The Mold and Hack for Inclusion we provided pre-defined problems, “challenge statements”, to our teams. Participants knew the challenge statements they may be working on before they decided to participate. They could state their top preferences when registering for the hackathon. Furthermore, we assigned teams to everyone based on their preferences for specific challenge statements. The goal was to take out the anxiety out of the process of finding a team and redirect that energy towards problems solving. When our participants signed up, they knew that they would be assigned to a team. In other words, they wouldn’t have to awkwardly network with fellow participants in hopes of finding a team or risk leaving embarrassed, without a team. To preserve teams that may already be working together, we provided the option of forming teams pre-hackathon as long as other participants could join the team.

For Hack for Inclusion and Breaking The Mold, we minimized last minute surprises by sharing the schedule in detail for the two days via email and on our website. We could’ve provided more information around timing (‘this is not going to be a day and night long hackathon) and on food (there will be x, y, and z options available, please bring your own food if you need something beyond this).

○ Analogous Inspiration

In his article, The Power of Being Seen for Who We Are, written on June 5 2017, Omid Safi, columnist for On Being and director of Duke University’s Islamic Studies Center, talks about his experience enrolling in a school that didn’t have a category for Muslims, for those like him. The orientation service was in a magnificent Gothic chapel that was “imposing, sacred, daunting, and so, so grand.” The faculty member who spoke to the class was a professor of Islamic Studies.

and spoke Persian and 10 other languages. “Persian. He spoke Persian. At least one person in this strange, imposing, expensive school spoke Persian. Someone knew the world that I came from. Someone knew the world of my parents. Someone knew that we were a poetic people. He studied Islam. He knew about this faith that I myself knew so little about.” The representation from a person who looks-like and feels-like familiar and the ability to being able to connect to that person made Omid feel “like a whole person, like a human being. I felt as if there was at least one person to whom I would not constantly need to explain myself, translate myself in that exhausting way that so many of us always have to do.” Representation from and connection to another human here changed Omid’s experience and sense of belonging to a space. “I wish I could tell you that I have always had a clear sense of my own self-worth, my inherent dignity as a human being. The truth of the matter is that I needed someone to let me know that I was seen to feel like a human being,” says Omid. 34

Indra Nooyi is the Chairman and CEO of Pepsi Co., the second largest food and beverage business in the world. She is consistently ranked as of the world’s most powerful people. Despite her power and privilege, Indra recognizes that women, including her, can’t have it all. At Aspen Idea Festival in 2014, Indra told the moderator, Kitty Boone, how “every day you have to make a decision whether you are going to be a wife or a mother…. If you ask my daughters, I’m not sure they will say I’ve been a good mom. I’m not sure.” 35 One story in particular highlights that our systems are not structured and designed for working mothers like Indra Nooyi. Covenant of the Sacred Heart, Indra’s daughter’s school, had class coffee with mothers every Wednesday. “How am I going to take off 9 o’clock on Wednesday mornings for a class coffee?” Indra lamented. She missed most class coffees. At home, her daughter would list all the mothers who were there to point that she, Indra, wasn’t. “I would die with guilt,” she said. Indra Nooyi couldn’t participate in her daughters’ schooling due to the barriers in the system that excluded her.

When Larissa Holmes interviewed with Borrowell, a Canadian financial services company, she was a new parent and a woman with a broken ankle. In her conversation with the CEO and COO, she remembers a commitment to diversity: “We realize you're in a unique point in your life. Let's find a start date that we're comfortable with. We're open to start you part-time. And by the way, if you need a fridge and room for breastfeeding, we can make it happen.” 36 Borrowell showcased inclusion through holding a position open for longer than expected and creating alternative working hours and locations based on individual needs.

○ Barriers to Inclusion

Attending an event that one hasn’t before can be quite intimidating. There is a risk involved in attending an event. For first-timers, the risk is higher: the benefits are less apparent while the costs such as emotional barrier to attend may be more apparent. This is especially true for marginalized communities. For members of these communities, questions such as “is this worth putting myself out there?”, “is this an event for people like me?” or “will I fit in?” are frequent and stronger. For those who have attended a hackathon multiple times before, there is an

34 Ibid.
additional and perhaps different barrier to inclusion. They may want to ensure that they get more
out of the event than what they previously gained. Their expectation of a hackathon may be
colored, positively or negatively, by their previous experiences.

○ Checking for Inclusion
  - How are you welcoming those who may not feel like they belong?
  - How are you lowering the barrier to entry and lowering the risk of attending for first-timers? How are you balancing their needs with needs of those who are frequent attendees?
  - How are you ensuring that potential participants feel like they will succeed or gain a quality experience by attending the hackathon?
  - How are you ensuring that potential participants feel like they will be able to contribute to your event in a meaningful way?
  - How are you communicating these aspects, via language, policies or actions, to potential participants?

○ Key Principles
  - Be hospitable. Be intentional about how you open your doors through marketing to different people
  - Break the wall. Reach out. Extend an arm. Find a common connection. Invite people into the space through this connection. Personal outreach and personal invitations matters especially to those who haven’t been to your space or spaces similar to yours
  - Reduce the risk and anxiety of attending the event for the attendee. Do so through prioritizing time and resource spending to ensure prospective participants feel they are invited and wanted in your space. Doing so through highlighting support structures, systems, and details put into place to ensure that attendees will succeed.
  - Be curious about people’s perspective. Ask your potential participants if and why they feel like your hackathon or event is or isn’t for them

○ Preparation to participate
  ○ Reflections
For Breaking The Mold, we asked prospective participants if they wanted to lead a specific challenge. This meant being the team lead during the hackathon. To ensure that our team leads felt prepared, we organized a workshop for them, taking them through a problem solving process, human-centered design. We planned to use this process during the hackathon. This way the team leads were fully aware of what we planned to do and could corral their teams to follow the process during the hackathon. In a way, they became our champions and point people during the hackathon. And given that team leads were prepared, we knew that team members would feel more lax.

For Breaking The Mold, we asked team leads and team members to do any necessary research beforehand. We connected team leads and enthusiastic team members with expert personnel in our network who were knowledgeable about their topic. We encouraged our network of expert personnel to provide our team leads and members with datasets, and supplement this with datasets and articles our team had found on certain challenge statements. The idea of team leads worked really well. Those who wanted to get involved but didn’t have much expertise got a
chance to lead a team they otherwise wouldn’t have gotten. However, what didn’t work so well were the challenge statements as many found them too broad or too leading and not grounded in reality enough.

For Hacking Discrimination, we found team leads who were already experts in their challenge statements and had done some work in the area. This way, they could bring any research and insights to their teams as they kicked-off problem solving at the hackathon. This was in contrast to Breaking The Mold where our team worked on challenge statements and found team leads who may or may not have expertise or experience in the area. The goal of finding experts and experienced personnel to lead teams during Hacking Discrimination was to ensure that participants felt supported and set up for success. This worked really well as participants felt that they made progress they couldn’t have without the team leads and team leads got a perspective on their work that they otherwise wouldn’t have gotten. For one team, the team leads were urban planners at MIT who had worked on census data collection. The work that their team did during the hackathon pushed their overall work forward and they continue to use the tool created in their daily work.

For Hack for Inclusion, our team worked hard to build challenge statements that were narrow enough to direct a team’s effort but wide enough to enable creativity and multiple pathways and not constrict creativity and thinking. We put out a request to get experts involved and provide any challenge statements they believed worthy to be worked on and included specifics around what makes the problem sticky and tricky. We also created our own statements and worked with experts from different field to refine the challenge statements. We shared these challenge statements with a broad group of people and got their feedback as to whether they were actionable, worthy of our time, and broad enough. As a result, we ended up with a wide selection of well-defined challenge statements, all the way from preventing diabetes in marginalized communities to creating a safe space for Blacks in Boston, from tackling pigeon-holing of Asian American in work and academics to tackling bias in machine learning algorithms.

For all three hackathons, we sent out timely communications to our attendees in an effort to ensure that they were reminded about their commitment to participate, had the information and materials they needed to participate, had answers to questions they may have. We also shared information about what the various days were going to look like and shared any asks we had of them.

○ Barriers to Inclusion

Prospective attendees who have signed up for the hackathon and preparing for the hackathon may wonder “How may I ensure that I’m prepared enough to put my best foot forward?” As an organizer, managing this question is tricky as different people come from different skill levels. It is even trickier to do so remotely -- the participants are yet to the event and even if they have signed up, they may feel anxious and doubtful about the forthcoming experience, especially if the experience is new and different than what they are used to. This anxiety in addition to the distance between the organizers and the participants is a barrier.

○ Checking for Inclusion

• How do you ensure that people feel like they are prepared to put their best foot forward? Are prospective participants empowered to contribute to your event?
Have you provided logistical information for the event beforehand? Are you providing this far in advance so those who need to plan their day e.g., book travel, reserve day care, request time off of work can do so?

How does your logistical information take marginalized communities into account? This includes logistics around transportation and location, time of the day, duration of the event, and food and drinks provided.

How do you ensure that those needing transportation can get it? How do you handle food restrictions, child care requests, bathroom access, elevator and wheelchair access? How do you help those worrying about forgoing income to attend your event?

Do you talk about code of conduct and expected behavior in your communications?

Where can people go for last minute or unanswered questions? How do you ensure you give people full permission to do so?

Who’s not able to arrive or attend at the hackathon? Why?

Key Principles

- Ensure that you set up participants up for success in small or big ways. This means doing the legwork necessary for potential participants or providing skill development workshops and resources. When organizing hackathons, find ways to incorporate people with skills beyond coding and value their skills equally.

- Recognize your shortcomings honestly and vulnerably upfront e.g., “We won’t have a gluten-free food option at lunch. We encourage you to bring your own lunch, if needed. Yes, this is disappointing. However, we hope this won’t discourage you from attending” or “Unfortunately, we don’t have gender neutral bathrooms at the location. Our vendors aren’t able to make concessions. Please let us know if this worries you. We want to work with you to figure this out.”

Arrival at and attending

Reflections

Cara C. joined our hackathon because she is passionate about the topic of inclusion and wants to become a programmer. She is a young female of color who comes from a low socio-economic background. Growing up, a part of her story revolved around not seeing people who looked like her in the positions she often aspired to. Currently, she is learning coding. Hack for Inclusion was her first hackathon. At the hackathon, Cara worked on an issue close to her heart: solving for social mobility, specifically using technology to help companies find a more socioeconomically diverse pool of candidates. When her team pitched their idea at the end, Cara bravely shared her personal story so the audience could understand why their idea is important. Unfortunately, Cara’s team didn’t win any of the prizes. However, Cara left with a full heart and a big smile. After the hackathon, she approached me said “This was my first hackathon and I can’t wait to go to more. I was welcomed with open arms and felt valued for what I bring to the table.” Cara’s experience was not unique. And not a complete surprise to the organizing team.

“People come in not knowing others, unsure of their welcome, unsure if they belong, sometimes unsure if they even want to belong, sometimes careful of wounds from the past, sometimes

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37 Name and identifying details have been changed to protect the privacy of the individual.
mindful that inside or out they may not seem like those they see around them.” 38 We worked hard to intentionally create a space that welcomed everyone and saw them fully for who they are. This was reflected in every detail of the hackathon: from how the room was setup to how the participants were greeted to how we evolved through real-time feedback.

The music playlist participants were greeted with reflected the various backgrounds of our participants: empowering music from females and males from Thailand, Korea, Mexico, Latin America, Kenya, Ethiopia, Australia, India and America. The tables the participants worked on were intentionally chosen to be round because a round table signals equality. A rectangular table could unintentionally put someone at the head of the table. The room was kept organized and clutter-free to encourage free thinking. Each table had limited supplies. No unnecessary flyers; only a set amount of pens and post-it notes. The rest of the supplies were kept on the side accessible to all in case they needed anything else. Right as the participants entered, they saw a “Wall of Stories” where they could anonymously share why they were at this hackathon. This was an attempt to humanize such an event and bring out voices, ensuring everyone was heard.

The facilitators kicked-off Hack for Inclusion with our own stories and why we chose to participate in the hackathon. Three facilitators with three different stories. All very personal and emotionally compelling. We wanted to create a connection with the audience. We wanted to show our scars and wounds, our hopes and aspirations, and our work in progress to set the tone of the event. During Breaking The Mold, I was the sole facilitator and I shared my story with the audience. Many came up to me after the event sharing their own stories. The connection continued long after the hackathon as I would be greeted with smiles and hugs with hackathon attendees I ran into. During Hack for Inclusion, we decided to have three facilitators from three different background. Two females and one male to signal inclusion. We shared stories of fitting in as LGBT, stories of subtle and not-so-subtle workplace harassment and stories of growing as a confident and motivated minority; stories of self-doubt, stories of fear, stories of disappointment and hopelessness, stories of courage and hope. The multi-facilitator approach worked better. Not only did we share more stories and had more faces for people to connect with, but it also helped with the quality of facilitation.

Soon after we shared our stories, we laid down some ground rules. These were intentionally inclusive and open. These included:

- **Rollercoaster:** this is going to feel like a rollercoaster. Hang on tight. There will be highs and lows. Remember, that your team is on this rollercoaster with you
- **Pause Button:** permission to use the pause button whenever you feel like you are not understanding something or the conversation needs to stop and reassessed
- **Action Pose:** permission to strike a certain action to signal to your team to stop talking and start doing
- **User is the decision-maker:** when in doubt or trying to make a decision, think about the user and let them be the judge

We gently asked all participants to adopt these rules and they bought into them. These rules empowered each participant with some power that they could exercise if needed. If you were an introvert, you could use the pause button to slow the conversation down. If you easily get

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emotional, we hoped that the rollercoaster principle would help you avoid channeling those emotions towards the team. The ‘user’ rule gave everyone some power and methodology to convince others of their thinking -- as long as it supports what the user would want, do it. This added to the creation of a safe space. A space with certain boundaries that everyone was held accountable to; boundaries that everyone knew. Ultimately, it helped welcome in those who would traditionally feel like they don’t fit in.

We also constantly asked participants for feedback to try and improve. This was key to inclusion as we couldn’t possibly bring in everything for everyone from our own brains, no matter how diverse our organizing team was. Getting feedback on items as small as ‘please turn off the music while we are working as I can’t hear my team members’ and as big as ‘please provide extra copies of the guidebooks as I read slower than my team members and am short sighted’ became important to try to provide an inclusive experience.

We tried to signal inclusion in every way we can. However, here are some ways we failed. We didn’t ask for people’s pronouns when they joined us. We didn’t provide childcare and excluded working moms and dads. We didn’t provide transportation subsidies and excluded communities that couldn’t access our venue easily. We didn’t consider how to include those who work to earn a daily wage and would have to forgo a daily income to attend our hackathon. We didn’t ask for food and dietary restrictions up front. While we provided vegetarian and gluten-free options, we didn’t consider asking or handling other dietary restriction. We didn’t consider that some people could leave hungry, excluded and even medically ill. Thankfully, this didn’t happen but we didn’t consider it.

○ Analogous Inspiration

In Understanding Integration: A Conceptual Framework, Alastair Ager and Alison Strang talk about the power of hospitality gestures in integrating refugees into their new communities. In their fieldwork, they found that for many refugees and non-refugees, the friendless of people they encountered on a regularly basis was an important factor in making them feel at home. Small, friendly gestures from the settled communities such as recognizing and greeting had a disproportionately positive impact on the refugees’ perceptions.

Language is powerful -- it can legitimize a person or it can dismiss them. The system of nomenclature around our identity is nuanced and evolving. As such it requires continuous education, learning and upkeep. However, because the weight it carries, it shouldn’t be ignored or worked around if we are aiming for inclusivity. The following includes language around gender identity. However, the power of language can extend to innate identity features such as ethnicity or circumstantial such as being a refugee or immigrant.

We look for clear and set standards and guidelines in our language. However, fluid identities require movement and flexibility. Journalism industry is debating the use of pronouns. Using certain pronouns can break grammar rules and conventions. It was only recently in 2017 that Washington Post and The Associated Press have started to allow the use of singular “they, them, and theirs” in their reporting. The AP Stylebook advises that you should “use the pronoun consistent with the way the individuals live publicly.” In the AP guideline also advises to use “they” not as a general term or a description of people whose external gender identification is not
obvious as that can “like an erasure of [a person’s] own identity in favor of society’s new standardized label.”39 Unfortunately, the AP still encourages journalists to avoid singular “they” pronouns as much as possible, instructing that “In stories about people who identify as neither male nor female or ask not to be referred to as he/she/him/her, use the person’s name in place of a pronoun, or otherwise reword the sentence, whenever possible. If they/them/their use is essential, explain in the text that the person prefers a gender-neutral pronoun. Be sure that the phrasing does not imply more than one person.” The New York Times asks its reporters two things: to be respectful of the subjects being written about and to be clear to the readers. In her article “‘He’, ‘She’, ‘They’, and Us”, RAILLAN BROOKS writes that an evolving pronoun vocabulary, especially one that questions the existing grammar guidelines and rules, creates a tension between the two. She points out that Some reporters find a workaround this by completing avoiding pronouns while others confronts this head-on upfront. “In a very real way, accepting the fluidity of gender requires rejecting standards in general. It means opening our “closed class” of pronouns.

Perhaps the most notable example in recent memory occurred when the AP Stylebook in 2013 dropped the term “illegal immigrant.” The AP stopped short of embracing “undocumented immigrant,” per the long-standing guidance of the National Association of Hispanic Journalists. The Huffington Post uses “Latinx” as a gender-neutral identifier that “makes room for people who are trans, queer, agender, non-binary, gender nonconforming or gender fluid.”

- Barriers to Inclusion

There are several other goals of a hackathon besides inclusion such as getting a high attendance or securing a notable venue and notable sponsors. The goals aren’t in conflict, by nature, with inclusion. However, when push comes to shove, trade-offs need to be made. At Hack for Inclusion, we had a full house the first day, which was a Friday evening. All the round tables were mostly full, sparing only 10% of seating for attendees who may show up late. The Operations team felt pressure to plan for the scenario that 30 to 40 more people may show on Saturday and we may not have tables for them in the room. “Can any newcomers build their own teams, sit outside the main room, and only come in the room when certain instructions are being provided?” one of them asked me. I felt torn. We didn’t want to turn away anyone. However, if we kept accepting people, we wouldn’t be able to fit them in the main room and they would end up feeling excluded. From a participant’s experience point of view, I thought it was better to turn away people than to provide them a tainted experience. The Operations team disagreed. We had promised this experience to the participants so giving them a subpar experience was better than giving them no experience at all. I share this story to highlight that providing inclusive experiences isn’t easy especially when resources are tight and time pressure is on.

Furthermore, when there is resource and time pressure, we tend to rely on assumptions and internal, implicit biases. Under time pressure, it is easier to refer to someone by a wrong pronoun when that information is not readily available such as on their nametag. It is easier to make that assumption than to be curious and inquire.

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Checking for Inclusion

- How do you provide food that takes people’ dietary restrictions into account while staying within budget and time limits? Did you get people’s restrictions upfront? Did you advertise what food will be provided so people can arrange for their meals if needed? It can be complicated ordering enough food that is vegan, vegetarian, lactose-free, gluten-free, kosher, halal, or low-sodium.
- Did you solicit correct pronouns from all attendees? How do you acknowledge different gender identities? How do you ensure all participants use and honor correct pronouns?
- How do you welcome and accommodate people with different abilities?
- Are you, intentionally or unintentionally, making it burdensome for those with disabilities to attend your event? For example, do you have flexible seating for people of short stature? Is there enough personal space per person in the venue to accommodate everyone, including wheelchairs, walkers, canes or other personal items? Is seating available for people who may need to sit throughout the event? Are doors an appropriate weight, and are they accessible for people who are in wheelchairs or people carrying items? Can the facility be accessed by bus, taxi, metro or other means? Is parking accessible for wheelchairs and canes? Do you attendees know of options all available?

Key Principles

- Stay curious and inquisitive of others’ experience specifically when under pressure. Put certain measures into place when possible to ensure you do so.
- Use inclusive language. Swap gender-biased terms like “guys” for “folks” to address a mixed sex audience. Give room to people to express their identity and acknowledge it so, consistent with how the individual identities
- Give room to people to explore their identities. Self-awareness and self-knowledge is an ongoing process. Our knowledge of self and thus our truths evolves. We ought to give others room for this evolution in our language, policies and actions
- Be aware of inadvertently limiting the identities your members can express. An example would be saying “Lets have all the men on this side of the room and all the women on the other.” Many people identify as both, neither, or somewhere else on the gender spectrum. Try to create groups in a more creative way like birthday months, or favorite movies, and start your event by asking about the pronouns people use.
- Be mindful of different abilities, cultural, and religious expectations e.g., when doing icebreakers, you should also consider people's different abilities that may make moving around quickly impossible or religious expectations that may make someone uncomfortable touching others

Production & hacking

Reflections
During Breaking The Mold, Hacking Discrimination and Hack for Inclusion, we decided to provide our participants a structured process. All participants sat in the same room and the facilitators asked the participants to follow a problem solving process that took them from research to idea generation, from prototype building to story crafting. I proposed this way of conducting a hackathon after attending several hackathons myself and talking to those who had attended hackathons and those who shied away from them i.e., after talking to our Leslie Knopes
and Clueless Chers. I found that a lot of prototyping and hacking happened in a short amount of time, using 15-20% of the total time. The rest of the time, teams spend on getting to know each other, finding an idea to work on, and getting on the same page about the idea and the prototype. Furthermore, there were usually a few people who drove the conversations -- these were usually extroverted individuals who made sure their voices were heard. Finally, teams spent a lot of time arguing and debating and didn’t have a way of resolving issues. From looking at these issues, I proposed taking people through a process whereby they would be forced, by the structure of the program, to tackle different steps of the problem solving process and keep moving forward. “I’ve been to several hackathons before. None quite like this one. I loved the structure. It helped my team so much,” said a MIT PhD student about his experience at Hack for Inclusion. “The structure helped our team make decisions fast. And as an engineer, I truly felt that my ideas and my thoughts were being listened to. I didn’t just code the prototype but I co-created the idea with the designers and business people,” said a MIT Computer Science undergraduate sophomore about her experience at Breaking The Mold.

Providing a structured process wasn’t easy. We had to strike a balance between being too instructive and hands-on versus being too hands-off. We wanted to ensure that our guidelines were seen as strong recommendations that the teams could decide or not decide to take. We wanted to ensure that our guidelines didn’t lead the teams towards a certain answer. For one of the steps of the process, we wanted to ask our teams to talk to potential users about their challenges. We wanted teams to learn about others’ experiences and identify problems that they could then solve. Asking teams to conduct interviews was our way of ensuring that ideas were rooted in real life experiences and would be highly desirable. During Breaking The Mold, we asked people to think of these such users and develop a persona to then build an idea for. While this worked within the short timeframe we had, it didn’t take out the biases people had about certain ethnicities, disabilities, sexual orientations or gender identities. During Hacking Discrimination, we gave people an entire evening to go out and talk to people: “Call up your friends in HR, go to the subway station, walk around campus, find someone to talk to and learn about their experience.” One team talked to a police officer to learn about their training and in the moment experiences and ultimately built a haptic vest to help tackle bias in police-civilian interaction. However, several teams didn’t talk to a user. Unintentionally, our process favored extroverts, those with strong networks, or those with the ability to stand and walk around outside. During Hack for Inclusion, we decided to provide participants a list of people they could interview. We sought out these potential interviewees, “users”, beforehand and ensured they were available to chat with our participants if needed. To ensure that our “user” base didn’t lead the participants towards a certain solution, we described our user to the participants upfront and gave them the option to leverage the provided list, their networks or the community in the room. For those who were absolutely not comfortable talking to anyone, we had a plan B: find stories online via StoryCorps, This American Life and other NPR shows, TED, and the NYTimes. “At first, I didn’t know what we were doing and why. I wanted to code and that’s why I was at a hackathon. But as soon as I heard the first story about someone with diabetes and their struggles, I got it. I thought I knew the answer and was ready to code but listening to others stories and daily lives helped me realize that I had to take a step back and listen,” said a Boston University graduate student studying computer science.
We also provided our participants other resources to help them in their journey. These includes resources such as process guidebooks and prototyping lists. The former was a template version of our process. While the facilitators walked participants through the specific steps and the goals of each steps, the process guidebooks provided a template for anyone feeling stuck. The guidebook also provided participants a way to collaborate with other members on their teams rather than debating out the process and approach they would use to come up with their idea and prototype. Finally, the process guidebooks also helped participants see where we were in the process. In case someone didn’t hear the facilitators properly or missed a segment, they could refer to the template to orient themselves. The prototyping lists gave everyone resources to leverage when creating their prototypes. We knew that participants didn’t have much time to prototype. During Breaking The Mold, participants had 3 hours to build their prototypes. During Hacking Discrimination and Hack for Inclusion, participants had 4 hours and 30 minutes to build their prototypes. The prototyping list gave the participants resources they could quickly leverage, thereby saving time spent on researching certain tools. This was especially helpful for participants who weren’t tech-savy or had experience coding. In the prototyping list, for each resource, we noted the amount of prior experience and knowledge required to use the resource as well as the output that could be expected. We included resources for beginners and experts.

Finally, we brought in mentors and guest speakers to support our teams. Again, we saw that the teams had a short amount of time to hack. We wanted to feel very successful and empowered. This is where mentors came in. However, rather than generalized mentors, we recruited mentors for each challenge who were dedicated to a team. The mentors observed and pushed the teams by asking thought provoking questions. They also brought their expertise and answered any outstanding questions teams had about their topic. Teams were able to leverage the mentor’s experience and brains, thereby expanding their collective knowledge on the topic. We also brought guest speakers to provide inspiration to our participants as fuel them to keep going and highlight the importance of their work.

The final step at all three of our hackathons was sharing the ideas with the broader audience. We didn’t call them presentations. Instead, we called it storytelling and pitch delivery. We placed an emphasis on this as we believe that an idea is only as good as how it is received and perceived. Before we went into our pitches, we gave teams 20 to 30 minutes to work on crafting their stories. We instructed them to make it an emotionally compelling story. “Avoid using dry or business-y jargon or using formal language to sound smart. Instead, speak from the heart and speak naturally. Use personal stories and passion to reel your audience in,” we instructed our audience. We asked them to move away from thinking about the users they designed their solutions for to stepping into the shoes of the judges and audience members they will be delivering the results too. “You’ve been thinking about the person you’re designing the product or service for. Switch your mindset and zero in on your current audience. Clarify who you’re talking to, what your audience cares about, and what you’re trying to achieve.”

Ultimately, we saw participants deliver emotionally compelling pitches. Most started with a person’s story -- either a fabricated persona, a true story of someone they spoke with or their own story. They connected with a broader statistic to highlight the prevalence of the story and the pain point. And then introduced their idea. Interestingly, most pitches during Breaking The Mold relied on fabricated personas while several pitches during Hack for Inclusion included real
stories of prospective users or the presenter themselves. As an observer, I could see through the stories delivered in Breaking The Mold -- they were generic. They spoke of “Molly from HR who had a tough time explaining bias to her male coworkers” or “Ryan, a black male, who was stopped by the police when driving down the road, for no apparent reason”. In other words, these seemed like generalized statements with a made-up person on the cover representing the issue. The complexity and nuance of human experience was often lost in these stories and one could see the biases we hold about others’ experiences. On the other hand, when participants shared their own stories such as at Hack for Inclusion, you could see the problem alive and raw, and you could feel the passion. One team during Hack for Inclusion worked on creating a safe space for blacks in Boston. Two of their team members shared their personal stories -- one shared his experience of moving to the city during a winter storm and another shared his experience growing up in an isolated neighborhood. Both stories tackled the problem of representation in public places as well as the rationale of relying on people who we can related to. The burden and dilemma a minority feels when walking into a new space that’s not intentionally designed for them became real as we heard their stories. Their stories pulled the audience in. We bought into the problem and the pain point this team highlighted. So when they presented their solution, many in the audience were compelled to applaud and help them turn their idea into a reality. One representative from the Boston Globe who worked with this team left the event with a burning desire to help this team: “I need to figure out a way to make their idea a reality. I need to look for funding or mentorship options and turn this into a program soon.”

We realized that the quality of the pitches depends on the support provided upfront. The participants brought into the room made a difference. We wanted to ensure that the people solving some of the problems were the people facing those problems. We wanted it to be an exercise in co-creation rather than designing and building solutions for others. And this impacted the stories shared during the pitches and the passion brought to the table. And we helped connect participants with potential “users”. This was not the case during Breaking The Mold and it showed when we saw fabricated personas. This was the case during Hack for Inclusion and it showed when we heard real stories during the pitches.

○ Barriers to Inclusion

Certain moments in a hackathon favor people who are outgoing and extroverted. During Hack for Discrimination, we asked participants to find people to talk to relevant to the problem they are working. This is because we wanted all solutions to be grounded in reality and real experiences. It put the onus on the participants. Those who were extroverted and had existing relevant networks got a leg up. This is similar to how many hackathons encourage participants to stay up overnight or to bring a sleep bag so they can rest at some point. This sort of environment invites a certain type of person and excludes many others. Unfortunately, there is a time and resource barrier. “There are only 36 hours to hack so might as well ask participants to stay up,” or “We only have a certain amount of budget so we can’t offer hotel rooms to all participants.” are common sentiments.
○ Checking for Inclusion
- How are you ensuring that different personalities, skills, and abilities succeed in your event? What resources, tools, and guidance are you providing to truly level the playing field?
- How do you help teams with interpersonal dynamics? How do you ensure team members accept and respect each other?
- How do you help teams learn and create? How do team members empower each other?

○ Key Principles
- Keep the event small enough to fit in one room
- Be thoughtful of that different elements such as table size, table shape, music level, lighting, visibility in the room, writing utensils, etc.
- Level the playing field for participants through using diverse judging criteria, building diverse teams, and providing necessary resources, workshops to acquire skills
- Provide structure and guidance to empower participants and to ensure they feel successful. However, balance it with freedom and flexibility to ensure participants have agency and choice
- Hold and acknowledge any discomfort. Provide guidance to participants on how to deal with discomfort
- Use team building activities, team norms, conversation or behavior guidelines, and best practices for team management to ensure team members trust each other, their mentors, and the organizers. Provide guidance on how the event may feel and how to handle those emotions. Provide guidance on what people can do in certain situations or who they can resort to for help

○ Delivery of final results
○ Reflections
All three hackathons retained the focus on competition. As the organizing team, we saw prizes as a way to lure people in and to motivate them to come up with ideas. At Breaking The Mold, we didn’t give out a grand prize. We had multiple categories, with different prizes, that participants could win such as “most innovative” and the “audience choice”. One team won two of the four categories. At Hack for Inclusion, we gave a grand prize. All teams were judged based on the desirability, feasibility, and the impact of the idea. And we gave cash prizes to the top three teams.

“Don’t make a hundred people compete for thirty six hours for one big grand prize. This motivates people who can take risks and are willing to bet their time for a small chance at winning something big. It can demotivate people who want to win but don’t think it is worth their time because of the competition. And usually these are people who are from low socioeconomic background,” said a Native American computer science graduate of MIT during our conversation around inclusion at hackathons. This statement made me pause. I had seen competition as a driving force behind action, creation, and innovation. Here, he was challenging my statement by saying that this competition doesn’t work for all communities. Certain communities may view this as a risk not worth taking. He went on to give me an example of someone who has to forgo a day’s worth of income to attend the hackathon. If we see prizes as a
motivating factor, the factor is not motivating enough for such a person as the opportunity cost in terms of income lost is higher than the probability of winning the grand prize.

What if we let go of prizes at hackathons? How would we drum up excitement about our hackathon and how would we keep people motivated during the hackathon? Perhaps this brings out an assumption we are making about our participants: people need an extrinsic motivating factor to participate and contribute. This could be extended to “people are inherently lazy.” However, my organizing team and I don’t believe this to be true. We believe that the prizes provide an additional incentive and drum up excitement in a way other motivating factor can’t. And how will we compete with the several other hackathons and events happening simultaneously and that offer cash prizes? However, what if the distribution of prizes motivates people to produce an idea that will win instead of create impact? What if the prizes alienate certain people from attending? What if the prizes attract people for the wrong reasons? If we believe so, can we change how prizes are advertised and distributed? Can we change the nature of the prizes from cash to another motivator factor such as a promise of mentorship? Regarding prizes, Unhackathon states on their website that they don’t reward large cash prizes as “we feel these encourage unhealthy competition while detracting from our focus on learning.” Instead, they offer “smaller prizes in a variety of categories to encourage you to stick with your project until the end.” At Hacking Discrimination we offered a chance to have dinner with the president of MIT, Rafael Reif, instead of cash prizes.

- Barriers to Inclusion -- Incomplete
- Checking for Inclusion
  - Does your pitch policy give a leg up to those who have practiced this skill through their educational training? If participants are going to be judged on this, how do you give people these soft skills and try to level the playing field?
  - Does your prize distribution exclude people of certain socio-economic class or with certain responsibilities?
  - Do you prize categories encourage learning and inclusion or only competition?
  - Do your prize type, amount, and distribution attract a certain type of individual? Who? Is this who you want to be in the room?

- Key Principles
  - Be thoughtful of the incentives you provide to people to participate and contribute to your event. Target intrinsic motivations such as personal development instead of extrinsic motivators such as money
  - Provide training in soft skills if participants are going to be judged on them
  - Encourage multiple prizes instead of one big, grand prize to lower the opportunity cost involved in participation

- Departure
  - Reflections

“This was a coopetition and not a competition,” one participant shared his perspective about Hack for Inclusion. And several others nodded. During Hack for Inclusion, we retained this idea around coopetition by encouraging participants to share their experience, feedback, or thoughts on the event. We wanted participants to leave on a positive note as they left the space where
they worked. As organizers, we believed that this reflection and share out would help create that vibe. And it did. We had several people share their experiences. Most shared the experience they had with their teammates and the energy they felt in the room. One of the participants was a practicing physician in her 60s. She shared her enthusiasm and said she wants to study user-centered design, the process we used to structure our hackathon, now. Another participant shared how the combination of the people motivated her. “This is really usual. It’s the most diverse mix I’ve yet seen in Boston,” she said. Participants had the permission to be open with their thoughts and took ownership of the physical and emotional space. When one participant made a comment that didn’t sit well with other participants, one of them stood up and politely disagreed.

○ Barriers to Inclusion
During our post-hackathon reflection session with the participants, one of them made an uncomfortable comment regarding being gender and color blind. Coming from a white, cis, straight male, this comment didn’t sit well with many in the group. Another white, cis, male spoke up and said that he disagreed with his views and explained why the idea of being gender or color blind is problematic and insensitive. As a facilitator, I wasn’t prepared for this. I didn’t know how to address the first speaker. I didn’t know what to say to the rest of the group. And it didn’t help that I had said “one last comment before we wrap up” before the initial speaker. A lack of preparation and a lack of ability to address the discomfort was a barrier to inclusion here.

Time and resources became a barrier once again. After the hackathon, we had a reception, filled with food and drinks. We served alcoholic beverages, water, craft pizzas, vegetables and truffles. As I reflect back, we didn’t offer any options to those who didn’t drink alcohol. We assumed that everyone will be ok with the presence of the alcohol. We assumed that all will be able to enjoy the food post an intense working session. We didn’t consider those we excluded by not mentioning the presence of alcohol, not providing non-alcoholic options, and managing food options for those who couldn’t eat pizzas. It takes time to think through these details and to deal with providing open and a variety of options. It takes time to make announcements about food and beverages, and when the event is running 5-10 minutes late, such announcements become a low priority.

○ Checking for Inclusion
- Departure is just as important as arrival. How do you ensure a hospitable departure?
- How do you encourage inclusive social events post hackathons? This includes providing non-alcoholic options and diverse food options
- How are you reinforcing your hackathon values and policies during the closing ceremony?

○ Key Principles
- Prepare for soft and unanticipated moments. Address such moments even if it means acknowledging you don’t know how to deal with a certain event. Don’t avoiding sensitive, uncomfortable topics and tensions. Diversity can be uncomfortable. Reflection can be uncomfortable. Encourage it
- Be inclusive in the closing ceremony such as by thoughtful of food, beverages, venue setting, and music
• Post-event connection and community building
  ○ Reflections
  After Hack for Inclusion, we sent out an email to all participants. In that email, we shared our gratitude with the participants and pointed out that we want to keep the dialog moving forward and to continue to build a community of changemakers (our participants). We gave them a few ways to do so: we requested their feedback, shared the toolkits we used during the hackathon, asked them to join our Facebook group, and offered other ways of building on the momentum. And we kept the channels open by stating that we are ears if anyone has other ways to building the momentum. Unfortunately, only 15% of participants filled out the feedback form and one team reached out for help in making their idea a reality. However, we continue to work on this by keeping our Facebook group active and keeping our participants on an email list that we can leverage for future events.
  ○ Barriers to Inclusion
  Post Breaking The Mold and Hacking Discrimination, we saw a momentum and surge of energy in a room. We wanted to keep it going but hadn’t plan on how to. As we were reflecting back on our experiences of organizing the two hackathons, we pointed out a need to do plan for post-hackathon continuation, connection and community building in the future. A few items we discussed included a need to give participants resources if they want to continue working on their idea, a need for post-event press coverage so that participants continue to stay excited and new people turn into prospective participants or donors for future events, and a need to document, track, and share ideas. Despite being aware of this, somehow we couldn’t prioritize this enough during Hack for Inclusion. Perhaps this is so because we didn’t have a specific team working on post-hackathon connection and community building. We didn’t get press coverage even though we tried to. We tried push this hard. Ultimately, it became an action item for one of the main organizers. We didn’t have a plan for resources for teams who wanted to continue working. We thought about this too and ended up talking one on one to teams that came to us seeking such support. In process, we excluded teams who didn’t come to us. We wanted to track all ideas but we didn’t have a point person for this. One of our team members took a few videos. Three months after the event, the videos are still sitting in our shared drive. During the hustle and bustle of trying to get an event organized, we missed the broader journey of our participants. The short term and apparent action items such as securing space, making name tags, ordering post-it notes, and securing gifts for our mentors took priority over long term and unapparent items such as keeping in touch with participants after they leave the venue beyond emails.
  ○ Checking for Inclusion
  • How do you plan to provide a sense of belonging and empowerment beyond the hackathon?
  • How do you plan to keep up with and reach out to people in ways beyond electronic communication? Emails and Facebook groups don’t work for all participants.
  • How do you make it easier for people to provide feedback and their ideas? How can we lower the barrier for people to do so? How can we keep people accountable to give feedback?
  ○ Key Principles
  • Always be open to feedback. Ensure that you lower the barrier to provide feedback for different types of people -- introverts and extroverts, high and low energy, those with and
without internet access, those who use internet, email and social media often and those who don’t

- Be intentional about how you want to impact the audience during and beyond the hackathon. Pull these elements in during the hackathon so it a continuation post-event rather than a new aspect that participants have you buy into
- Go to people. Meet them where they are. Communication beyond hackathon can create further inclusion and even change a formerly exclusive narrative to an inclusive one
- Be patient. Community development will take time. Be patient and persistent.

V. Conclusion

Given the scope and gravity of this concept, it is best to not define radical inclusion so as to not limit it. Instead, it is best to see radical inclusion as the interbeing with all, seeing our realities and existence as interwoven. Radical inclusion allows us to be who we are at our core. Organizing for radical inclusion is a task that ought to be undertaken by all, at all times. Through this thesis, we saw the different ways to organize for radical inclusion at a hackathon. However, the principles and guidelines that were uncovered in this process can be extended beyond hackathons: to businesses, communities, other events, and various aspects of life.
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37