



# plause

a design probe for  
collective futuring of work

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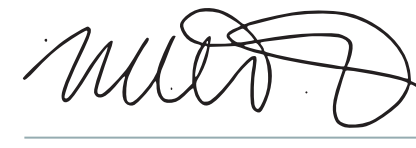
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*“We are on a journey toward  
a future being made from the  
dreams of everyday people”*

Liz Sanders, 2000, p.11

PART ONE

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# context

# introduction

significance

the changing nature of work

workers in the restaurant sector

a probe for collective futuring

introducing plause

## significance

In his book *Shaping The Future of Work*, Thomas Kochan talks about the need for a social contract for the next generation in order to combat the changing forces of the labor market. Of the several systemic issues Kochan outlines, that the workforce and labour market are facing, the two that are important when framing my thesis were: the decline in bargaining power and voice of workers and market and institutional failures that employers and other stakeholders need to overcome through coordination and collective actions.

Kochan writes that “Independent, innovative, and powerful networks and organizations that mobilize and give workers a voice in things that are important to them are critical to building a new social contract” (2016, p.136). In mitigating challenges of work in the 21<sup>st</sup> century, a reimagined social contract between workers and employers must strengthen the voice of workers and create avenues for collective action.

New social contracts can be embodied by organizations and companies to become inclusive in decision-making processes to navigate change and include workers’ voices. With the long-term decline of unions memberships, new forms of work emerging, worker collectives, councils and associations championing for organizational policy change and innovation like worker representation, fair wages, flexibility, lifelong learning etc. can use futuring methods to build shared understanding of worker needs and sensing trends of change especially for precarious workers who face the risk of losing work or the nature of their work changing.

While the most important amplification of worker voices is required in low-wage jobs, gig work and workers in industries facing more direct threats of automation and public health challenges like the COVID-19 of 2020-21, collective action and building a shared understanding of needs can also be used by groups of white collar workers who also face a changing landscape of work.

### Why Do We Work?

### How Will We Work in the Future?

This thesis explores the question 'Why do we work?' to understand 'How will we work in the future?' Through my research I learnt that people’s motivations to work are varied. Professionals seek career pathways based on personal values that guide them to make important decisions about their work.

Some may work for a sense of identity. There may be others for whom flexibility and income are the most core values. For others, a match of values between the employers and their own is the most important. While earning a stable income is, of course, important, it isn’t the only motivator. For some people, work provides other things like a sense of identity, belonging to a community, or an opportunity to learn. Understanding these value systems is important in shaping the future; because they tie closely to a sense of agency workers feel towards their organizations and industry communities.

These attitudinal and value-based archetypes of motivations to work were more insightful to understand behaviors and attitudes than the segmentation of workers by the type of work and wage earned itself. Whether a worker is categorized as essential, non-essential, wage, gig, full-time, etc doesn’t inform me as much as the attitudinal motivators that get one to work every morning.

Values drive decisions around work and planning for the future. Knowing what values workers prioritize and what matters to them can signal towards how equitable futures of work should look for the worker. In my interviews with participants for this thesis, workers described new trends like working from home that nudged some companies to extend more autonomy to employees and how economic stimulus programs created a new acceptance to contested ideas like universal basic income. In the pandemic, a lot of dormant practices that happened in a small niche, accelerated to become new normals. The present is filled with these seeds and raw fruits of the future. To hear how workers who had to face unforeseen changes navigated them and whether that event of change was an opportunity for them to think about their personal future embedded within this larger future of work, laid the foundation of my thesis research.

The core qualities of workers’ experience I inquired into were a sense of agency and the mindset for personal futuring: "organizing personal research in such a way that individuals will be able to apply existing futures methods to their live events" (Wheelright, 2009, p.1) as a way to understand the

of their work in the future. What aspects of change can participants be involved in? And how much control do they have in the participatory process? The control and incentives should be enough for them to have faith in the process and believe that it is not nominal and superfluous. When it comes to images of the future, the principle of voice is important. Placing authority in the hands of citizens incentivizes them to be active drivers of change in the process. Voice without the ability to vote and affect change is almost a counter-productive way of setting up a successful participatory process.

**I argue that futuring and shaping images of the future is also an active form of participation.** Furthermore, collective voices enhance the legitimacy and create plural versions of possibilities. The ability for multiple workers to voice their visions of the future would strengthen participatory and collective futuring, for which I proposed to design a research method or probe.

As Molly Kinder from the Brookings Institution who did extensive human-centered research interviews with workers puts it, the worker mustn’t be absent from the future of work (Kinder & Lenhart, 2019). She writes “workers are at the forefront of change, but who are all too often absent from these discussions.” (Kinder & Lenhart, 2019, p. 4).

There was a design opportunity to leverage futures and foresights methods for ethnographic research for inclusive futuring that could be a stepping stone for new forms of participatory governance and decision-making for organizations to adopt.

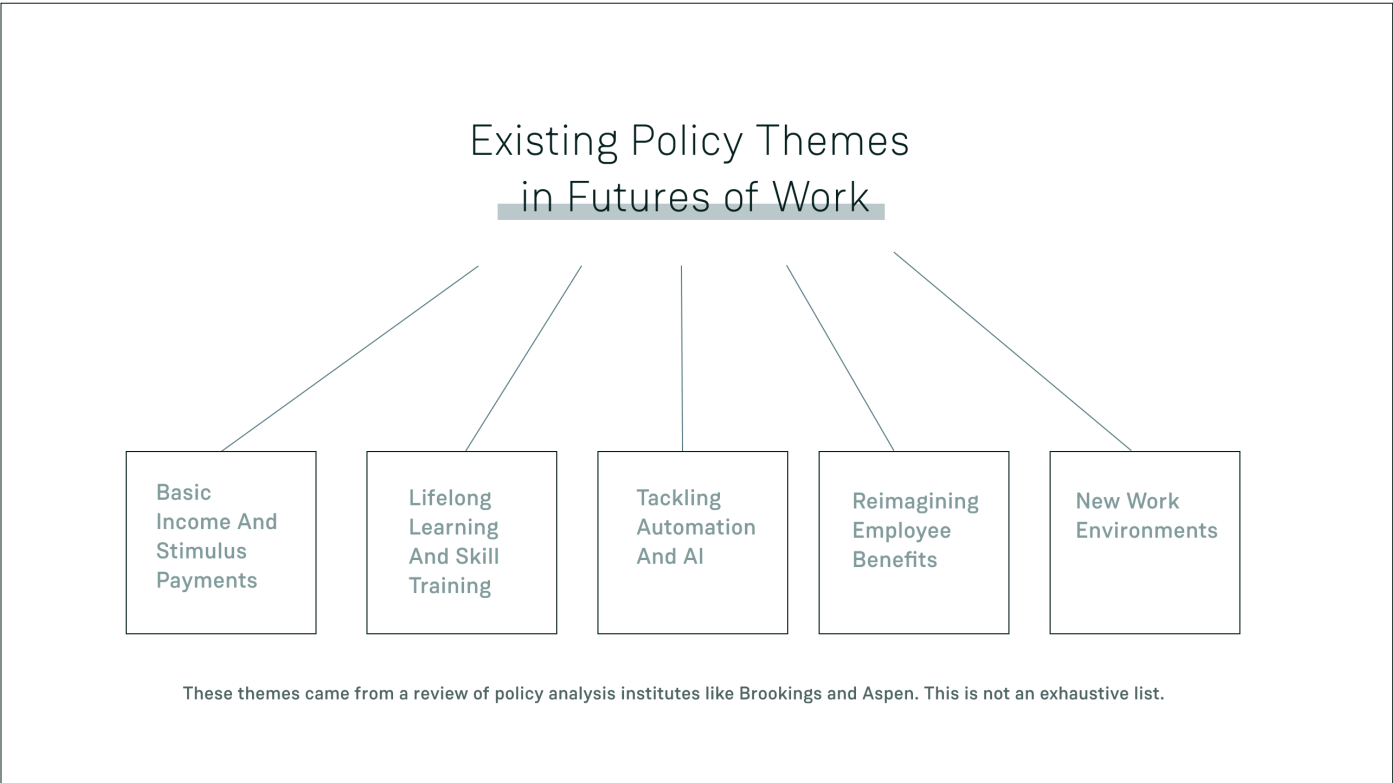


Fig 01: Recurring and topical themes I encountered in my research about the Future of Work

the changing nature of work

In many ways, the pandemic gave us a glimpse of the future of work. For restaurants and cafe workers among others in the service industry, that future had a disproportionate impact. Many of these places of gathering, landmarks of a street, shut down for months, unable to navigate change. What is at stake for precarious workers is that many of these jobs might not come back even after the pandemic subsidies.

The COVID-19 pandemic is only one of several things that affects industries like the restaurant industry. A local restaurant, cafe, tea room or diner are identifiers of a street and the neighborhood. Besides the fact that restaurants provide food services, they are also a point of business, gathering and interaction. Workers from the service industry, and others like, manufacturing, retail, etc, were not only affected temporarily by the pandemic, but many of those restaurants and jobs never came back after the pandemic seemed to subside. Surviving change is a part of work especially in these industries that are most sensitive to waves of change.

Occupations are shifting and changing across the world. According to this review of occupational shifts by the McKinsey Global Institute shown in the matrix diagram, the United States will see a decrease in the share of food services employment in the next 10 years (MGI Report, 2021). The food services industry is one of the most drastically affected in the post-pandemic world (MGI Report, 2021).

The Aspen Institute’s Future of Work Initiative states that “Rather than waiting to react to future disruptions,

it is critical that policy-makers must strive to create solutions that address the changes of transforming the economy.” (Aspen Institute, n.d.) The aim of applying a participatory approach to policy making for a future policy scenario, is to leverage our tendency to be more optimistic about the long-term future than a short term one, to identify peoples images of the future and learn the significance of participatory transition to policy futures.

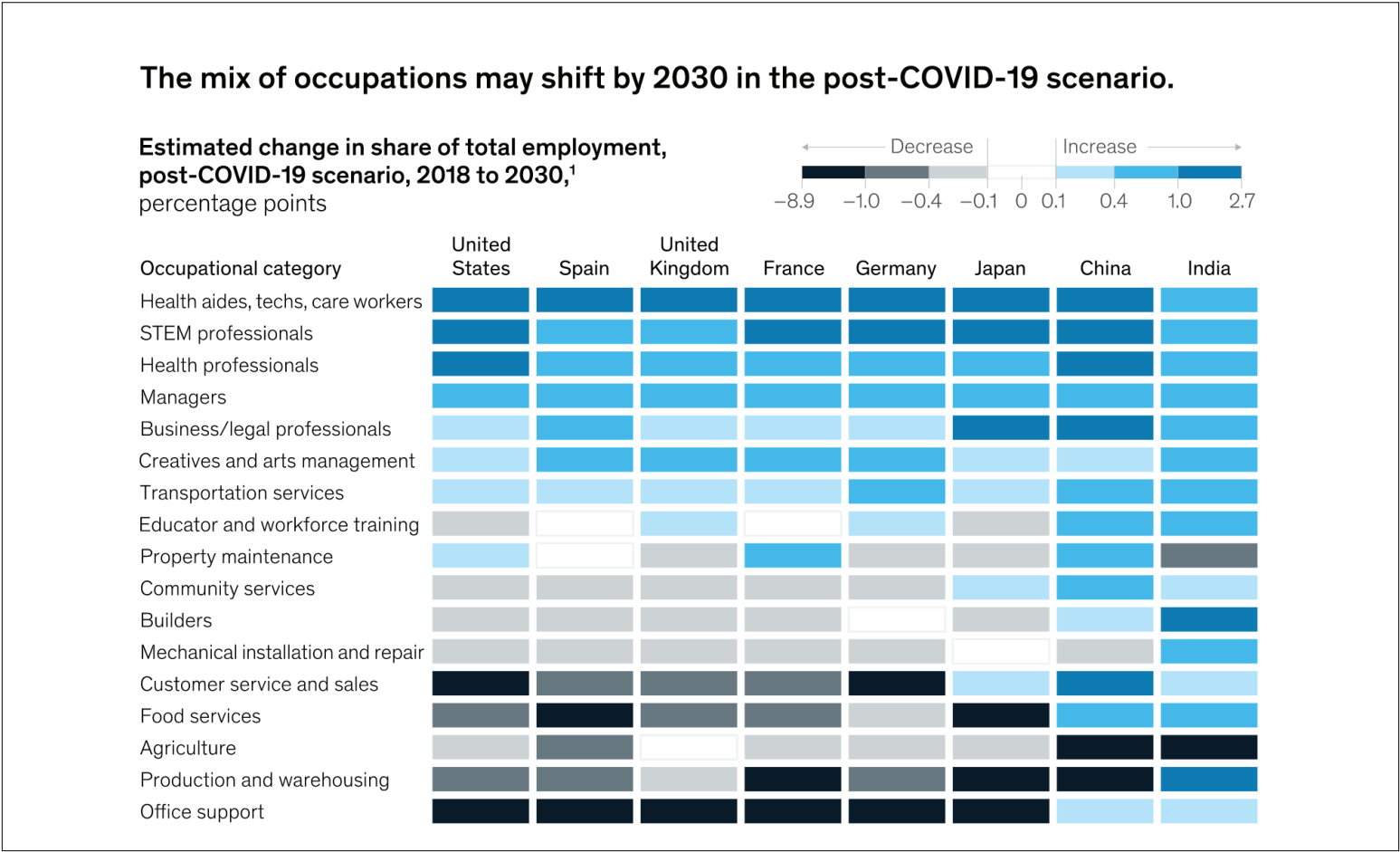
workers in the restaurant sector

Restaurants and cafes are always my first identifiers of a street when I first move to a new neighbourhood. The restaurant sector was hit the hardest with only 6 out of every 10 food service businesses that employed workers in Pittsburgh were allowed to remain open and out of 88,000 workers employed in this sector, almost 30,000 workers lost their work, daily wages and tips. (Center for Social & Urban Research, n.d.).

According to “Worker Voices:Technology and the Future for Workers”, food services have always been the most precarious professions, even before the pandemic (Kinder & Lenhart, 2019). They are not only at the front-line of the workforce but also at the frontline of low wages, automation, and other changes. For example, as restaurants become more dependent on food delivery technology, restaurants had to adapt to this new way of delivering their services. This shift in a way of working illustrates how being able to speculate changes that one’s work might go through can help be prepared.

The design probe, Plause, that I created drew from insights and evaluative research with this specific category of works but is applicable to other groups of workers whose work is on the edge of changing in unexpected ways in the future. Perspectives on the nature of work and the trajectory of a workers’ profession at large can be shaped through conversations with groups of peers from the same profession as well as a mix of workers from different professions coming together to create shared images of the future.

Fig 02: McKinsey Global Institute report on how industries will trend in different regions. There is a regional context to how the waxing and waning of industries happens in the next 10 years. In the context of the US, food services are seen to decline.





# a probe for collective futuring

## Collective voices in futuring of work makes the future inclusive, plural and creates a space for diverse images and imaginations.

Therefore, amplifying voices of less-heard stakeholders and collective actions aligns with my thesis goals of designing participatory tools for collective futuring. The collective voices of workers asking for desirable changes could shift organizational structures of organizations and change our interactions around or work and workplaces.

One role of design research is to bring qualitative substantive significance and insights to policy analysis, decision and implementation that is driven by statistical significance (Burstein, 2003). The impact of public voice on policy changes is of more substantive significance than statistical significance. The future of work is often analyzed, explained and decided through perspectives that may not account for the lived experiences of workers.

When navigating change that disrupts work for an entire industry, it is important that the worker has agency and a voice in shaping changes. I took on exploration of design ethnography methods through conversations with workers from varied industries, as a way to make the implicit hope, fears and visions of the future explicit. Through this research approach to

learn how design probes can become tools for futuring and participation, I started with the question: How can design tools enable precarious workers to sense change, consider its impact and prepare for it?

The further sub-questions I asked were:

- 1. How do workers respond to change at their workplaces?
- 2. How can anticipating change help to structure conversations that collectively imagine desirable futures of work?

How can design tools enable precarious workers to sense change, consider its impact and prepare for it?

# introducing Plause

To put the worker and her lived experience back into this future, I created Plause: a design probe that leverages a futuring framework to build on lived experiences of workers, and navigate change within hypothetical trends and time frames.

Plause is a design game, a research method that draws inspiration from tools and methods from future studies and existing design research methods. It is a design research method or design game that enables and facilitates conversations, interactions and engagements between a group of employees or workers that leads to the creation of a shared understanding or imagination of the future of work and the extent of changes that the future holds. Ultimately, Plause works to tap into the voice of workers’ lived experience and use those ideas about the future as seeds that might inspire organizational or policy ideas. It can be used by other designers or researchers as a method or game that enables individuals or groups to discuss and respond to change.

The design elements help to scaffold the participants thinking about several aspects of the future, through prompts, and questions. By prioritizing their values, participants place themselves in the future, understand trends that may shape their pathway, respond to change, imagine and create encounters to navigate them, and think of how a change scenario impacts their values.



The game Plause is a card game with four main card types: value cards are yellow, trend cards are green, change cards are red and encounter cards are blue.

These elements together, aim to provide participants tools and cognitive shortcuts to make futuring more tangible, intuitive and less abstract. This conversational facilitation that Plause offers can be a way to build a language of shared understanding that in turn contributes to new social contracts for the future of work that include the workers’ voices and encourage group conversation to encourage collective action.

It enables reflection on personal values and imagining preferable encounters that can become seeds of ideas and strategies for organizations to implement and ultimately create worker-centered workplaces. This thesis chronicles my research and development process for Plause, and what I learned along the way.

# frameworks of participatory governance

futuring as a form of participation

digital platforms for participatory governance

structuring and designing conversations

## futuring as a form of participation

Participatory Governance is a mode of governance that brings ‘multiple stakeholders together in common forums with public agencies to engage in consensus-oriented decision making’ (Ansell & Gash, 2008). One of the central ideas of participatory governance is that the carefully considered design choices and variations in crafting participatory processes can create a space for participation that is sustained rather than temporary, and designing platforms or processes can contribute to key democratic values such as legitimacy, effectiveness and social justice. (Fung, 2015). These values serve as good starting points to articulate design principles for a participatory policy platform. Participatory governance is also seen as a strategy, according to the author, “for shoring up the democratic legitimacy of governance processes” and “in response to criticism of the political systems and opaque processes”. (Fung, 2015, p. 9)

The idea of mini-publics was first proposed four decades ago by political scientist Robert Dahl. Inspired by democratic ideals and social science principles, Dahl envisioned an innovative mechanism for involving citizens (workers in this context) in dealing with public issues. He called it “minipublics” (Fung, 2015, p.7) an assembly of citizens, demographically representative of the larger population, brought together to learn and deliberate on a topic in order to inform public opinion and decision-making (Fung, 2015). These assemblies can be convened for collective futuring in an online-mediated version of Plause.

Participatory processes have been applied to several questions of public policy as well as shaping new organizations and institutions through bottom-up approaches that align with the spirit of democratic and inclusive decision making. Nina Simon in her book *the Participatory Museum* (Simon, 2010) proposes the term “participatory institution” and the use of social objects that build interactions among participating groups. Plause can be seen as a social object that facilitates futuring conversations among workers.

Participatory governance is not the only way in which policymaking can be pursued for futuring purposes. It is important to acknowledge that there are areas of policy that need critical expertise that citizen participation might lack. There are varieties of participation (Fung, 2015), each one relevant to an issue at hand. Ezio Manzini in *Design When Everybody Designs* (Manzini, 2015) introduces the idea of “diffuse versus expert design” acknowledging that “everybody designs”. Workers through their lived experience may not possess the strategic decision-making capacities that organisational leaders are perceived to excel at, but their lived experience can be encoded into their images of an equitable future. Futuring need not be an expert activity and in exploring ways to make Plause accessible for diffuse designers to imagine futures and give them a sense of agency when they participate in futuring conversations.



# digital platforms for participatory governance

Traditionally, town halls are a space for the citizens to gather and voice opinions about the governance of a county or city. Participatory governance platforms, whether analog or digital, must create a shared place of gathering, to align stakeholders and steer a group conversation towards a common set of goals. My inspiration for designing a participatory futuring probe came from a review of several examples of participatory communication platforms that are designed for different forms of participation.

I reviewed several platforms that are designed primarily to facilitate these different types of processes in the context of citizen-government interactions, and learned about how the offerings of these platforms can give me insights about designing a facilitation probe for the represented and decision-makers in the context of a company or organisation. My goal in investigating these platforms was to ask and explore: How might I design a probe that enables participatory, collective, inclusive futuring conversations for the future of work?

I recognised certain types in the digital platforms for participatory processes:

### Consultation-based Participation

A consultation-based policy process is one where a policy idea drafted by decision-makers is shared with the citizens or the represented (in the thesis context, the workers are the ‘represented’). The represented are embedded in the process determined by the decision-makers, and can suggest modifications to policy implementation but cannot shape the course of action.

### Forum-based Participation

This process affords more agency to a group of the represented, where the represented can pick the issues to be discussed and worked on. Several participatory budgeting examples use this form of participation (Fung, 2015). But it would require facilitation and steering to lead a group to a set of goals.

### Poll-based Participation

This form of participation involves the least engagement from a citizen(represented), but it is used to learn the perspectives of the represented on different policy ideas that are being implemented.

### Campaign-based Participation

Of all the forms of participation I reviewed, this form of participation brings the most agency in the represented. The active participation reflected in efforts to gather peers around a shared need or want and advocate for change, is on the far end of the spectrum of participation types when compared to a consultation-based participation framework. Box #2 describes the platform Co-worker.org in detail and how it provides participation tools to workers for organising effort to advocate for changes at the workplace.

Certain types of processes might be suited for different issues that require varieties of decision-making approaches. **The important takeaway is that the structuring of the participatory process has a relationship to the agency that the represented can participate with.**

Whenever multiple-stakeholders have to be involved, it becomes important for communication, framing and goals to be specific, explicit and shared (Dubberly and Pangaro, 2016). These various forms of participation also lead to varied structures of conversation.

There are two aspects based on which I analysed these platforms, as shown in the 2x2 matrix. The first lever is whether these conversation structures are representative-driven or represented-led. This was of interest to me because it reveals the level of active agency and engagement that is needed from the worker, (the represented). The second lever is whether these platforms afford synchronous or asynchronous

communication: this would require facilitation tools to be of a particular quality to facilitate a group conversation. Stakeholders participate with different levels of involvement, agency and engagement in creating change (see box 2). This offers an opportunity to design a public interest technology platform where tech can level the playing field and include more voices to shape policies that influence workers' lives. Specific conversation structures afford certain types of participation. **From this analysis, I positioned a future-based conversation platform that affords a represented-led participatory conversation, where the main goal and main form of active participation is futuring.**

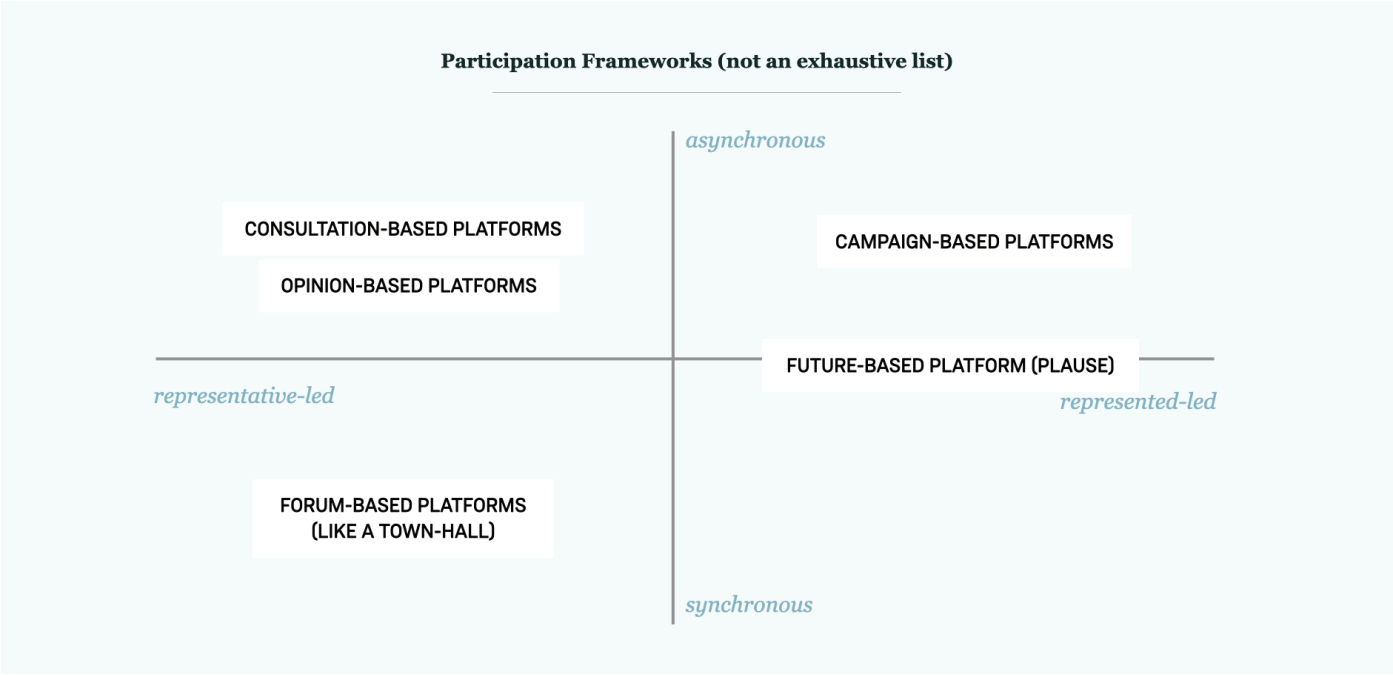


Fig 03: I categorised the digital participatory platforms I reviewed based on the level of agency they offered to the represented and the mode and synchronicity of participation they offered.

**A represented-led futuring platform gives agency to the represented, by enabling them to build imaginations of an equitable future. I see this as a form of active participation and the first step in creating a represented-led participation from where decision-makers can seek evidence and inspirations of new policy decisions for an equitable future.**

This is the first step in creating a good dialogue as the first step in creating a shared understanding of the future, and in turn these future imaginations becoming the material for decision-makers to work with in making equitable decisions for organisations, as Walker describes in his process for turning conversations to ideas to action. (Walker, 2007). Being able to create a good conversation is a way of designing (the future).

Once a group agrees on goals and boundaries to learn something about a context, a conversation becomes a vehicle for a group of people to collectively construct an image of the future. Dialogue and communication is an important tool for deliberation and learning, as a key feature of a participatory approach (Walker, 2007). The essence of a participatory process is held on the shoulders of key goals and responsibilities of the participating members.

In this process of translating dialogue to action, a futuring tool is effective in the phase of creating a shared understanding. Through the conversation about the future of work that happens around a session of playing Plause is what can potentially lead to a ‘critical examination of ideas’ that decision-makers can leverage to implement and adopt in organisations or workers can adopt in their own collectives.

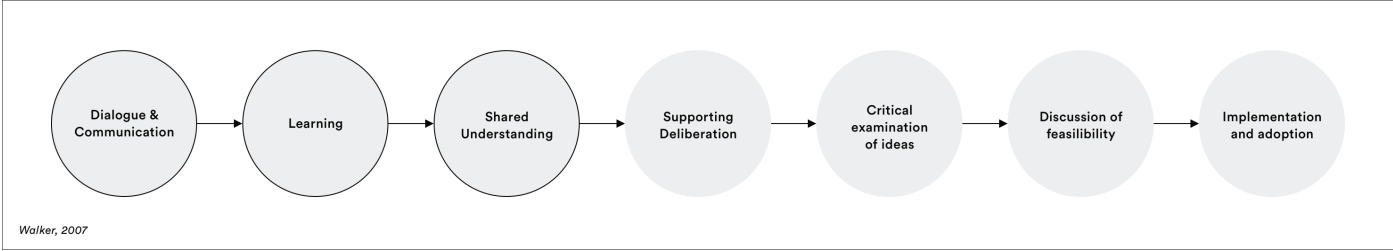


Fig 04: Brian Walker, describes the process of turning conversations into actioning on ideas, in his paper on participatory communication for ecological conservation. He highlights the importance of the conversation-goals-learning structure (Dubberly & Pangaro, 2015), in building a participatory process.

**co-worker.org:  
a campaign-based participation platform**

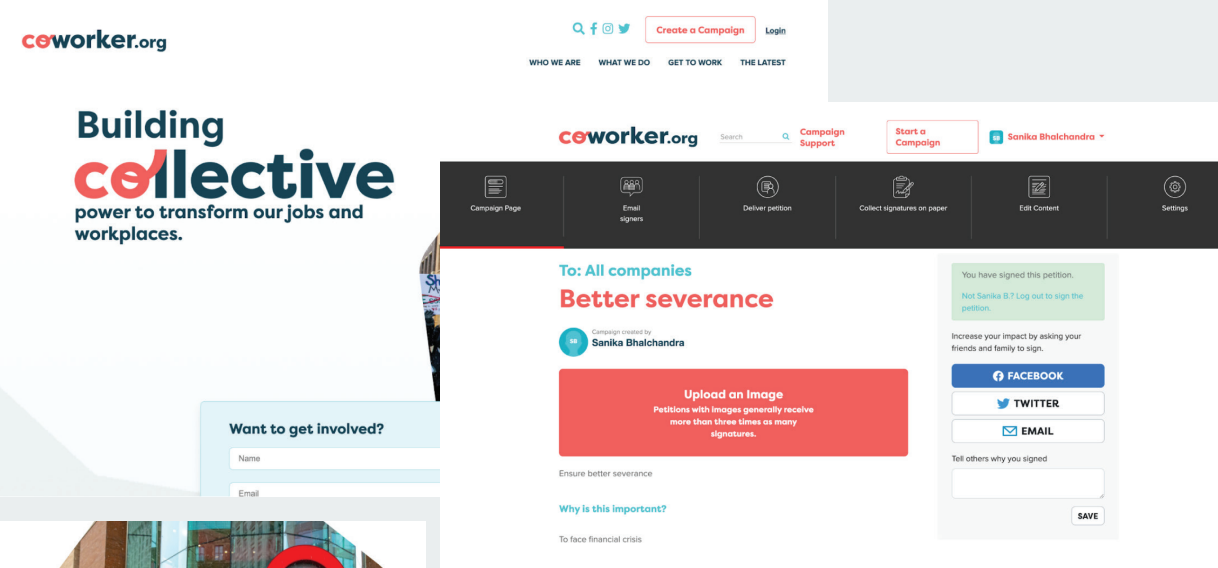


Fig 05: Coworker.org website, 2020.

Platforms such as coworker.org facilitate workers who are new to organizing to do exactly this: advocate for small but significant changes in the workplace as stepping stones towards gaining credibility and traction to then advocate for important changes as workers garner skills of organizing and build a sense of agency. Co-worker.org offers a digital platform for workers to describe their experiences at work and for workers and peers who belong to the same organizations to collectively band together and bring their voices to ask for change in their workplace and its policies.

Co-worker.org invests in “power-building” ideas for workers and by workers. Participation requires the right tools that facilitate conversations and offer a stage for collective interactions. Co-worker.org is giving workers in this economy the technology-based tools to build solidarity and fight for their rights from their employers. **Futuring as a participatory exercise would have similar characteristics: an incrementally strengthening sense of agency that stems from asking for improvements in everyday experiences and having the right tools to express change and vision.**

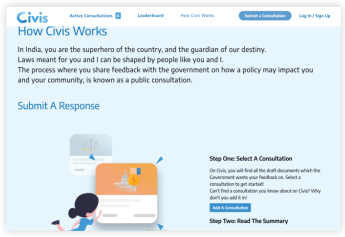
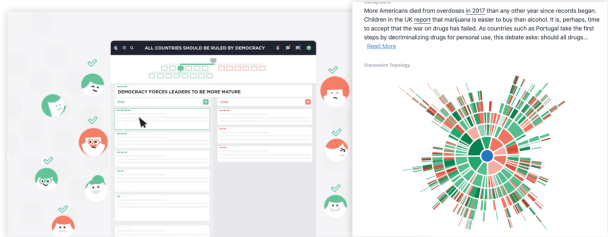
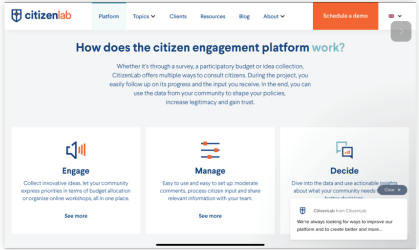
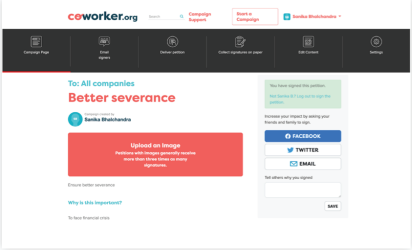
NAME	Civis.Vote	Kialo	CitizenLab	Co-worker.org
				
MY LEARNING GOAL	Understanding how a digital platform conducts and organises consultation-based participatory processes for drafting policy	Understanding and exploring novel ways in which user interfaces are designed to afford and visualises participation, conversation and deliberation	What is offering of a holistic participatory platform for local governments to host and conduct digital townhalls? Is there an opportunity for futuring tools.	What tools are provided to worker campaigners when they decidefor a certain change or organise themselves around a certain goal or task
VALUE OFFERING OF PLATFORM	Civis aims to be the key platform for consultation-based participatory policy interactions between citizens and policy makers. What this means is that it is interested in creating a participatory process mechanism to get citizens involved in the decision making process, by embedding them in the government's (existing) way of functioning.	It is a novel way of visualising conversations and decoding the contents of contributions and understanding the dimensions of a debate.	Citizen Lab offers an array of services to local governments to conduct their participatory process and engage citizens in policy deliberations at the local level, making it a holistic citizen engagement toolkit. Different policy issues elicit the need for different conversational styles and different level of stakeholder engagement. While in some instances it might be effective to have in-depth workshops, in others polls and surveys might be more effective than rounds of discussion and deliberation	Co-worker.org invests in “power-building” ideas for workers and by workers. Participation requires the right tools that facilitate conversations and offer a stage for collective interactions.
LEVERAGING A DIGITAL PLATFORM	The digital format and data-driven insights offers several advantages over traditional in-person townhalls (also called ward-level meetings). Because of the online nature of the platform, engagement is asynchronous and spans across different cities in India, thus creating an opportunity for cross-pollination of ideas. The data Civis.Vote collects, shows which policy topics get more traction over others. This helps the team to strategise ways in which engagement can improved, possibly with workshops or events with specific intent.	In-depth reflection onboth sides of the conversation that can incorporate a wide range of global perspectives can plat an important role in broadening the way wwe think about what seems to be a simple issue with two sides (there is usually more nuance in it)	Designing for multiple modes of input beyond textual conversational User Interface or a forum based feature, I can also consider how audiovisual input methods can be used to create a participatory dialogue. The digital form also allows local government officials to analyse and revisit meetings and reflect on the learnings. Recording knowledge in an online platform easier for its use later.	Allows workers to initiate and jon campaigns. Because it is online, the outreach for organising is higher, which is beneficial. The impact of the campaigns are therefore higher and the benefits of collective bargaining can be reaped by workers across different cities, working for the same organisation.
MAIN MODE OF PARTICIPATION	ASYNCHRONOUS SYNCHRONOUS ORGANISED GATHERINGS & EVENTS	ASYNCHRONOUS	ASYNCHRONOUS SYNCHRONOUS	ASYNCHRONOUS
AGENCY FOR PARTICIPANT	LOW	NA	MID	HIGH
FUTURE-FOCUS	Are participants required to think of futures when participating? YES Can the platform benefit from including futuring probes? YES	Are participants required to think of futures when participating? YES Can the platform benefit from including futuring probes? YES	Are participants required to think of futures when participating? YES Can the platform benefit from including futuring probes? YES	Are participants required to think of futures when participating? YES Can the platform benefit from including futuring probes? YES
HOW CAN FUTURING HELP?	Futuring design probes can be leveraged for participants to think of future scenarios of the policy and how it can impact their personal lives. Considering this might impact their repsonses to consultations	The negative and positive consequences of an issue and its impact on the future proposed by the futures wheel (Montgomery & Woebken, 2016) can help to describe an issue from all perspectives.	In this digital townhall, futuring probes can be used to define the setting and purpose of the deliberation for local governments to come up with ideas for long term planning and budgetting.	Futuring design probes can be leveraged for participants to build shared understanding of an equitable future of work among employees in preparation of defining campaign goals and what the long-term intention of their collective bargaining effort would be.
ISSUE-FOCUS	NO	NO	NO	YES

Fig 06: A review of digital platforms that provide spaces for participatory process between the represented and the representative or enable conversations to include multiple voices. This review helped me to uncover the opportunities for futuring tools in participatory platforms.



Participation Personas: Learnings from the Founder of Civis.Vote

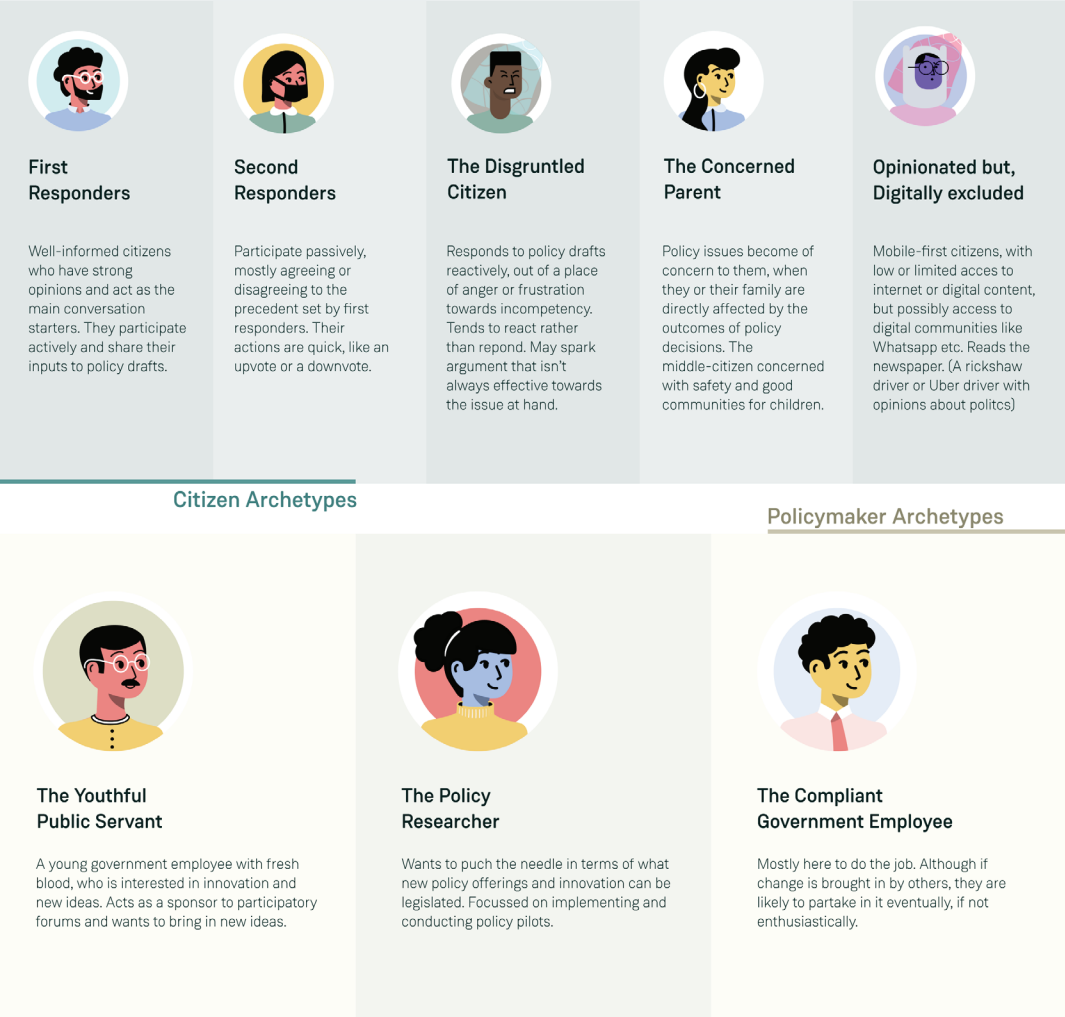


Fig: 07: The founder of Civis.Vote described archetypes of citizens and policymakers and how it is important to note these behavioral archetypes in designing for tools for participatory communication.

During my interview with the founder of Civis.Vote, I was interested in learning about how the platform identified user archetypes, and how they participated. In this consultation-based platform, she describes key attitudes in terms of how people participated on the platform. While some citizens researched a policy consultation in details, others were second responders merely agreeing or disagreeing with a proposal idea. Furthermore, certain users showed interest only in those issues that were personal to them. For example: a mother concerned about the city having enough open spaces for her children to play in. So the motivators of participation varied for each archetype. This interview gave me insight into leveraging behavior archetypes to understand participation attitudes.

structuring and designing conversations

Consensus building and facilitating conversations across a wide range of stakeholders is an important stage in creating shared understanding or imaginations of the future. Applying design probes can enable aligning on ideas about the future by making implicit worldviews explicit and therefore included. "Policy Prototyping For The Future of Work" (Gustetic, Teixeira et al, 2018) summarizes discoveries from a collaboration among innovators, designers, policy-makers to become policy designers through a series of design-driven tools envisioned to tackle emerging themes and policy questions around the future of work during a multi-stakeholder workshop. It highlighted the issues policy-makers would face in designing and implementing policies for the future of work and what policymakers must keep in mind while reimagining the social contract between workers and employers. One goal of this workshop session was to “surface new opportunities and collaborations, and policy prototypes that hold promise for refinement” (Gustetic, Teixeira et al, 2018, p.10) . Design methods and facilitation was used to observe the pros of a design-driven policy innovation approach as opposed to the traditional process that may lack iteration, and the voice of the impacted stakeholders.

Design tools like the use of fill-in-the-blanks “Mad Libs” exercises, co-writing and agreeing on a policy intent document, and co-creating personas were used to develop a shared understanding between varied stakeholders. Thus, design tools were used to make ideas and thoughts explicit in a collaborative conversation. Designing a participatory process is

about designing a structured conversation and a tool that facilitates setting of goals, enabling a conversation and learning (or in this case envisioning the future).

Conversations Can Be Infinite Games

An ‘infinite’ game, is that which focuses on participation and engagement more than winning (Carse, 2013). Conversations can be infinite games (Carse, 2013). Infinite games are played with the purpose of continuing the gameplay and they are open with no limitations to eligibility (Carse, 2013) Games can create possibilities for others to have conversations, learn and to act' and 'learn together' (Dubberly & Pangaro, 2019).

A conversational game as a tool to aid these conversations can be a starting point towards imagination of futures and policies that govern the future as well. While a game may seem an unusual way to think about a participatory process around a topic such as the future of work, the framing offers a way for participants to distance their personal anxieties of the future and start imagining the future as a set of scenarios to be navigated.

# design probes as participatory futuring tools

participation in collective visioning

futuring conversations in contextual inquiries

## participation in collective visioning

A participatory design approach acknowledges that the designer or design researcher cannot know everything about a context or group of people they wish to learn about or design for. Participatory research involves participants as stakeholders who actively shape the outcomes of research rather than being the recipients of a service product or initiative they had no voice in envisioning. In the case of the future of work, I think of workers or employees as agents whose involvement in the shaping of an organization, company or collective represents "the participation of the persons who will be affected by the output that is being designed." (Cozza, Cusinato and Philippopoulos-Mihalopoulos, 2020, p.272). Here what I see as "being designed" is the culture of inclusion and agency in an organization or workplace especially when it comes to navigating unforeseen changes. These changes may be downsizing in the presence of a global pandemic or introducing a technology that automates a segment of the process that the worker is part of.

The Aspen Institute's Future of Work Initiative states that "Rather than waiting to react to future disruptions, it is critical that policy-makers must strive to create solutions that address the changes of transforming the economy." (Aspen Institute, n.d.) The aim of applying a participatory approach to policy making for a future policy scenario, is to leverage our tendency to be more optimistic about the long-term future than a short term one, to identify peoples images of the future and learn the significance of participatory transition to policy futures.

Organizing workers around a present-day concern faced collectively by workers and asking for favorable change is one way of participating and demonstrating agency in change. **In my thesis however, I am interested in how collective, inclusive futuring can be a form of participation.** Elise Boulding says "We can't work for what we can't imagine." (Boulding, 1995) A moment of pause and imagination about how work and a workers' profession will evolve in the years to come, is an important indication towards thinking about broader visions of how society will be and how specific professions will change to be something else or demand new skills. That the agency and voice of those directly affected by changes in an organization are absent from these imaginations means that they are not participatory and inclusive. By including voices of its employees shaping its future, can organizations become more inclusive and participatory?

# futuring conversations in contextual inquiries

Design probes are artifacts or prototypes that can be used in contextual inquiries or design workshops, designed to generate human-centered insights through conversations, discussions and gatherings around a specific research goal. They ensure that ethnographers do not have to recreate basic tools over and over again (Robinson, 2018). In addition to in-depth inquiries, design probes and prototypes ask questions in material form and effective probes are like a searchlight that can cast light on the most relevant aspects of an individual during ethnographic research. The Nielsen Norman Group defines it as “a type of ethnographic field study that involves in-depth observation and interviews of a small sample of users to gain a robust understanding of work practices and behaviors. Its name describes exactly what makes it valuable — inquiry in context.” (Salazar, 2020).

Ethnographic research frameworks in design can be of two types. The first are those that enquire into present day pain points and find opportunities to resolve frictions people face in their daily interactions, with environments, systems, objects and other people to come up with service or product ideas. An example of this is the AEIOU framework by Rick Robinson that asks researchers to record activities, environments, interactions, objects and users to gain a deeper understanding of that which presently exists with the goal of improving it. A contextual inquiry or an interview is a simple yet robust way of unearthing insights from people-research through enquiry about the activities of everyday life.

The second type probes scenarios that don’t exist: scenarios that belong to the future. While observing people in their present environments may provide insights, and framing of the future can be as much a material to understand the core attitudes and values of people as much as asking them about pain points they face in the present day.

An example of such a design probe that makes futuring accessible and scaffolded is a game called “The Thing From The Future” co-designed by Stuart Candy and Jeff Watson: a "foresight tool and imagination exercise in the form of a deck of cards. The game is described as “Part scenario generator, part design method, it invites players to collaborate in describing what could exist in alternative futures” (Candy, 2018).

During a contextual inquiry, the playful and informal quality of such probes is useful in future scenario building - to express abstract, intangible and often hypothetical notions and qualitative aspects of the human lived experience and a future setting for those to be embedded in.

Information about individuals’ values is encoded in the scenarios and objects of the future they can imagine—that is the role of probes as futuring tools.

Liz Sanders’ “Generative Design Methods” (2000) include problem contexts in which she developed many of these design methods, probes and design toolkits to help to make the implicit, explicit. They give shape and form to beliefs and thoughts that participants have about a question posed to them. This is an augmentation to a simple one-on-one interview or contextual inquiry. Liz Sanders writes about how the creation and refinement of design methods is a design process in itself. And identifying which probes would help ask the right questions was an important part of my research process. Each method intends to uncover specific things about participants. I used the ‘What if’ scenario cards to stage provocations about objects and scenarios that a worker would encounter in the future. One example of such a card was: “What if everyone received a basic income?” These prompts were meant to learn how workers felt about specific ideas about the future. Eventually,the combination of tools and strategies to steer the conversation towards futuring in my contextual inquiries was an effort to create an effective collective visioning probe.

I took inspiration from these methods and designed a series of activities that got participants in experiment one of my thesis, to think explicitly about how their day would look in the future, what would the images of their workplace or work be like. I invited them to think through positive and negative scenarios of the future

based on specific “what if” cards I designed and provided. The change they faced during the COVID-19 pandemic gave a heightened opportunity of the impact of unforeseen change on their daily work lives and what other scenarios may emerge in the future.

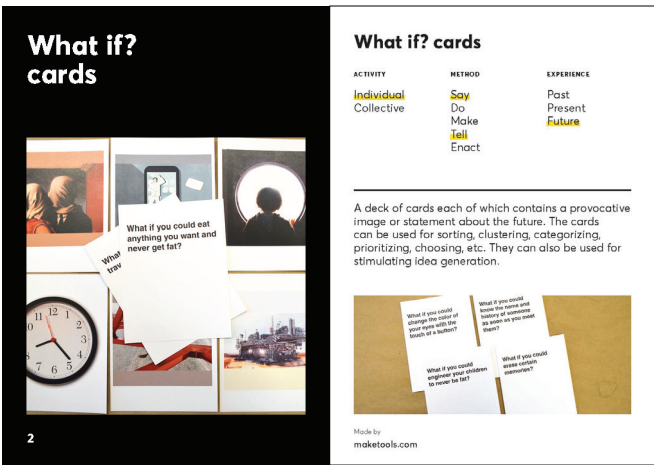
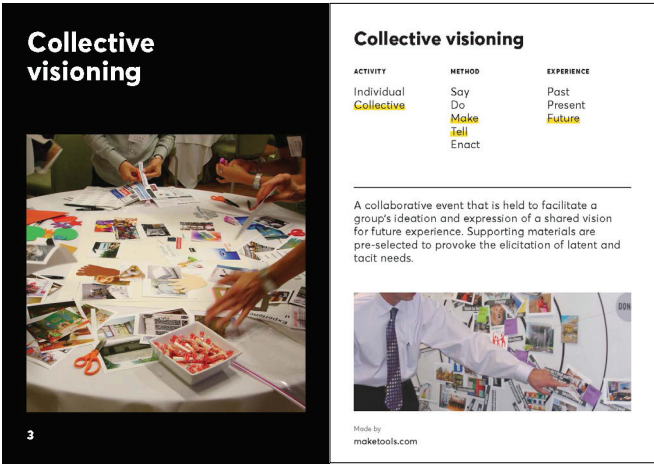


Fig 08: What If Cards and Collective Visioning cards focussed on futuring with participants to learn about their attitudes.

PART TWO

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# approach

# developing and evaluating a design probe

research and approach

experiment one: personal futures, future images

participant demographics

insights from experiment one

the role of the facilitator

experiment two: group & individual futuring conversations

tips and guides to design futuring probes

## research process and approach

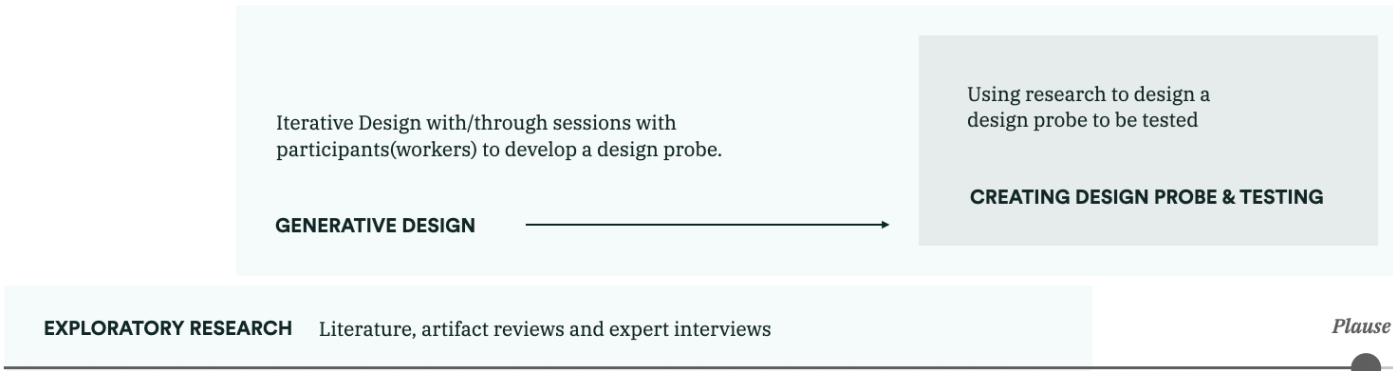


Fig 09: The structure and approach of the design activities that I conducted through the design process.

My essential research question was:

**How can design tools enable precarious workers to sense change, consider its impact and prepare for it?** I conducted contextual inquiries with individual workers and used them to identify and distill the elements of an effective design probe which can facilitate conversations of ideal images of the future. Further the two sub-questions were:

1. How do workers respond to change at their workplaces?
2. How can structuring conversations around anticipating change help to collectively imagine desirable futures of work?

This led to structuring my process into two design experiments to learn ways of responding to these questions through an understanding of behaviors and attitudes of those who work. The research question led to a series of smaller tasks which I used as conversational tools to create scaffolding for futuring conversations.

Activities I conducted with participants were in the form of in-depth interviews aided by a series of tasks that each aimed to answer parts of the larger research question - these interviews were explorations of different ways in which I could ask questions about the future that would highlight and surface implicit mindsets of my participants. The goal was to build a scaffolding and stage future scenarios, artifacts, encounters etc in order to "create, share, test change that we cannot observe at that moment" (Candy, 2010). These activities culminated in the design of *Pause*.

I followed a 'research through design' (Archer, 1995) (*studying or examining something in order to produce useful information or methods for designers to use or apply*) approach to achieve the goal of creating a futuring "research for design" tool (*using a design project to study or examine an issue or topic, or generate new knowledge through either the design process itself, or how the project is applied or used*) (see Figure 10).



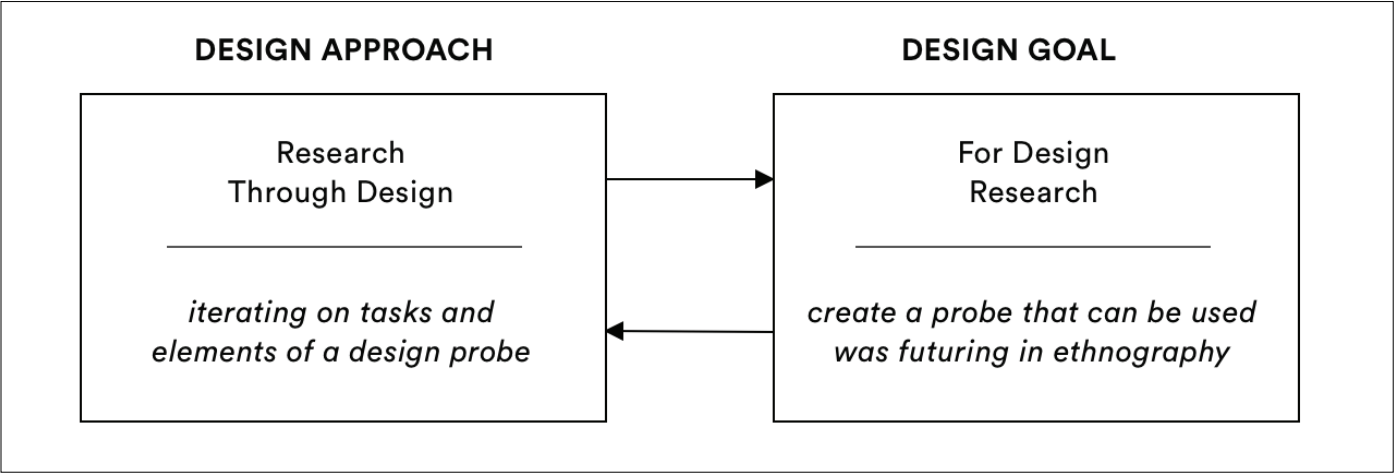


Fig 10: **Approach: Research Through Design → Goal: Design Research.** Rationale and overview of design procedures that I conducted across two experiments. While the research was to design a probe through research (& ethnography) the goal was for the probe to aid design researchers and decision-makers organizational designers to design policies and intervention and systems that inclusively shape the future of work.

Plause, structures conversations to arrive at tangible future artifacts, situations and encounters of the worker’s everyday life as a lens of the kind of future they aspire for—not only for themselves, but also for their industry and workplace. What I learned from my research and testing the design probe is that the more near-term future is defined by goals and plans that stem from the present. The long-term future is more abstract, it is about bigger picture change that the participant must try and situate themselves in. So, the way I sequenced from the activities with participants to design Plause, began with questions about personal futuring and zoomed out into future images driven by specific trends. Eventually the goal is that the participants or player sees themselves and their goals in the context of the bigger picture future (Fig. 11).



Fig 11: In this context, the worker is situated inside/within this broader more abstract notion of the future of work. For the development of my design probe, it was important to emphasise that the workers place themselves in the future and gauge changes and trends in terms of their individual ability to navigate it.

My conversations with participants (workers) revealed their hopes and fears about desirable and undesirable change. Understanding why people work can offer insight into whether they’re able to sense change and how they would respond to it when it happens to them. I used ethnographic frameworks to identify hopes, fears and aspirations, in order to understand how my research participants envisioned the future. I interviewed workers and built probes that aided contextual inquiries and to be elevated to become collective futuring conversations that are meant to build and shape images of plausible, equitable futures of work in the light emerging trends that are niche right now but might bubble up to become prevalent and common practice.

In this manner, I saw the use of this probe as a facilitation tool to scaffold imaginations of the future and the resulting collective futuring as a form of participation - that can inspire visions of shaping the future of workplaces and the social contract between workers and employers through a more collective shaping of the future of work.

experiment one:  
personal futures, future images

The scenarios posed by the COVID-19 pandemic widened the cracks through which we saw "future scenarios" on display in the present. In other words, the future was here for some workers over others. To understand **how workers respond to change at their workplaces and perceive their own agency in asking for desirable change**, I interviewed seven participants who had lost jobs because of downsizing or other changes at their workplace. Alongside a shift in the core nature of work for all types/segments of workers, losing a job was one of the most significant changes to navigate. While recruiting participants who were facing this particular scenario in their lives currently, I wanted to learn whether an unforeseen change offers workers a chance to reflect on the future in a way that the activities of everyday life don't permit. My focus was: **What can I learn about worker's' attitudes about their future-selves when faced with changes in their work /workplace?**

<p><b>Personal Futuring:</b> A Day In the Future + Images of the Future</p> <ul style="list-style-type: none"><li>• How do they account time and how significantly is work a part of their day?</li><li>• In what visual and verbal expressions to they describe future scenarios?</li></ul>	<p><b>What If:</b> Positive and Negative Scenarios</p> <ul style="list-style-type: none"><li>• How do they see positive and negative? What does that reveal about what matters to them about their profession?</li></ul>	<p><b>Change Agents:</b> What is your agency in change?</p> <ul style="list-style-type: none"><li>• How embedded do they feel in their workplace? Is there a relationship between the certain types of scenarios and sense of individual agency?</li></ul>
Personal : People state perceptions in personal terms	Aspirational : People state perceptions in personal terms	Ideological : Express views and beliefs that extend beyond themselves.

Fig 12: Each of these questions was associated with and answered through carefully planned design activities. The sequence of activities was deliberate: personal (internal) → ideological(external).

The in-depth contextual inquiries included a series of tasks that tackled the following themes:

1. What does work mean to each participant? How significantly is it a part of their life? What is the most important aspect of their profession? What are key differences in their present and future priorities when it comes to professional goals? **What are their values and how do they align with their workplaces or employers?**
2. In everyday life, it may be harder for participants to think of the future and plan current actions based on it. **What are their imaginations, assumptions and descriptions of the future of their work?**
3. As an extension of my participants' value systems, their relationship with their workplaces changes and along with it their sense of agency in change is also different. What is the extent of their sense of agency in affecting change at their workplace?

**Activity 01: A Day in Your Life**

I asked my participants to answer two major questions. First, I asked them about a day in their life in terms of the five most important activities of the day and how long they spent on them. They were asked to talk through the main activities they spend their day on and what are the resources at their disposal that help them achieve those things.They repeated this exercise for a day 20 years in the future. Second, I asked them to think about what are the most important artifacts they possess right now, repeating this question again from a future-based mindset. These two questions showed how people think about the future: we are bound to the set of our own experiences of life in order to determine

prospects of the future. (this is also called availability bias : refer to Box X: Noticing Biases for more details). I was able to notice the significant changes people wish to make to their lives in 20 years. For example, people speculated that the current work-from-home scenario that became a new normal during the COVID-19 pandemic would prevail, travelling to work would be limited and would give them more time for other personal activities. What people indicate they would like to spend time on the future is an important indicator of how future imaginations give people an opportunity to fulfill goals, focus on possibilities rather than feasibility and plan or imagine the things most important to them, such as a house, a new business etc.

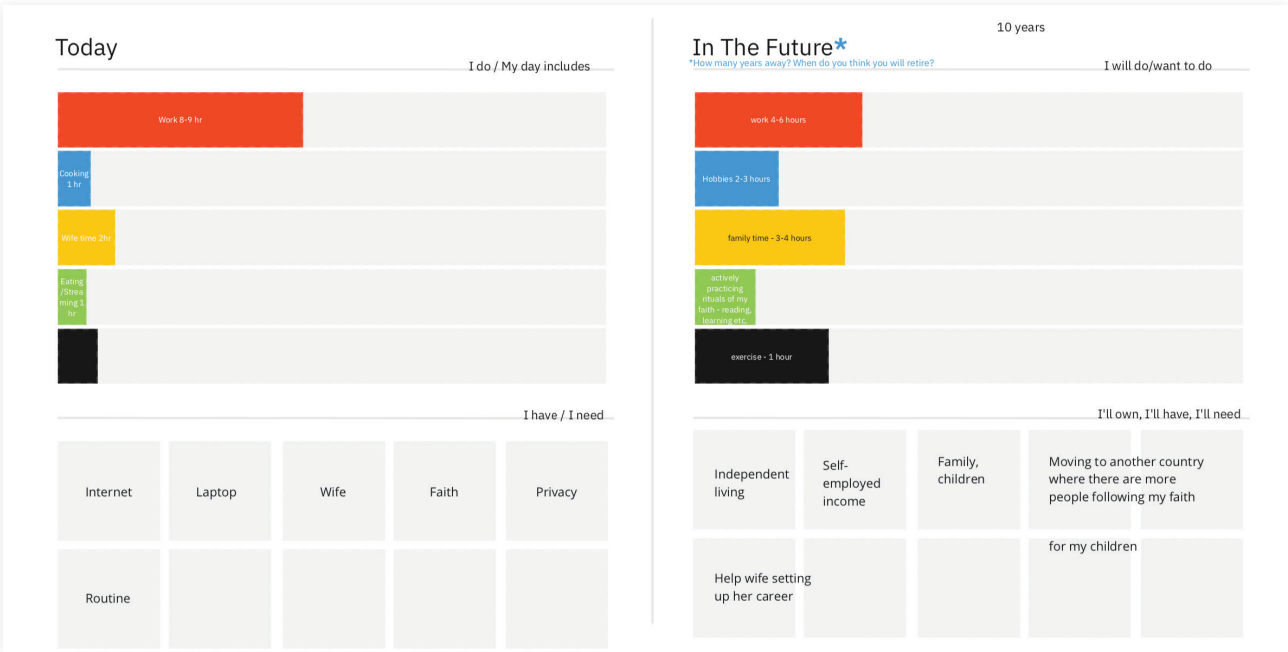


Fig 13: A completed activity sheet from a participant shows differences in a day in the present and future.

Activity 02:  
How Does The Future Look?

This activity asked participants to look outward rather than inward - and gather a vocabulary of words and images that construct the mental images of the future. The Google Image Search is a quick fast tool to surface images of the future as seen in the ‘litany layer’ (Inayatullah, 2008, CLA). Sohail Inayatullah in causal layered analysis, describes the litany level as the common pithy narratives that govern our society.

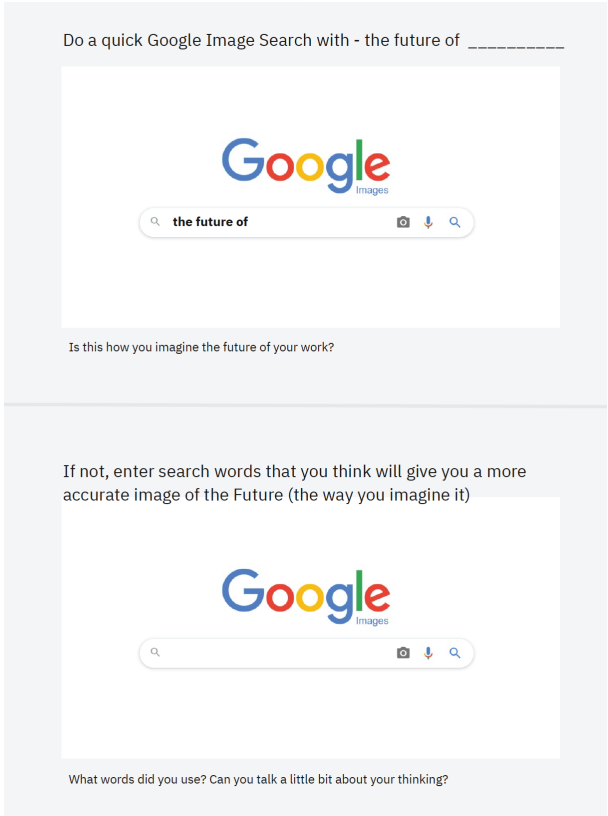


Fig 14: The Google Image Search activity was a tool to discuss what dominant images of the future of work.

In the context of the future of work, this activity gave up cheesy results like robots holding trays of food. But diving deeper into using this tool, I asked them to enter search words that bring up image results for **a future they preferred to see**, instead of the image results displayed after they type in the Future of *<name of their profession>*. The contrast in these two activities allowed me to gather a vocabulary of words people use to describe the future and initiate poignant conversations and helped participants recall moments in which they say how "the future was already here." A participating restaurant worker recalled "Have you seen those self-ordering kiosks at airports? I think one kiosk replaces the work of two servers like me."

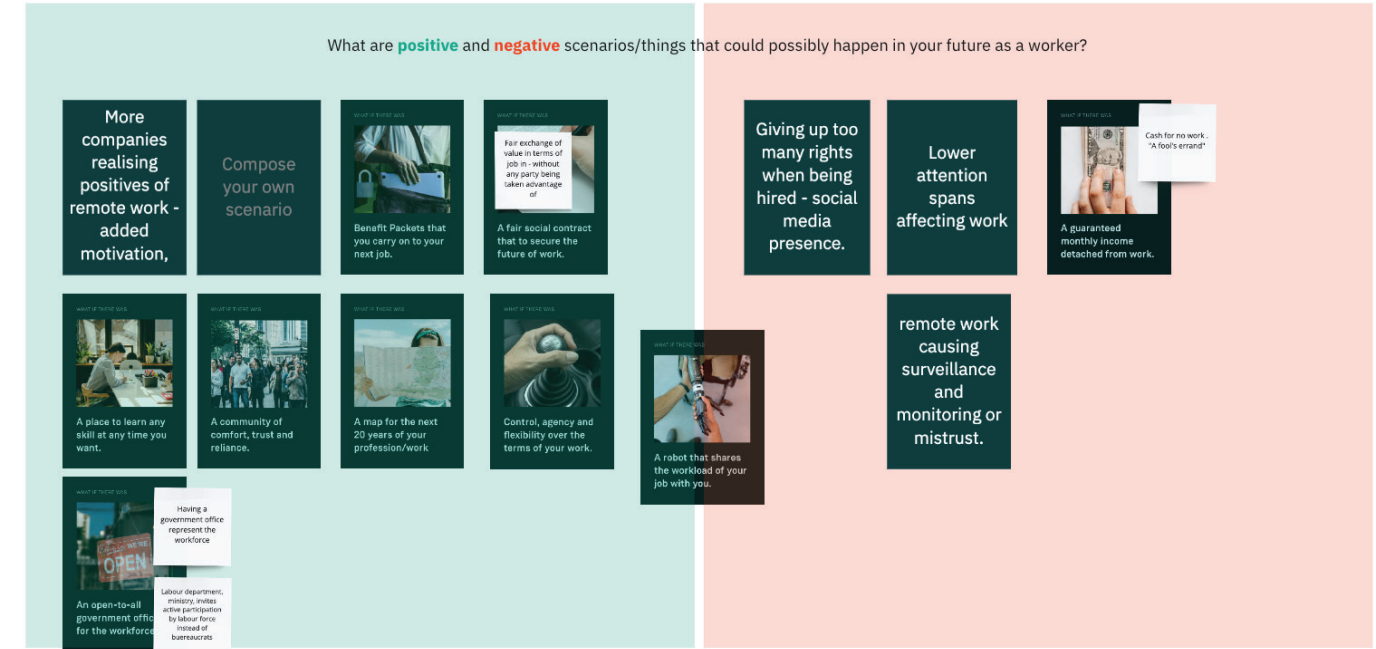
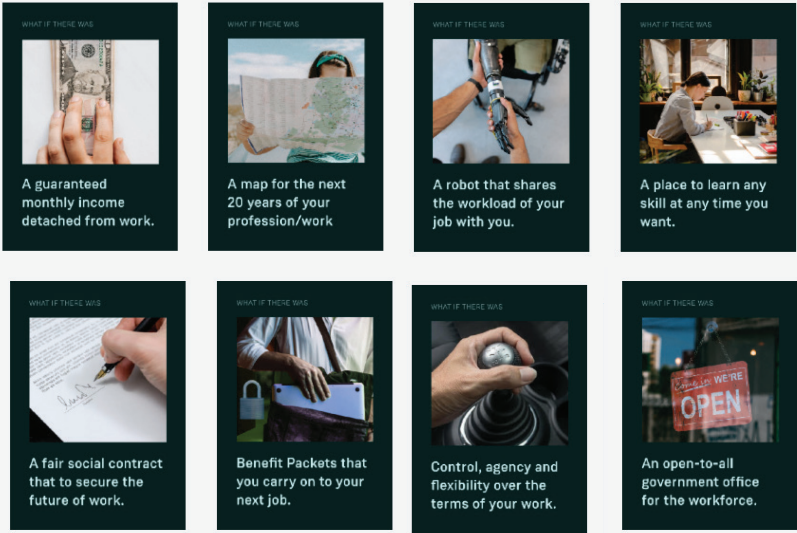
Activity 03:  
Scenarios; Positive and Negative

For this activity, I wanted to find a way to invite participants into thinking of positive and negative aspects of a future they envision. The What If scenario cards (Sanders, 2000) were possible ideas to demonstrate the fidelity with which I wanted them to think about given prompts as positive or negative. I also drew inspiration from the futures wheel (Montgomery & Woebken, 2016) to enquire into perceptions of positive and negative outcomes of a future scenario, artefact or policy measure. I tweaked the sequence of questions and activities to include more space for participants to include and talk through their ideas. For example, in the first interview, I provided only predetermined scenario cards, but realized that giving more space for their own ideas

and scenarios revealed richer insights about their personalities. The scenario cards ideas came from secondary research on current trends in Future of Work that I came across (*mentioned in section: introduction → significance*). As with the previous activity this protocol of providing examples (cards) and found material (Google Images) contributed to an important design principle for designing futuring games, that I discuss in the upcoming sections.

Fig 15 & 16: The What If Scenario cards I created were used to describe and build positive and negative scenarios of the future of work.

You can also use these future images scenario cards to work with





Activity 04: Agency in Change

The final activity was modelled on and inspired by the Polak Game, which inquires whether people are optimistic about the future, and how much they see themselves play a role in that future (Candy & Hayward, 2017). I adjusted the axes to ask

participants/workers how change is governed - is it governed by employees or representatives and decision-makers (vertical axis) and whether they have a role in the change. Each of the what if scenario cards from the previous activity was a starting point to reveal a pattern of archetypes governed by levers of personal agency, values and attachment to the workplace.

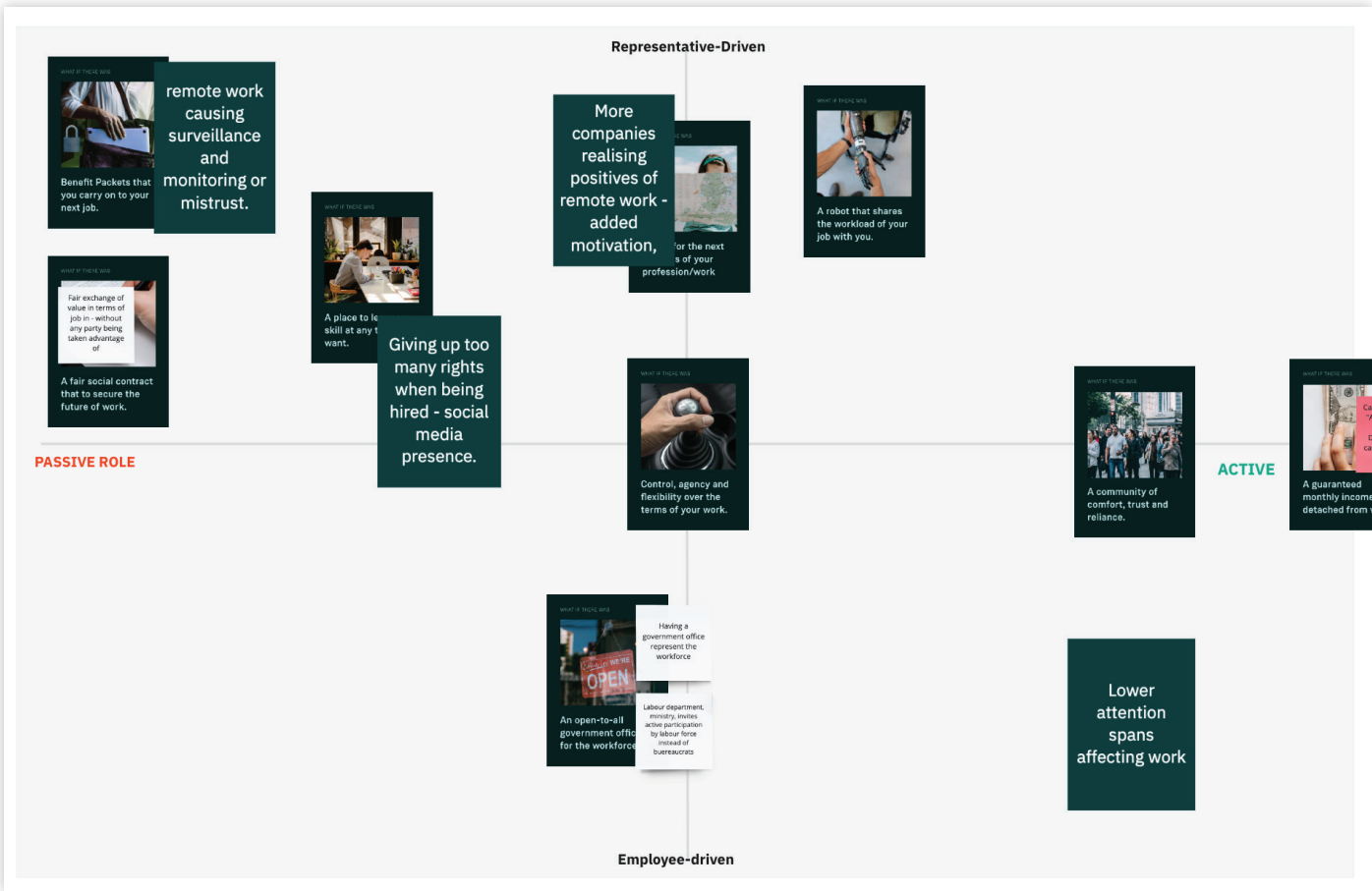


Fig 17: The What If Scenarios Cards are further used as a probe to investigate the agency workers feel in bringing those scenarios to life, and who, according to them can drive this change.

participant demographics

**Adpating to Limitations:** I observed that companies during the pandemic in the effort to stay afloat laid people off and many who assumed that they would not be laid off eventually were out of work. Initially, I planned to conduct interviews with restaurant workers because one of the non-essential worker groups that were severely affected by the lockdown for COVID-19 were restaurant workers. However, in order to adapt to the limitations of conducting interviews remotely and non-responses for several restaurant worker collectives, I changed my direction to recruit workers from a variety of sectors, who had lost their jobs.

Sr. No.	Name	Age	Industry	Change
1	D	32	Financial Services	Contract terminated
2	J	28	Restaurant Server	Lost job
3	S	27	Design/Consulting	Lost job
4	M	36	Energy and Resources	Visa status change/ pay scale change
5	Z	27	Design/Consulting	Contract terminated
6	R	26	Design/Consulting	Switched to freelance
7	A	29	Design/Consulting	Changed country

Fig 18: Participants were between 25-35 years , from various industries and organization sizes.

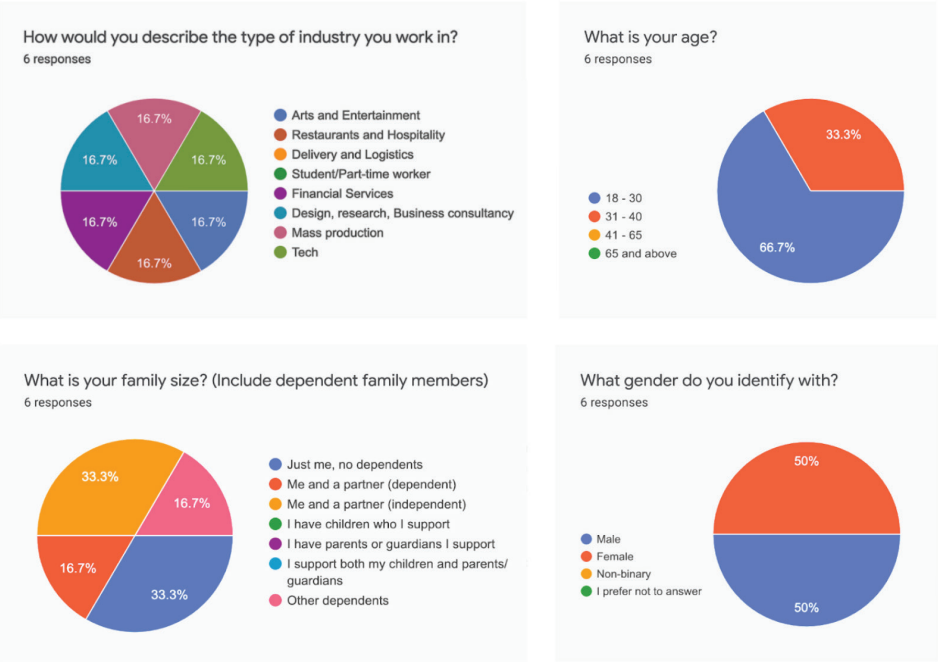


Fig 19: Demographics and background of the seven participants I interviewed.

# insights from experiment one

Insights from experiment one were of three categories. These categorisations were important as each of them created a channel or pathway down which I could explore further for my second experiment.

**Category 1** insights were those that helped further design of the research method, which was the direction that led me to taking this project forward into an outcome which is a research method.

**Category 2** insights were about the emerging attitudinal archetypes of the participants.

**Category 3** insights, for example, were topical insights - about the future of work and taking those forward would have led me to do a different type of experiment.

## Category 1: Insights That Helped Design the Probe

Insights from this experiment about attitudes and mindsets gave me clues for elements of the design probe. For example, setting the stage with a hypothetical trend was a way to distance participants from the present bias. In placing themselves within a future scenario, the interviews surfaced the participants worldviews, and therefore showed how they decisions correlated with those values and how that resulted in them thinking of preffered futures and also their descriptions of whether they felt a sense of agency in their workplaces. The four main components of Plause - values, trends, change and encounters came from this section of the research.

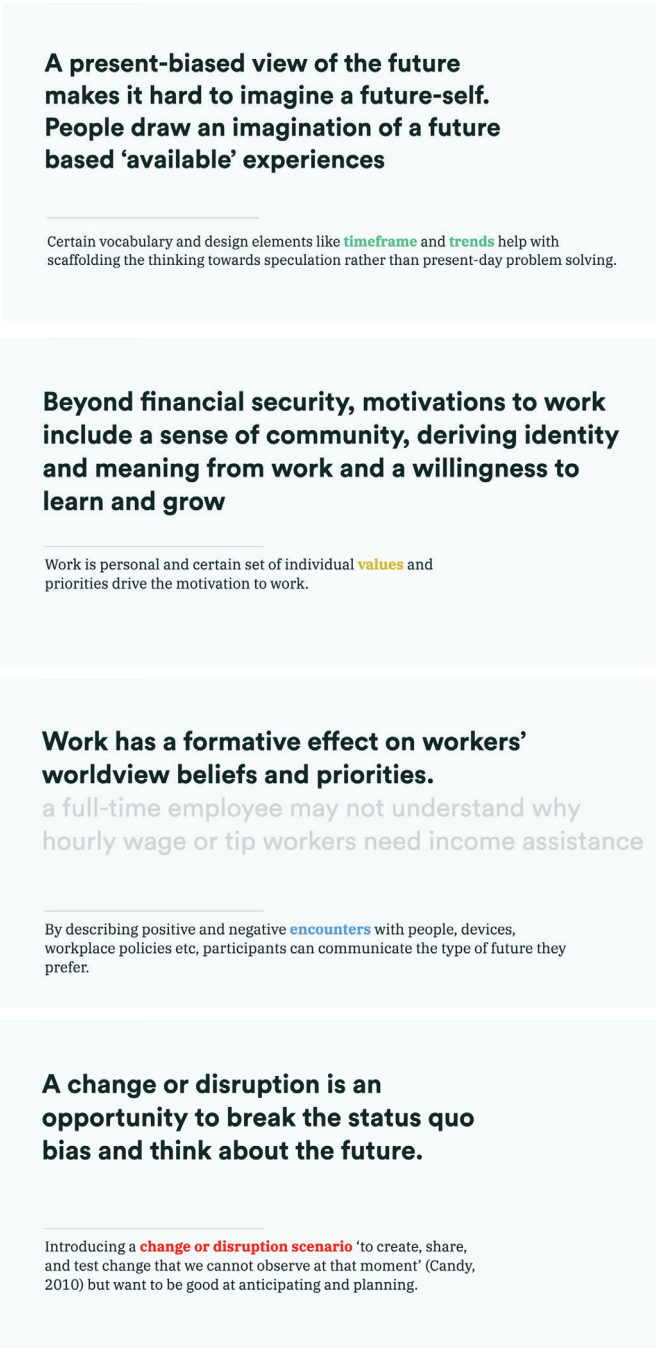


Fig 20: Insights that become elements of Plause.



Fig 21: The Interview and Discussion Guide for sessions in experiment one

Category 2: Insights about attitudinal archetypes

Beyond the traditional segmentation of blu and white collar worker, this category if insights deepens the emphasis on attitudinal archetypes. How workers perceive their role in change and how do they perceive their employers role in providing a sense of belonging are a part of my analysis of the participants I spoke to. The archetypes also illustrate what motivated the participants to work.

Instead of using traditional segmentations of workers as blue collar orwhite collar, categorizing workers by their aspirations, gives an insight into how they make future decisions. This categorisation of workers emerged during the synthesis of their interviews. This list of archetypes is not exhaustive given the small sample size of interviewees for a qualitative contextual inquiry. However, with the levers I chose in the two-by-two, these archetypes respond to the research question I sought to answer.

Participation Attitudes

Sense of agency (and participation) is related to sense of belonging and match of values

<b>The Freelancer</b> Sets own rules and prefers flexibility and conducts work transactionally.	<b>The Compliant Employee</b> Believes in change through large macro forces, not individual or small group effort.	<b>The Second Responder</b> Supports and shows solidarity to change but may not initiate it	<b>The Organiser</b> High agency - finds ways to organise and work for change
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Values and Motivations

Work is value-driven. Values may evolve based on time and life-stage.

seeks money / gains /income from work	seeks meaning and identity at work	seeks for community and belonging	seeks personal growth and mentorship
seeks skill and knowledge	seeks to provide comfortable life for self and family.	seeks flexibility and autonomy	seeks inclusion of voice in decision-making

Fig 22: Emerging archetypes of participation attitudes and motivations I observed among participants.

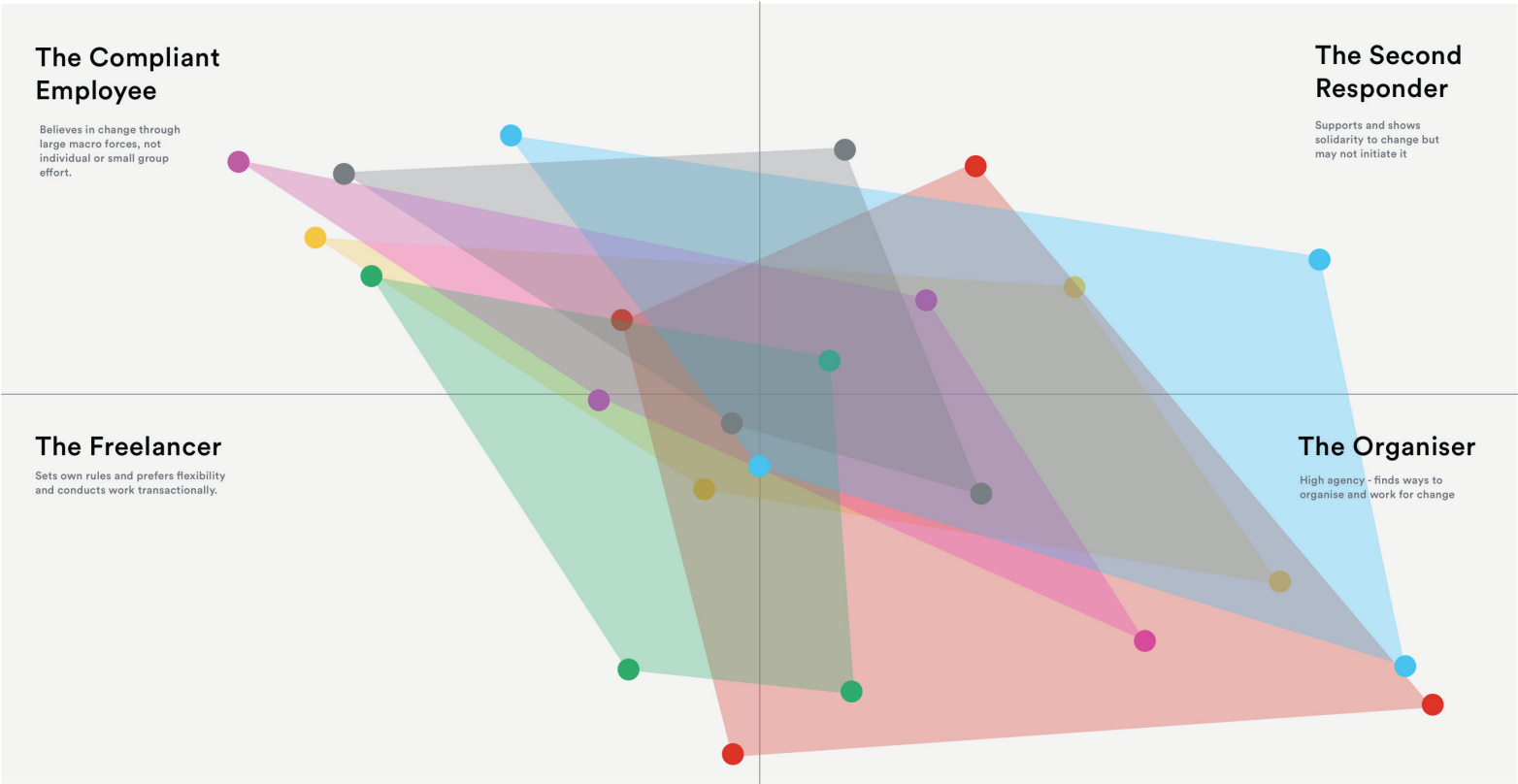


Fig 23: Each polygon represents a participant. These quadrants describe how an individual associates with agency in the workplace and how her/his value systems relate to his sense of agency in the work environment.

The **participation attittudes** as employees, as shown in the table on the left, are important for the designer, facilitator or policymaker to know while interpreting their images of the future and show the nature of work and engagement workers may prefer. The attitudinal archetypes describe people's key **values and motivations** to seek work and employment, emphasised by their values. Synthesizing tendencies and perceptions of the employer can

also be important for organizations in thinking of organizational change. For example, participants recounted that ambiguity and opaqueness in communicating reasons for layoffs created uncertainty about their skill and performance and created distrust towards the employer. Workers may feel agency in driving small changes but that sense of agency is lost when the values of the workplace don't match their own.



Change shapes value systems that in turn impact a sense of agency workers feel in their workplaces and professions. While I did not address this notion of agency explicitly and directly in the design probe creation, it is important when facilitating a visioning of the future. The value cards in the game are one way of encoding a sense of agency. In that way “agency” is one of the values of why workers work, the same way that income, stability and sense of community are.

These archetypes illustrated what motivates workers to work. Despite segmentation of workers as blue-collar, white collar etc, in the context of my qualitative research the attitudinal and value-based archetypes of motivations to work were more important than the segment itself. In qualitative research this distinction often changes how the worker voice is considered, translated and included in decisions to govern their future.

Category 3:  
Insights About the Future of Work

These themes came from testing the what-if scenario cards - where participants chose as positive and negative scenarios as far as their work is concerned. I staged themes that are commonly discussed: policy questions related to the future of work such as basic income, portable benefits, fair wage, automation, gig work, lifelong learning etc as provocations; and "what if scenarios' to build an understanding of their values, and what matters the most to them.

- An enabling sense of ownership and an environment of empathetic teams that create wider perspectives among workers due to racial and economic diversity and mentorship that lets employees grow along with the company.
- Income supplements don’t replace the motivation to work, but shift the agenda of searching for work. Financial safety nets give broader opportunities to workers to align their values with their employer, not to stop working or misuse the cash transfers.
- Automation must augment and enable the worker rather than making them obsolete or replacing them. It’s a way for improving quality of work and enables smaller companies to grow
- Knowledge and awareness of possibilities of their profession and the opportunities available to them rather than only upskilling or reskilling, is key in navigating change.
- Rapid changes create an opportunity for the acceptance of niche ideas to become commonplace. The less control over change we have as whole, the more acceptance there is of new norms. Eg: remote work has added a sense of autonomy and employers being forced to trust employees to work without being surveilled.
- A guarantee of equity, transparency and a language of equity, inclusion, fairness, security for a shared growth of employer and employee. Ambiguity and opaqueness in communication reasons for lay-offs created uncertainty about their skill and performance and created distrust towards the employer.

- Creating opportunities in the public domain to balance the gap in opportunities to create working spaces and skill-development infrastructure for workers (especially gig and freelance work) and fairly address worker grievances and ensure fair scheduling laws.

Perspectives From Interviews

The significance of the perspectives that emerged from this experiment reflected the concerns and aspirations of participants, and showed the varied worldviews that I heard from the participant group.

**There is an awareness that automation could replace your work, even though the exact means in which it could, are not always clear.**

*A participant expressed concern at technology like the self-order tablets in big restaurants and food-courts? It’s unfortunate that those tablets would replacing the jobs of restaurant workers eventually, especially in high volume areas. The participant suggested the responsibility of small businesses (restaurants) to keep human staff to serve and create a sense of personal hospitality, to retain employment.*

*A designer, expressed how she never really thought of her job being replaced by a robot or automation, but maybe some of her tasks can be made quicker.*

**Unclear goals and a role in a company with that adds no value to the employee is a source of concern and demotivation.**

*There were times when workers who were assigned to teams in the company with no goals or metrics about found it difficult to gauge the contribution of their work. Workers who realised that their skills were suddenly not required by the company worried for whether they would be let go.*

*Despite getting paid “to do nothing” it sounded ideal, but was far from it. There was a clear misalignment between their values and those of their employer.*

**Unfair practices, wages and no mentorship or support to ask for the rightful share from their employer along with opaque decision-making, contributing to feeling unsure and insecure in the job security with employers.**

*Several restaurant workers face several unfair situations in hourly work - for the amount they are paid, their scheduling is unfair and creates tiring days of work with no pay to match it.*

*Participants wished for mentorship and guidance to navigate discussions with employers. They felt that keeping these discussions like salaries of employees closed was one way in which they had power over the employees.*

*In situations where employees were let go, limited options were given to them to navigate this change. Leaving promises to provide severance benefits void, drove the loss of trust in the employer and the time they had spent working at the company or organisation. Sudden changes that were made during downsizing proved to be unfavourable in the face of other bigger changes like the COVID-19 pandemic.*

**The arrival of change and shift at the workplace indicated that workers must upgrade their skills in order to keep abreast with the direction their profession was going toward.**

*Employees described how they utilised company resources to upskill and get certifications that turned out to be useful in navigating changes the company had to face during the COVID-19 pandemic. They found that this training helped them stay relevant and valuable to the company. A professional who worked in oil and natural resources spoke of how he sees his work as an oil trade/sales expert gradually becoming less relevant as the demand for alternative energy sources rises. And it would be important for him to start reimagining his work : think of themself as a energy sales expert instead.*

**Finally, working remotely has had the effect of professional and personal life meshing together and there are no clear boundaries. This has made drastic changes to lifestyles of workers.**

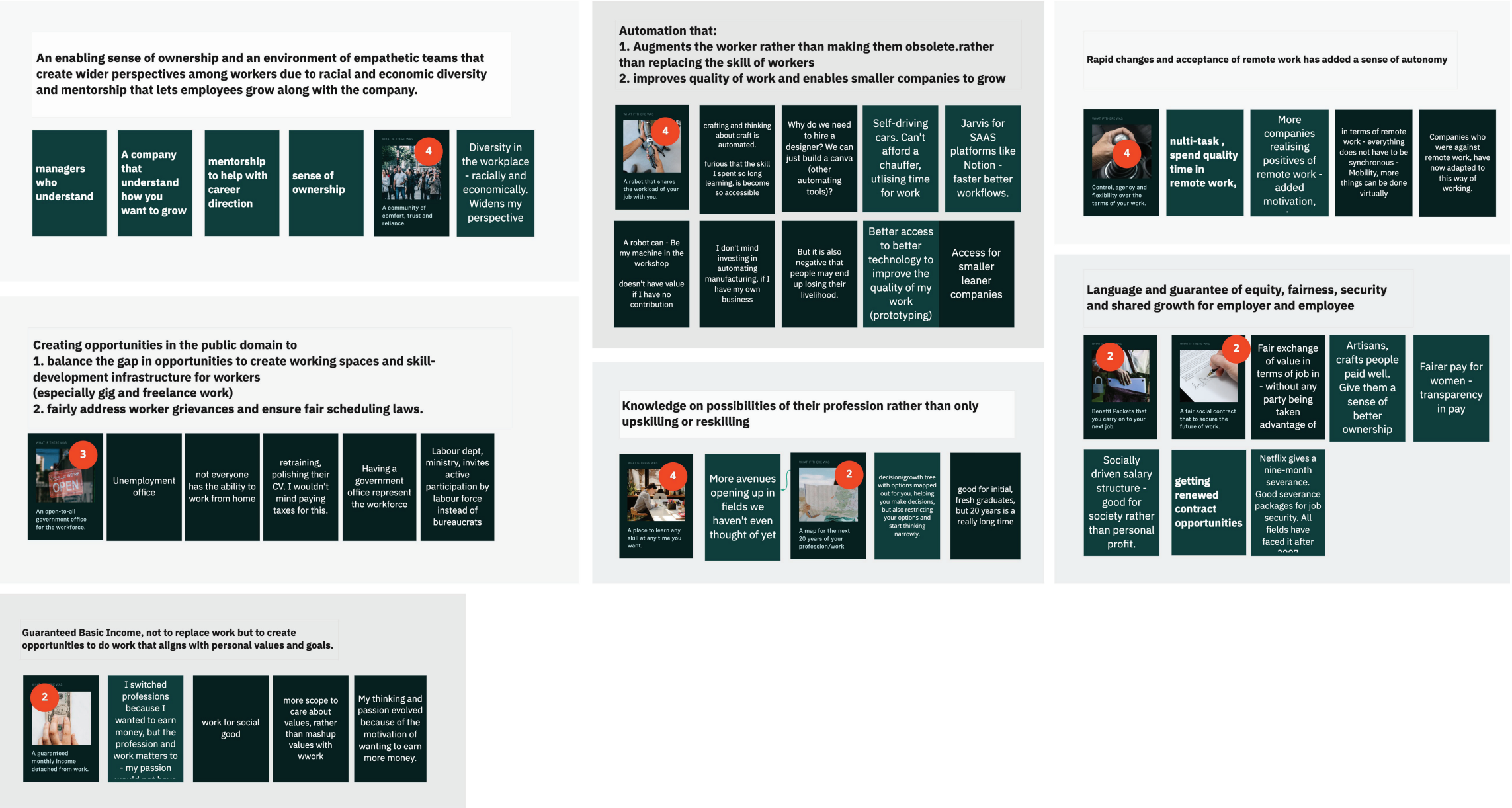


Fig 24: Synthesis of the Insights from the What If Scenario Cards.



# the role of the facilitator

During the contextual inquiries in this experiment, my role was that of an inquirer and facilitator who attempted to nudge participants more speculatively about the future. While translating the characteristics of the conversation in the contextual inquiries into Plause, I intended to transfer and encode all the facilitation nudges that I used in conversations with participants. For effective personal futuring, the facilitator must be mindful of the decision and behavioral biases that all of us tend to operate under. Conversations about the future and speculation must be facilitated to help to distance people from their present-bias that makes the future self intangible and their tendency to only draw from a set of existing experiences to build images of the future (see box ‘Noticing Behavioral Biases For Effective Design of Probes’ on page 66)

This learning led to important design principles (see page number 56) and considerations about the kinds of ‘scaffolding’ I would need to give so participants using Plause could generate their own ideas and encounters for the future of work . Similarly, for designers who intend to design tools for futuring conversations, these principles will be helpful. Plause can play the role of a facilitator in a group conversation and help in creating a prominent role and voice for workers to express their experiences through these conversations and deliberations, in online communities and in-person face to face assemblies.

A designer/facilitator must clarify the intent and goal of a tool by either emphasising the instructions or encoding them into tools or probes (like Plause does). Participatory processes need a clear definition of words, terms and a detailed description of intent to create a shared understanding of the current and future context, trend and change being discussed. The more the stakeholders in the process, the more important this definition becomes.

# experiment two:

## group & individual futuring conversations

Once I conducted contextual inquiries using a series of design activities, I focussed on distilled the key “structural” elements of a futuring conversation that would go into designing the probe. **What are the elements of a design method that facilitates conversation and collaboration to build shared visions of the future?**

The second phase of the project included interactive and evaluative sessions with restaurant workers. A wealth of insights from interviews made its way into starting to create design elements for a design probe. This was the first instance of where the probe started taking shape as I synthesized insights from the previous phase and tested elements with participants in this activity.

There were two key activities in this phase:

- 1. **Group Futuring Conversations:** Testing and prototyping what type of design elements can be used to facilitate a group conversation
- 2. **Individual Futuring Sessions (guided by probes):** Testing out elements that emerged from experiment #1 with a refined set of activities with the specific demographic : restaurant workers.

The goals for building on my insights from the first experiment were to use design probes to enable participants/workers to design for a future version of themselves, expand on the insight that work creates formative worldviews by learning how participants in a group build understanding and how they create and visualize tangible scenarios alongside one another.

### Group Futuring Conversations

For my first test, I conducted an activity that started with a future of work scenario with five participants. I asked them to work through a set of role-playing tasks where they were to think of stakeholders (I provided stakeholder roles like factory owner, factory worker, factory manager etc to choose from)) and respond to tasks based on what stakeholder they are.:

The goal of the activity was to understand group dynamics and how the notion of personal futuring and a sense of agency play out in a scenario to come up collectively with a preferable future which is based on the preferred future scenarios that each of the stakeholders select. I was interested in understanding:

- Is it important for multi-stakeholder groups to align on values in the beginning or will values emerge as a result of having this conversation in a group?
- Do people shift their stances during this group discussion? Is that the goal of deliberative discussions?

:

### Overview of activities and procedures

- 1. Getting familiar with a scenario and selecting a stakeholder to do the task.
- 2. Thinking through the positive and negative outcomes of the scenario
- 3. Deciding on the level of personal agency by identifying a stance/posture in a transition or change (here my guess is that the pull of the group may eventually drive more outlier towards a preferred future, and her is where I need to ask more questions about inclusion, agency etc)
- 4. Describing scenarios based on their stance and posture or level of agency and build on that scenario, or describe it.
- 5. Defining a timeline: how far out in the future is this (can I add to the experience by adding points/ subtracting points based on how far out into the future it is?) and what are other elements of this future scenario - what other things are true about this future?
- 6. Thinking of encounters, artefacts, tools, institutions that fit this future scenario.



Deliberative discussions are one mechanism to reveal images of the future. Through discussion/ conversation structures like this, participatory futuring can reveal preferred directions, what matters to the stakeholders and opportunities for policy interventions that are relevant to the context. It is possible to understand conversation dynamics through a multi-party conversation (Seering et. al, 2020). It led me to thinking about what aspects of the role of a facilitator can my design probe embody. Forums like Reddit and Twitter perform some kind of implicit and explicit content moderation using bots that “steer” the conversation in a certain direction. For all participatory platforms, moderation is a vehicle to create a shared understanding.

Individual Futuring Sessions (Guided by a Probe)

This section was a distillation of a structure to contain the futuring probe to a short but robust set of instructions and elements that enable participants to journey through the Experiential Futures Ladder (Candy & Dunagan, 2017).

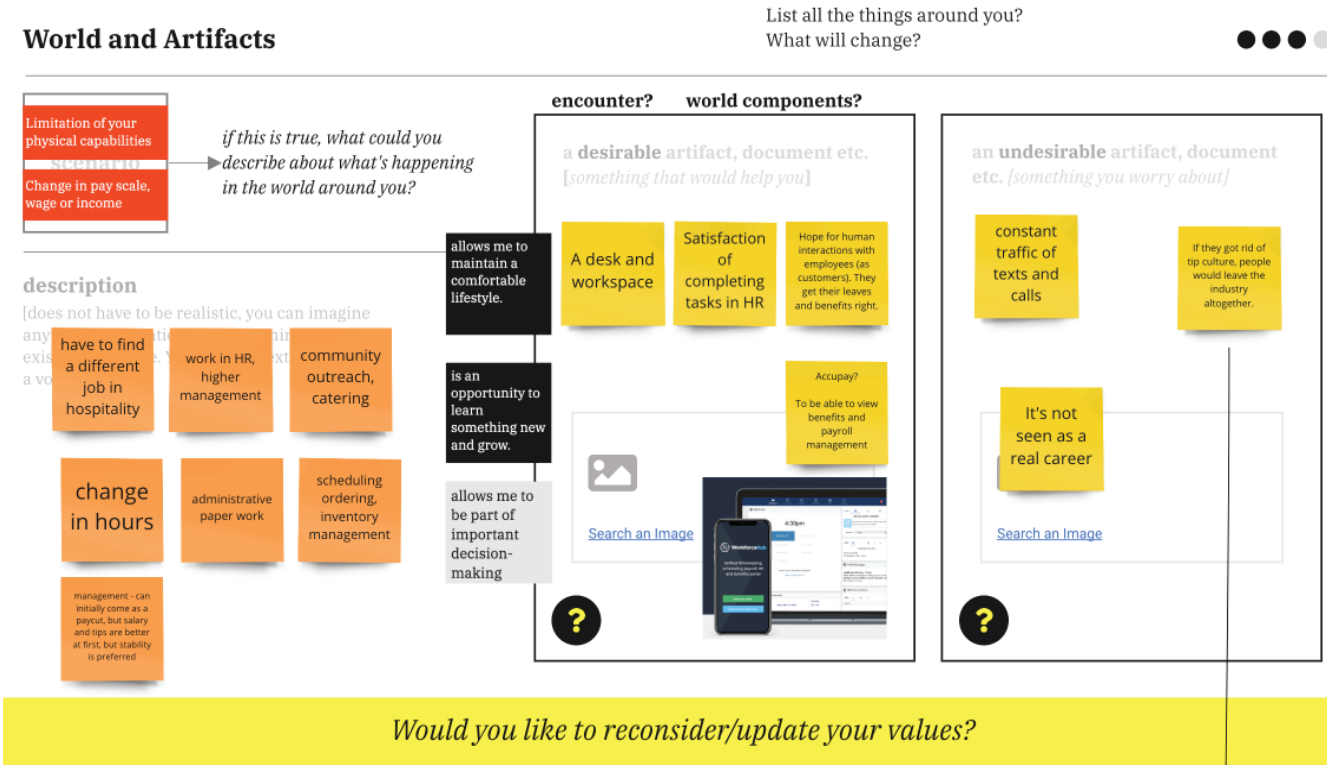


Fig 27: An example of an activity sheet that shows a participants description of artifacts in a new world scenario.

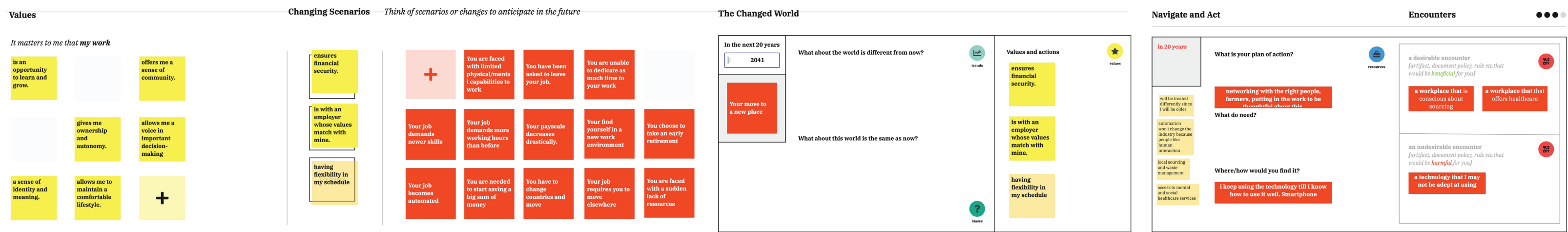


Fig 28: The activities from one end-to end session of experient two, activity two (individual futuring)



**Call to participate for a fun design activity!**

I am a CMU Design Student looking for participants for a research project:

**WHEN:** this week & next week (before April 5th)

**HOW LONG:** 45 minutes

**WHERE:** on Zoom



**Looking for someone who has worked in the Restaurants & Hospitality sector or owns a related business.**

If you want to participate, please reach out me (Sanika) on email at [ssahasra@andrew.cmu.edu](mailto:ssahasra@andrew.cmu.edu) or drop me a text message at (412)897-7207

part two: approach • chapter four : **developing and evaluating a design probe**

# tips and guides to design futuring probes

The sessions from Experiment Two led to best pract principles to make futuring probes effective and gave me a clearer idea of how I could improve the prompts during the activity. Futuring requires scaffolding and structure to ensure that the tone of the collective discussion is about speculating rather than problem solving. For example, it made a big difference when a change card was picked unseen rather than by scanning a set of cards and then choosing.

- It is alright (and recommended) to be as prescriptive as possible. Being prescriptive helps to clarify what you expect to give a boundary of thinking to players. It gives specificity
- Randomization: scenarios must be random, instead of asking “pick a scenario that happened to you” - this helps to break present bias
- One way to be prescriptive is to give examples. An example is a good way of communicating what you are expecting from the player.
- Limits and priorities: Make them select few out of many to learn about their persona/character.
- The framing/use of words is important in determining if the thinking will be speculative or present-day descriptive.

Being prescriptive isn’t bad.  
Clear goals result in better conversations

*Explain clearly what is expected from participants.*

Asking them to prioritize and assigning limits shows what matters to them the most.

*eg: All values are important, but which they choose reveals more about them.*

Random selection instead of choosing helps players to think on their feet

*Provide mechanisms to push their thinking and imagination*

Guiding through examples is helpful in steering and nudging the conversation

*With an example, they are better equipped to build ideas.*

Fig 31: Tips and guidelines for designers to consider while designing probes for futuring.

PART THREE

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# outcome



## chapter five

plause: a probe for  
collective futuring

plause: a probe for collective futuring

## the core elements of pause

## possible extensions to the core elements

plause online

## adding value to participatory platforms

who is the user? why is this worth doing?

experiential futures ladder foundation for plause



Fig 32: Initial high fidelity cards of Plause for testing and evaluation.



# overview

Plause is a futuring tool or method, like several others that similarly aim to help people think speculatively and navigate change scenarios that don't yet exist. It facilitates meaningful conversations, for collective visioning about the future of work with groups of employees, and ultimately works to tap into the voice of workers' lived experience and use those ideas about the future as seeds that might inspire organizational or policy ideas. It can be used by other designers or researchers as a method or game that enables individuals or groups to discuss and respond to change. Plause collects all inputs: current employee values, ideas about the future, which are then synthesized by organizational decision-makers.

These design elements are meant to help scaffold the participants' thinking about several aspects of the future, through prompts and questions. By prioritizing their values, participants place themselves in the future, understand trends that may shape their pathway, respond to change, imagine and create encounters to navigate them, and think of how a change scenario impacts their values. For each of these elements, players can use the predefined prompts or create new ones that get added to the deck when the next individual or group uses it. These elements together, aim to provide participants tools and cognitive shortcuts to make futuring more tangible, intuitive and less abstract.

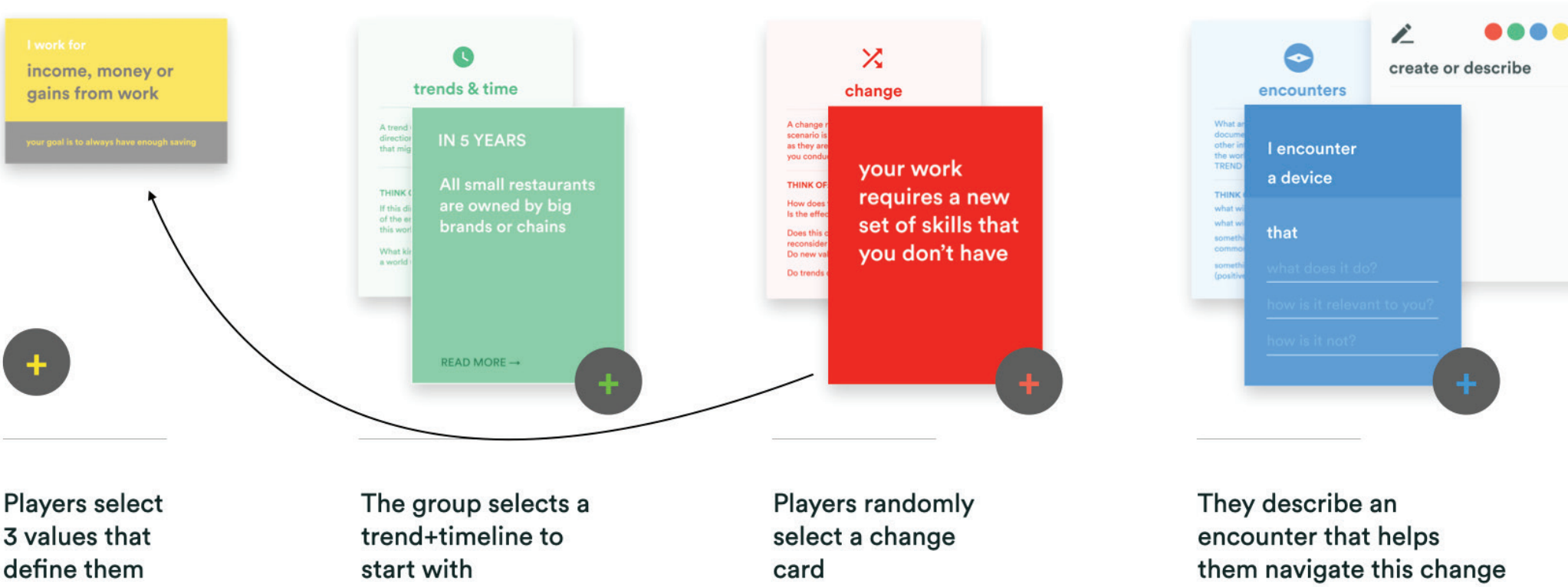


Fig 33: Key elements of Plause are: Value, Change, Trends & Encounters : based on the Experiential Futures Ladder

# the core elements of Plause

The core elements emerged from Category 2 of insights of Experiment One. Insights from this experiment about attitudes and mindsets gave me clues for elements of the design probe. For example, setting the stage with a hypothetical trend was a way to distance participants from the present bias (refer to page x on noticing biases). The core experience is that Plause is based on responding to change scenarios. By introducing a randomly- selected scenario, I wanted their reaction to unforeseen changes that can’t be observed in this moment, but may happen to them in the near future” (Candy, 2010). I learnt that people’s motivations to work are varied and very personal. Using values as an element was a way of making their personality, attitudes and rationale for their actions in the game explicit. Each participant’s idea of an encounter would be unique based on their profession, beliefs and perceptions of their own agency in taking actions in order for desirable change to happen.

## Design Elements

**Value Cards:** Select the values that drive your decisions. What do you value?

**Change Cards:** You experience this specific change scenario and have to respond to it.

**Trend Cards:** Set the stage for futuring through a trend that sets boundaries and context for a world. Encounter: within this trend context + change card, players have to imagine ideal encounters with objects, people or environments and describe them.

**Descriptor cards:** this is a free blank card that denotes a nudging or steering question when it appears under each of the stages of the game.

**Creating A New Session** (online version): Selecting the number of players and creating a new play session.

**Profile** (optional, online): A mini-profile or qualities and chanractistics of your particular profession.

**Conversation section** (online version): In the online version, conversations between participants can enable adding detail to future imaging.

# possible extensions to the core elements

While the core elements include insights that translated into the basic form of the probe. These can serve as tooltips or nudges to add more context and levels of learning and engagement to the game.

**The STEEP Framework:**  
As players are asked to add descriptors to each of the cards, the imaginations of the future can be detailed well using by asking if the description is of a social, technological, environmental, economic or political nature (These are the aspects of the steep framework and it is used frequently to understand a problem or scenario in depth in consulting and foresight studies. This layer will deepen the description of the future.

**Behavior and Decision Biases:**  
The biases extension can check on players in the fidelity of their descriptions. Bias nudges can be additional help or tool tips if players are stuck or want to push the details of their future images. The main function of the biases extension is to bring participants’ notice to the cognitive barriers that occur commonly in futures thinking. (More on biases on the next page)

**Resource Pool:** A resource pool can indicate support and aid that workers believe they may need in this future that is constructed, This can also be a list that can be expanded by adding new resources for future players.

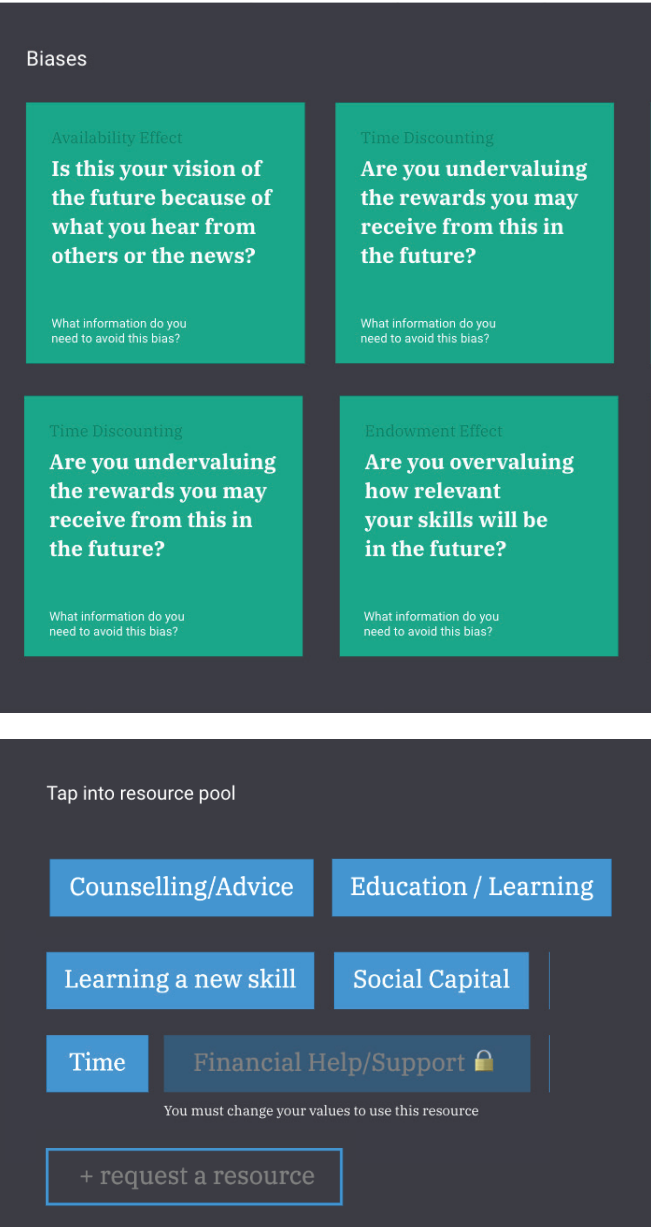


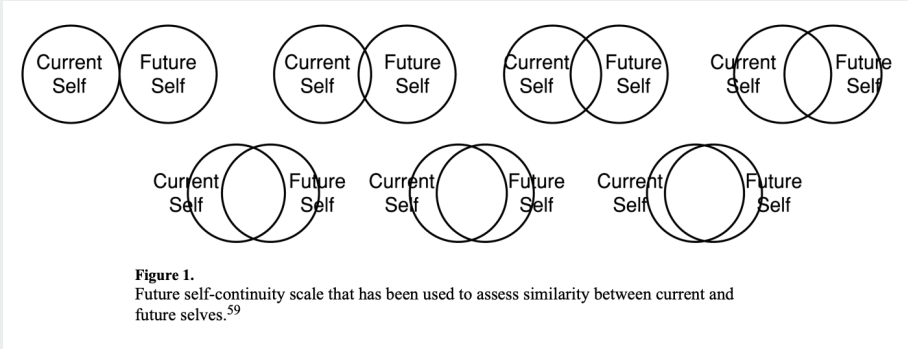
Fig 34: Examples of prompts that would be included in the suggested extensions.

noticing behavioral biases for effective design of probes

Our decision making processes are flawed and affected by the limitations of our own bounded rationality : we only know a limited amount of things. When faced with challenging decisions, basing important actions based on the information that is available to us is our brain falling into the trap of the availability bias. With more and more evidence showing that we are behaviorally flawed rather than being rational decision-makers, it was particularly important for me to understand how these behavioral biases play out specifically in a series of activities that are asking workers to think about the future.

In his book *Don’t Even Think About It*, George Marshall quotes Daniel Kahneman on climate change, and how we are cognitively inept in thinking seriously of this threat. He writes, “A distant, abstract, and disputed threat just doesn’t have the necessary characteristics for seriously mobilizing public opinion.” While changes in the future of work, or other aspects of socio-technical systems that will affect our daily life are not as catastrophic as those of climate change, it makes the point that what is abstract is hard to describe, leave alone think about how I will mitigate it. This idea of change as a deception tool to think of that which isn’t present yet, comes from the work of Daniel Gilbert who says that there are 4 key triggers that make people respond strongly: personal, abrupt (change), Immoral, Now (present).(Marshall, 2014, p.106). He calls this PAIN.

When I designed Plause, I focussed on making the future personal, and by introducing abruption, made the future Present through the elements of the game, attempting to momentarily break cognitive biases. Additionally, collective futuring, which Plause enables, also allows biases like the availability heuristic to be minimised through collecting multiple lived experiences. In addition to this, we often treat the future-self as a stranger and the present and future self are two different individuals(Hershfield, 2011). We frequently prioritise our present-self when we make decisions.



We are present biased and discount the rewards we could receive in the future (this is also called temporal discounting) and therefore important to note that future thinking is not easy or natural, but an important tool that requires scaffolding and specificity, and something that should be accessed and used by more workers.

plause online

While it can be played as an analog set of cards, Plause, hosted online, can facilitate and record futuring conversations. that can be mediated online, It provides the ease of adding new cards, saving previously played sessions, enabling participants to build on the material others have created, and plugging in snippets of information or other resources to fortify richer discussions, in a manner similar to tools like Miro. I envision it to be a crucible of ideas or an idea base that is a site for qualitative insights for policy research related to the future of work. With the rise of online tools for workshopping organizational planning and team collaboration, setting up a playspace for Plause is an important way to keep it accessible and open to more gameplay sessions to build its vocabulary and continue its refinement as a design method. So an existing tool like Miro can host an online version of Plause as a pre-designed template for futuring about work.

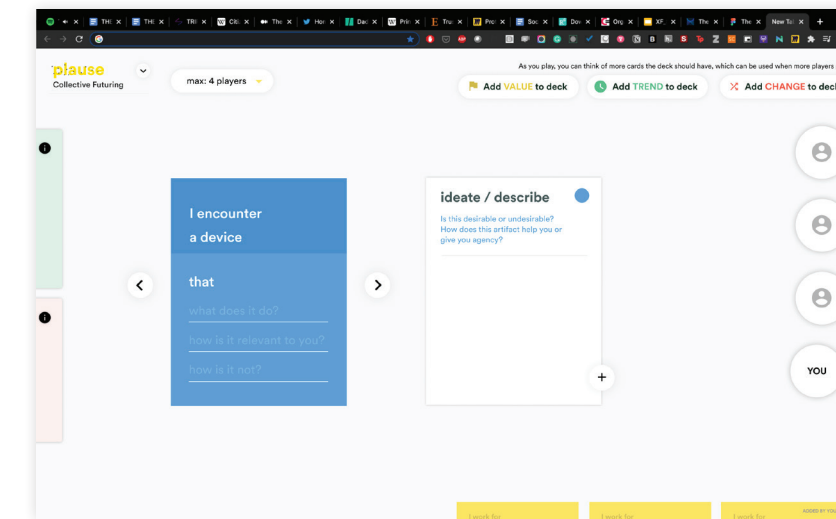
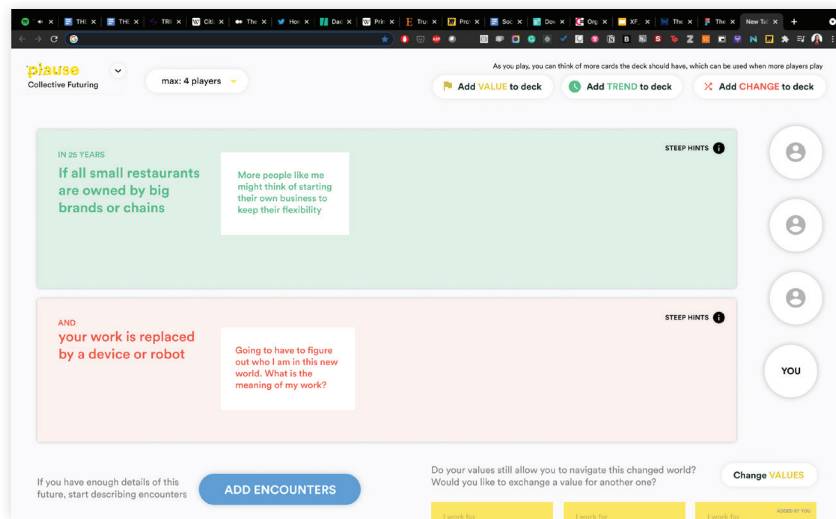
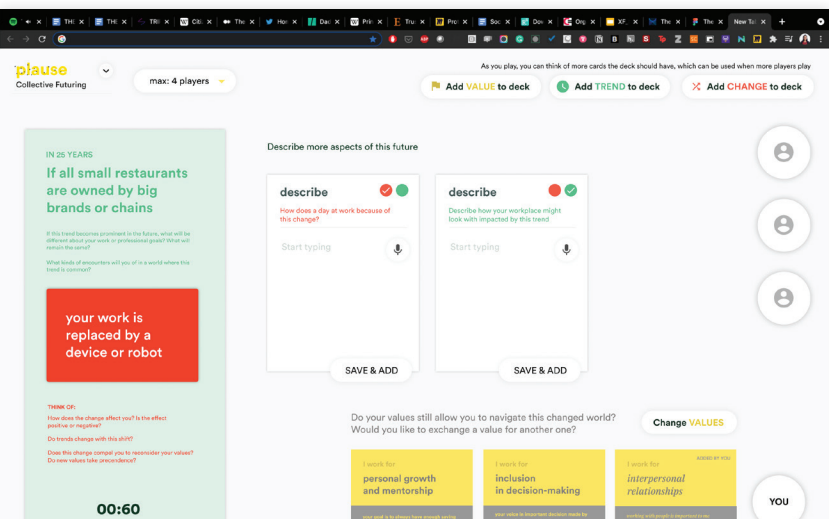
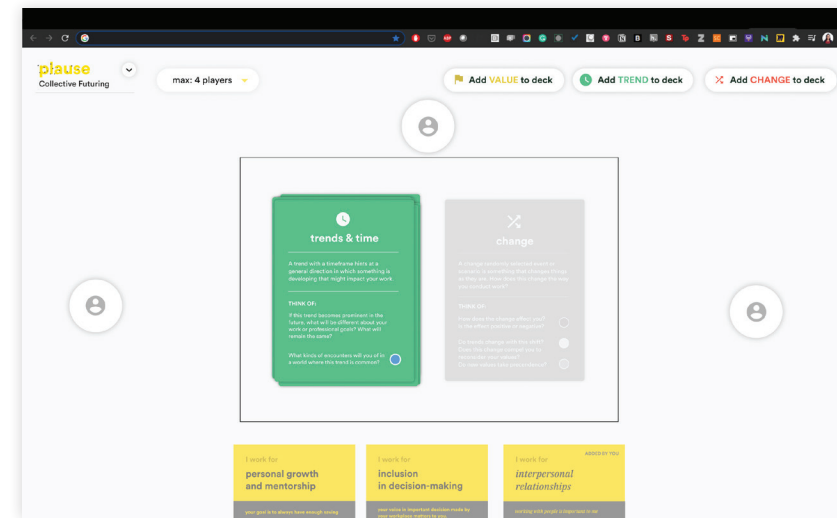
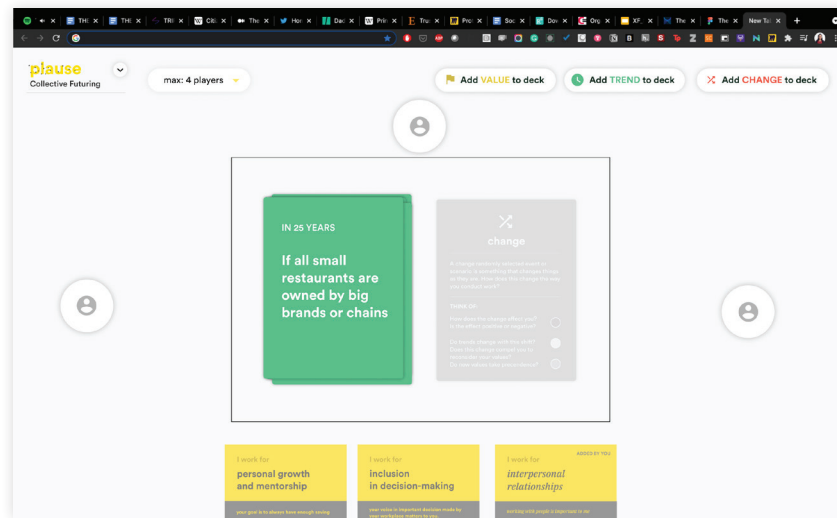
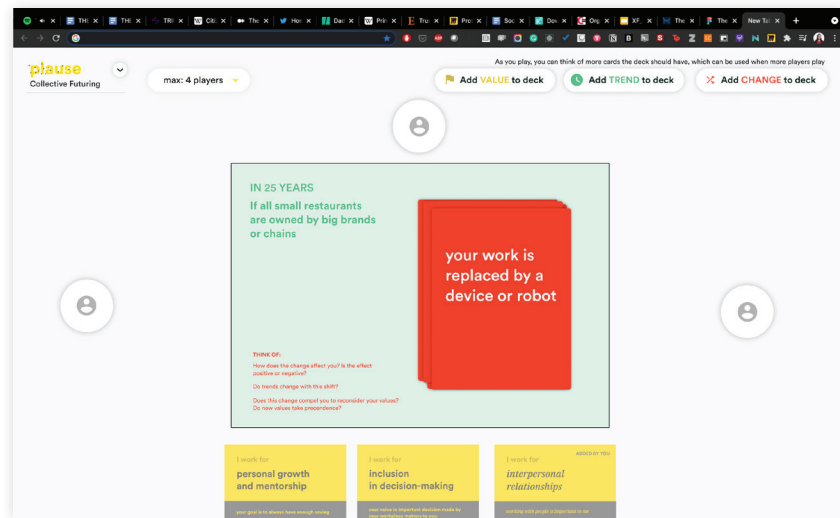
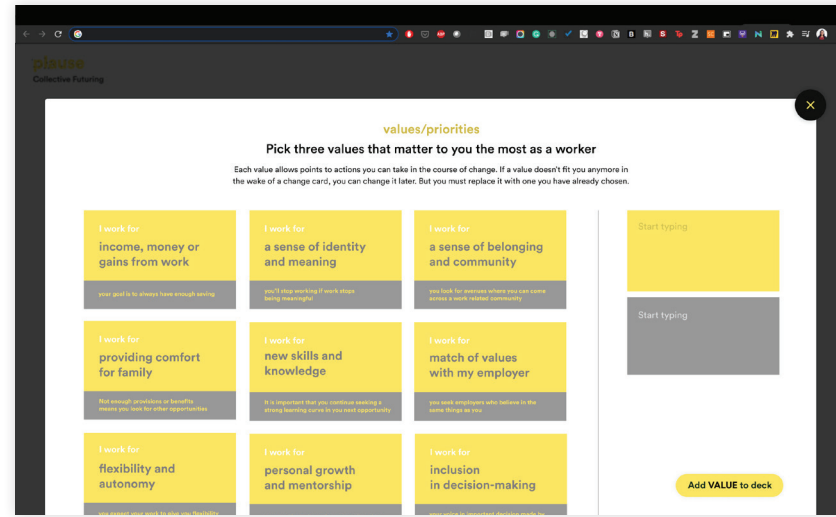
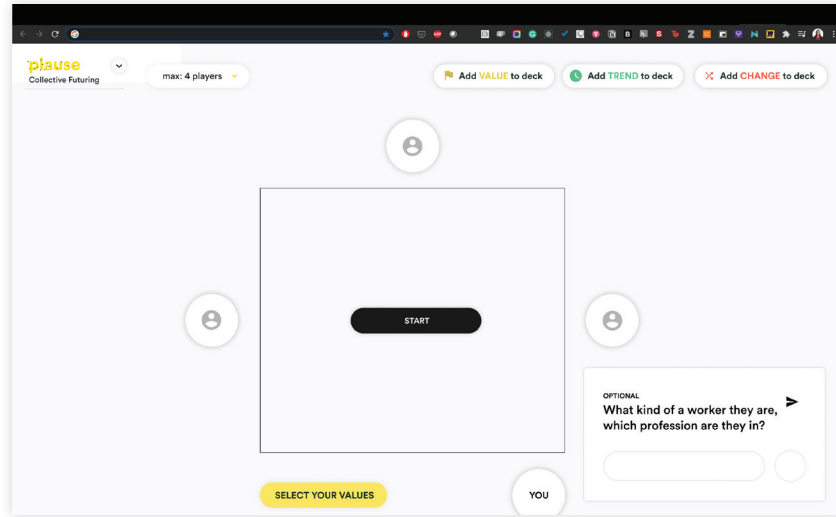
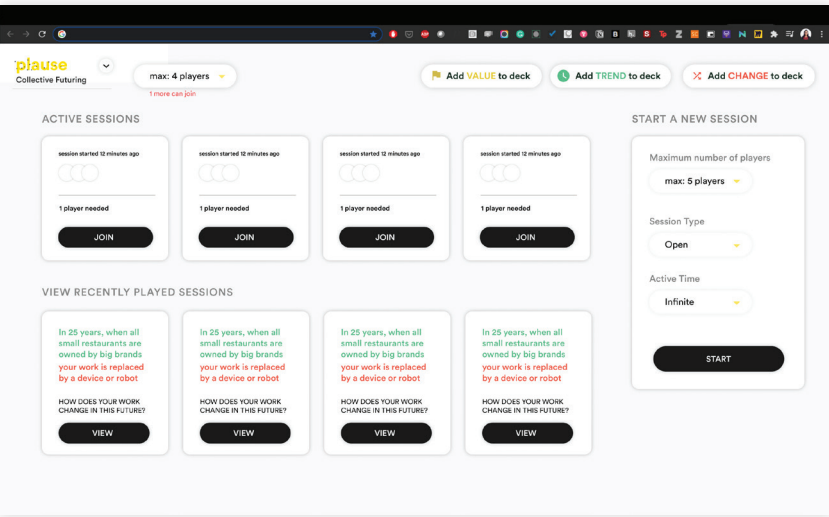
**Entry Points To Start Playing Plause**  
There are certain key entry points into joining a session of playing Plause. One can join as an individual or as a group, they can join an existing session that needs additional players, or create a session of their own., An open session can invite other players who are online to join the session, and also can be run indefinitely, without being time bound. This enables both synchronous and asynchronous contribution to the card deck as well as the sessions.

Other players can join asynchronously, add their own imaginations of the future, to the pre-selected setting of the trend, and change scenarios. Players can also view recently played sessions.

Irrespective of whether they want to join a session or not, a player can add cards to the existing deck. As I move into the session based on the number of players who can play the session.

The canvas is updated to create a place at the figurative table for each player - every player gets a side of the polygon. There is an optional chat section. This is especially meaningful in the online version, where a player can answer questions about which profession they are from, and create a mini profile. Assuming that the number of sessions played on this platform are enough to draw insights and patterns, it would be helpful to learn how certain types of workers respond to and imagine the future.





## steps and rules of Plause

The first step is to select values. There is a blank value card where a player can type out a new value card which will be added to the deck, and also, type out an action related the value card (the action provides direction for how they can navigate a new future using the actions that they have stated) ,

Moving forward, the first card that has to be picked, between the players of the session, is the gens and trend card, which sets the stage for the future in which the players are going to imagine and ideate.. This card is randomly picked with an option to change maybe once or twice, if the card chosen at first, is agreeable to all players.

Once the trend card is picked it sets up the stage, even visually, and the change cards are activated. Change cards are randomly shuffled - this card can't be replaced. It has to retain the quality of suddenness for an effective session. In the final test session with a restaurant worker, I learned that it is important for the description cards to be associated with each of the card types. A describe card is specifically annotated by each card type to ask players to describe a little bit more about what that change scenario means to them. These descriptor cards are helpful

As they replace the nudges and prompts that a facilitator would usually ask a group of people in ensuring that they are responding to and think of these game elements in the way that is intended. After the trend and change sections are totally described, is when it is time to move on to encounters.

If players feel stuck in describing the trend or the change scenario, a hint tooltip is added which can include hints that are described in the "possible extension section of this thesis document'. And finally, players can peruse through encounter cards that have predefined mad-libs for players to fill, and continue to describe this encounter, to make it a holistic and detailed description of that imagination of the future.

## adding value to participatory platforms

In comparison to other participatory platforms, it focuses on future imaginations rather than present-day problem solving. I designed this based on learning from reviewing participatory platforms and design methods. I saw that participatory platforms focussed on present day issue-solving but did not include opportunities to enable assemblies of participants to conduct collective futuring and visioning. Plause could be seen as a futuring 'add-on' that proposes the idea of participatory platforms including an opportunity to conduct futuring conversations using Plause. Plause aims to offer an approach that makes the future salient, for those interested in forecasting and constructing images of the future.

Plause by itself is designed to be generative about future ideas. To facilitate this aspiration, the research informed the level of scaffolding needed I needed to encode into the design elements of the game for it to offer generativity. Once it has been used several times, I aim for Plause to generate a library of personal futures for future participants to engage with, respond to, and build on. The version of Plause cards that is envisioned as an online mediated space for futuring conversations aims to address the question of "the foresight field being limited to a creative minority (Inayatullah, 2008) of decision-makers and "finds itself with much room for improving public uptake towards the the development of a distributed, society-wide capacity for anticipation." (Candy, 2018)

# who is the user? why is this worth doing?

**Design goals are correlated with the intended audience of Plause. The goals of plause are three fold:**

- 1. Participation**
- 2. Decision and**
- 3. Expansion/Collection**

At the individual worker/employee level this tool intends to help workers lay out pathways and strategies for themselves to adapt to change. Plause aims to offer an approach that makes the future salient, for those interested in forecasting and constructing images of the future. A participant said “Hourly workers don’t have that much time to discuss these things like what the future holds.”. But The hope is to lay down possibilities the future can present, so that workers can draw pathways and milestones of their own plan of action using this as a backcasting tool.

For Decision-makers, the design goal is that "encounters' will provide seeds of ideas for new organizational policy decisions that include the employee voice. If policy-making is a form of designing, then Plause is a tool that generates design insights to inform policy. Additionally, other designers and qualitative researchers can apply this probe to new groups of workers, create a new vocabulary and add to the existing design elements and cards.

Plause can be defined as successful, if it helps design or non-design stakeholders to initiate discussions of a qualitative nature to inform key decisions that impact the collective or community of workers. Another measure of success is if other researchers find it useful in learning about a group of workers or organizational members they are interested in learning about. While generative research methods must serve as a blank canvas, a good toolkit offers a blank canvas, "with a large number of simple but abstract ambiguous components that can be arranged and juxtaposed in a variety of ways" (Sanders, 2000, p.5). But in the case of this futuring tool, its a canvas with outlines, boundaries and scaffolding instead of a blank canvas.

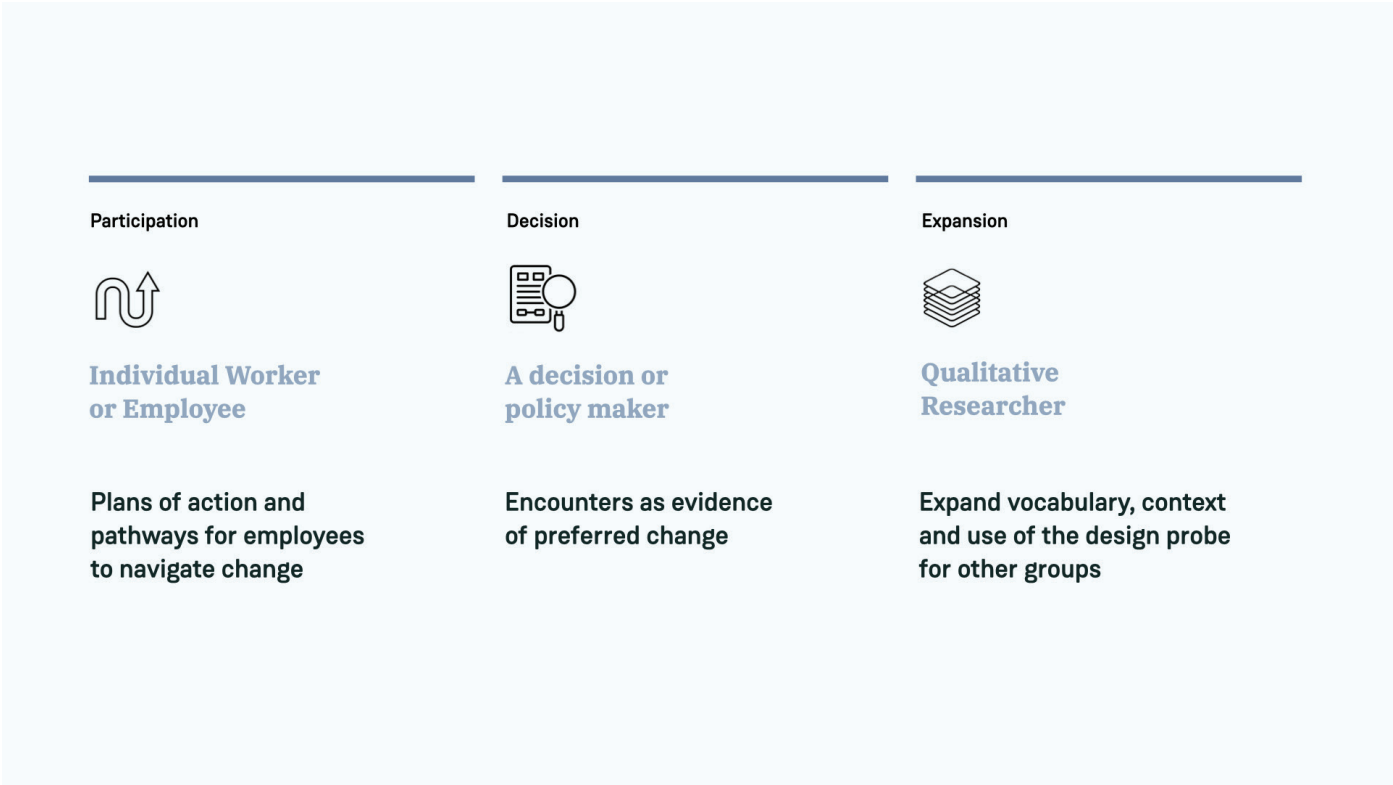


Fig 37: The design goals for each type / group of audiences.



# experiential futures ladder as the foundation for Plause

Plause follows the Experiential Futures Ladder in guiding futures thinking from the more intangible aspects of the future into the encounters of everyday life, where the most tangible aspect of the future is you being in it - and assessing your values and their relevance to navigating it. As the game progresses, the encounters are a guide to making the aspects of this trend that is cast into the future more tangible. Plause leverages the experiential futures ladder to facilitate players to arrive at the "stuff" (Candy, 2018, p.235) rung of the ladder to imagine encounters that encode their lived experience. By picking values that govern their decisions about the future of their work, participants are including themselves as a part of the experiential futures ladder structure.

I intend for Plause to focus on building shared understanding of a certain future among a group of people associated with each other through the means of their work or sharing experiences and philosophies about how the future of work ought to be. It is intended to emphasize and indicate preferred future visions, positive encounters that provide evidence to decision-makers about what is desired and which directions can the future be traced into. These directions result from the collective pathwork of preferred future encounters, generated by the worker-participants.

Fig 38: Using the futures cone (Dune & Raby, 2013) I compare and differentiate Plause from The Thing From the Future (Candy, 2018) which aslo uses the futures ladder.

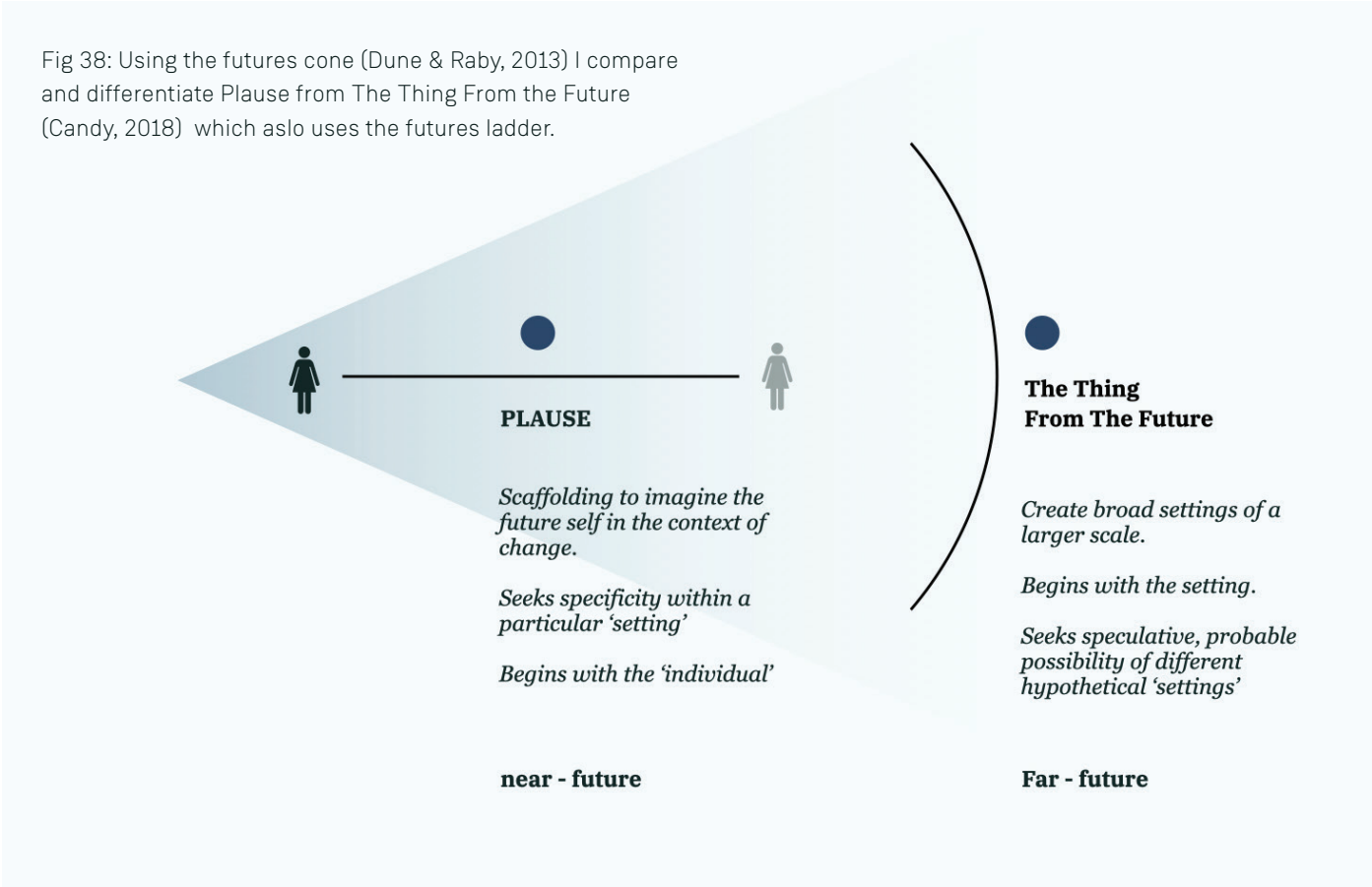
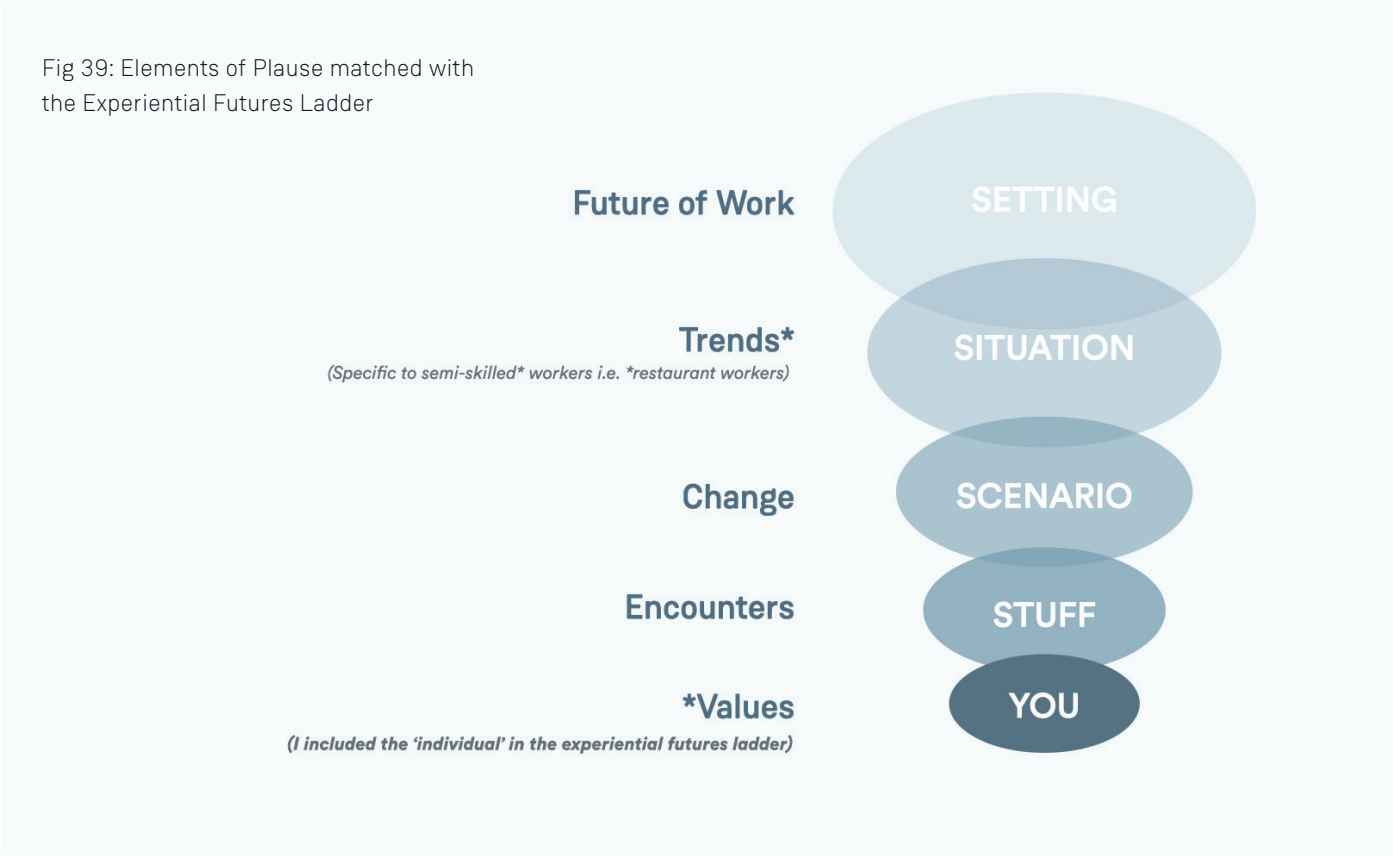


Fig 39: Elements of Plause matched with the Experiential Futures Ladder



# making the future of work tangible and personal

experiential scenarios using pause

pause to facilitate the EXF cycle

evaluating and refining pause

## experiential scenarios using pause

***“How may we take strategic foresight from difficult and rare to automatic and common?”***

Stewart Brand, 1992, p. 2

“Experiential futures is the design of situations and stuff from the future to catalyse insight and change.” (Candy & Dunagan, 2017, p.137). When these futures are created based on lived experiences, the way Pause was developed, relates to the phases of the Ethnographic Experiential Futures (EXF) cycle (Candy & Kornet, 2019). The aspect of ethnography this framework focuses on, is designing and staging scenarios as a synthesis of qualitative research. It was important for me to guide the synthesis of my procedures in the design of the probe using EXF. So the outcomes of my thesis are not experiential scenarios themselves but a probe that mediates the collective creation of scenarios that can be “mounted” (Candy & Kornet, 2019, p.4) on Pause and be posed as considerations that are seeds to strategize equitable futures of work.

As Hayward and Candy write "Humans construct narratives from their own experience and sense of the world" (2017, p.9). While as individuals our imaginations may be bounded, collectively, we can create richer images of possible futures, bridge gaps of how we understand the world individually.

For instance, for workers who faced disruptions, job losses etc, though the pandemic was an opportunity to consider what steps they should take for the future, the moment things went normal, the thought of considering their future carefully, faded away. Experiential scenarios are tools to stage futures and make them salient.

So that they don't fade once the change scenario dies out. A learning I had during the design process is that Experiential Scenarios could also be a tool for people to recognise, understand and reflect on the behavioral biases we have in our daily decision-making and planning. In a way, the goal of bringing the lens of foresight to ethnographic research probes is to develop empathy for the future self and consider the trade-offs that the future self has to make when it comes to unforeseen changes. Future scenarios can be staged through futuring conversations. A future game for collective imagination of the future of work is an attempt to use the tools for facilitation within a group environment.

# pause to facilitate the EXF cycle

The game structure and the intention of Pause to create multiple images of the future of work, is closely related to this EXF cycle and it's four phases as shown in Fig 40. The phases connect with the game design of Pause as follows:

**MAP:** I used secondary research to map scenarios that summarise policy trends discussed commonly in policy think tanks, through legislative efforts and by organizations and unions to shape preferred futures.

**MULTIPLY:** Using these are starting points, the procedures in Experiment #1 were an opportunity for individual participants to generate alternative scenarios that signalled positive and negative futures, giving me insight about their belief and value systems.

**MEDIATE:** The probe itself aids the creation of these tangible representations. Here is where my role as a

designer is to set elements of the probe that scaffold thinking so that participants can create representations. The encounter cards are intended to host descriptions of representations that are a part of the future they are imagining.

**MOUNT:** Mount summarises the tangible representations or encounters into a base of ideas for decision makers to deliberate upon. The idea base points to each session of this gameplay being a session to generative new tangible representations that point to multiplicity of options to shape the future rather than the visions of one individual or small group of decision makers (with no input from the represented)

Anticipating future scenarios is more important than predicting a future - the future (of work) is not a monolith, but a collection of ideas, where it is possible that a group or individual may hold conflicting ideas of the future simultaneously.

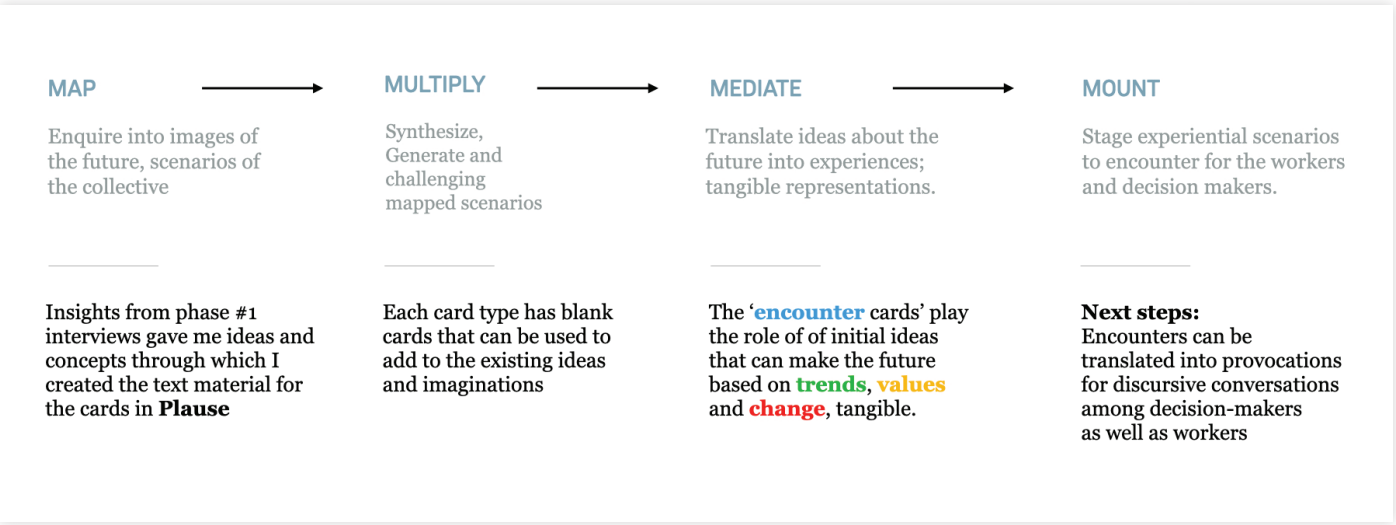


Fig 40: Elements of Pause mapped to the phased of the EXF cycle.

# evaluating and refining pause

Different formats, modes of gameplay and sequences of the cards arose from smaller rounds of quick prototyping. Through more iteration and testing, in future iterations of Pause, I aim to introduce more elements and tooltips in between the steps and test how they work with the existing elements. Tooltips small icon-based elements on in the Online version of Pause. They are help prompts essentially meant to nudge and steer the conversation. Tooltips can utilize the ‘possible extensions’ mentioned in the previous section. They are auxiliary elements that are designed to layer or push the detail of the futuring conversation being had in the session and possibly help participants get unstuck when they are futuring.

In a live workshop, the role of facilitator is to nudge a group in the right direction and keep on track. Over time, when and if Pause is used independently by participants, there are two elements and extensions can nudge and ensure a good fidelity of player responses/ inputs. In the evaluation and testing sessions, the design elements achieved the intention of making the implicit explicit. Asking participants to prioritise their values and unforeseen scenarios deepened how they thought about their future self making decisions. The structure of the design elements as we progressed through the experiential futures ladder was clear, but what it required was more scaffolding, more explanation of what I required from participants as a response.

Participants across several evaluation sessions said that it helped them to think of themselves (their future self) in a different way and spend time reflecting on the agency they can exercise in the workplace - it helped to think of what changes can be made for her and her peers alike. The idea of having some initial prompts and allowing room to add more was helpful - encouraging a conversation by providing examples is an important nudge for the probe to be effective.

The values, trends and change cards together combine to create the very initial scaffolding of the future Pause intends to create. The white post-its denote self-reflections on how workers said their worldviews would shift and how they would reconsider. After the first high fidelity design of Pause, the user test revealed points in the gameplay that warranted more detail or explanation or guidance for the player to build more detailed and descriptive encounters.

What foundation of the future does this example lay down?

Let’s dive into what this illustrated example of Plause from a user testing session shows (shown in fig.43). The setting and scenario that this illustrated example present is: *‘In 25 years, if all local businesses start sourcing food locally [trend]; what encounters would a restaurant worker [player] who values sense of belonging and identity in their workplace, and seeks income from working [values], come across, if they were replaced by an automated device or robot [change]?’*

Illustrating another instance from an evaluation, a participant reflected on wanting to understanding her identity and meaning as a worker and what skill she brings, if most things she does today get automated.

Thus, going through the steps of the game creates this prompt for a group of peers to imagine the type of encounters that would be possible in this world. There are benefits to this group of players all being from the same profession as well as being from different professions. One of the participants in the evaluation suggested that she would learn more about this world if she could play this game with workers from diverse professions.

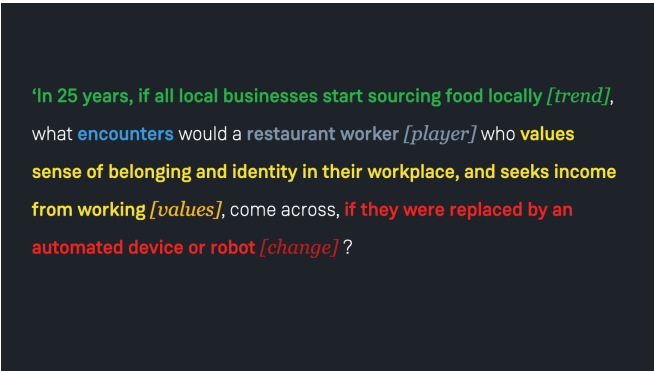


Fig 41 : An articulated prompt from a evaluation-tested session with a restaurant worker.

Next Steps: Staging Experiential Futures

The setting that prompts such as this one creates is an entry point into starting to imagine what kind of encounters can be expected. As a designer, creating and designing these encounters through a combination of scenarios, policy ideas, stories or objects would be the way to make this future tangible.

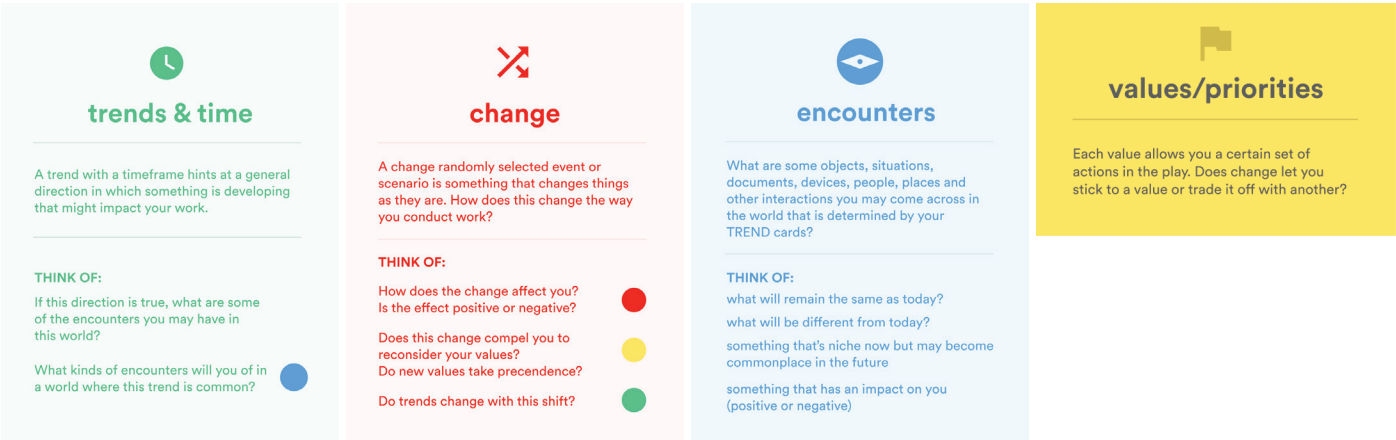


Fig 42: To design this for play sessions agnostic of a designated facilitator, each card has an explanation of what responses each prompt expects. In the online template version, these prompts are more deeply embedded in the structure and flow of the gameplay (See section Plause Online, oages 67-69)

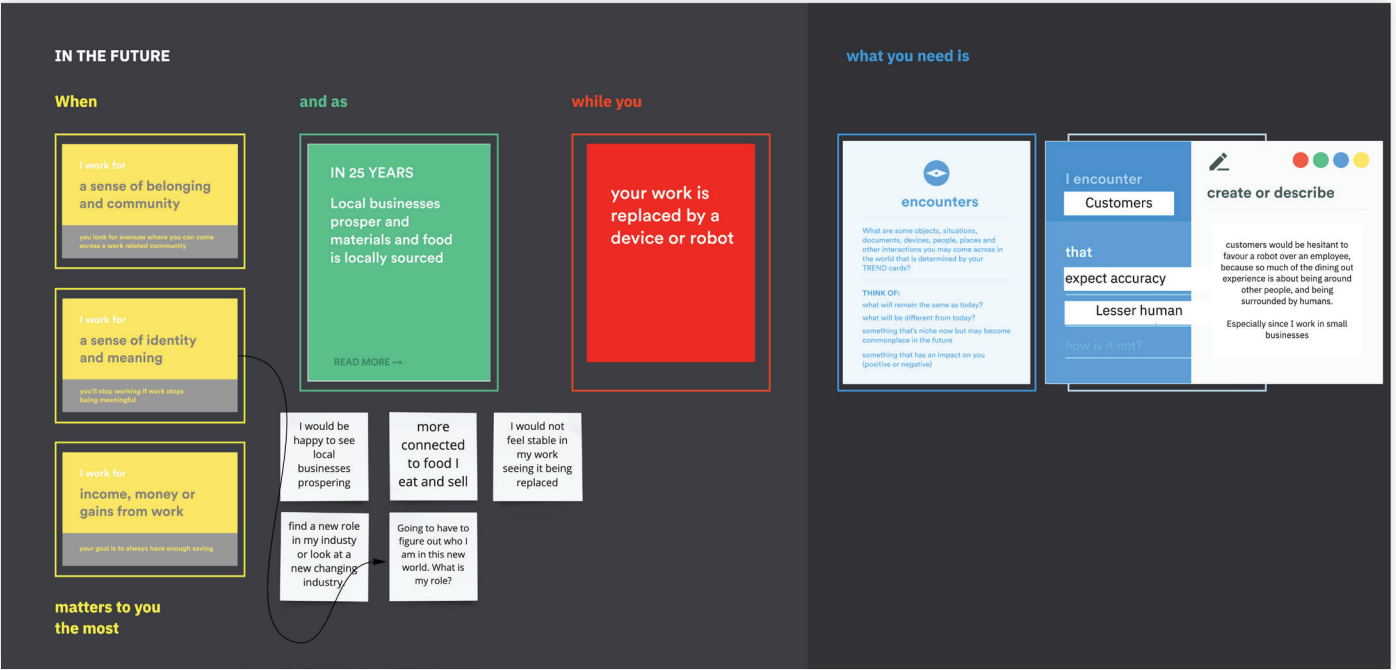


Fig 43: A worked out example of a trend, change and encounter that emerged out of a testing session



spent: a game that stages experiential scenarios to make an abstract issue tangible

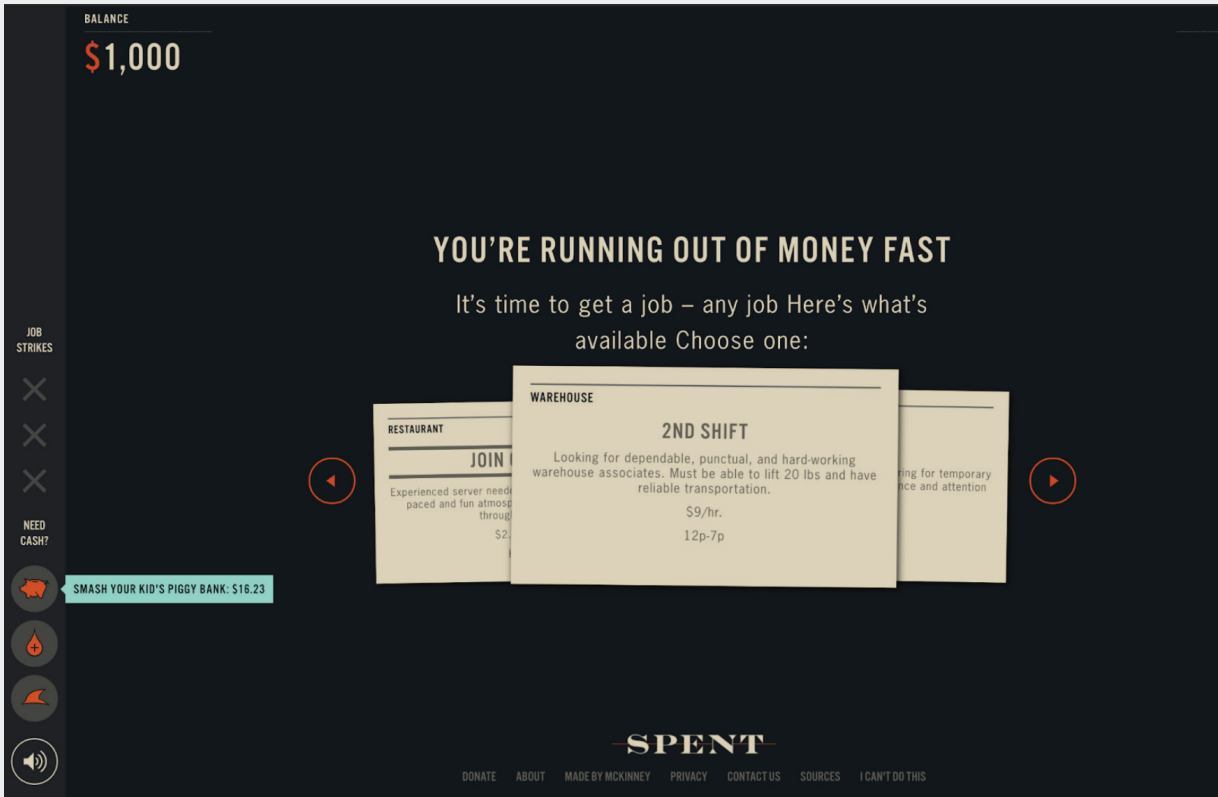


Fig 44: Spent, a web-based scenario-drive game created by McKinney (an ad agency).

I reviewed this example of a game that stages experiential scenarios designed for an audience who may not go through this experience first hand, in order for the audience to empathise. Eventhough these are not based in the future, the interface was a reference for me to design the online interface for hosting the online version of Plause. **Spent** is a web-based educational game to immerse players into the difficulties faced by a person surviving at the border of financial insecurity. By increasing awareness of the struggles of low-income parents, the Urban Ministries of Durham hoped to change the fate of struggling citizens. Spent was designed by an ad agency called McKinney for a non-profit called Urban Ministries of Durham. Spent, is about negotiating the realities of poverty and financial responsibility, and how small choices can be hard for someone who maybe financially responsible, but may seem financially irresponsible. Players walk through situations where they have to make trade-offs between equally important financial decisions at the risk of spending all their savings. **As you navigate these situations, where you must make hard decisions about how to spend a limited income, the challenges of navigating change become clear. In thinking of future-based scenarios or to create a future-based conversation about scenarios workers would face in the future (as an example), a similar fidelity is important to create an engaging experience.** Games such as this one can enable real-world issues to be brought into a safer space for discussion, and conversation.

chapter seven

# reflections & closing

discussion

conclusion

## discussion

Diving into the specific context of the future of work and expanding on the lived experience of restaurant workers was an entry point into developing learnings about how futuring practices can be brought into ethnographic research methods and accessible tools to adopt futures frameworks can help with personal futuring (Wheelwright, 2009). In the varieties of different participation approaches, I state and explain in my thesis that being able to create, build and expand images of the future is a way of participating because it forms images that can influence the design of policy making and organisational decisions in order to reimagine the social contract (Kochan, 2016) for an equitable future of work.

Plause, and the research that led to it can be used as a futuring tool in contexts outside of the future of work as well. By rewriting the prompts of the four key elements - values, trends, change and encounters, Plause can be used for a futuring conversation to reimagine a resident community, local government, a school or educational institution or any social institution that impacts the everyday life of the ‘represented’.

The development of the findings of my research into a design probe is my exploration of finding the language, vocabulary and framework to make futuring accessible as a tool of building shared understanding of current conditions of work and identifying the weak signals (Dunne & Raby, 2013) of today that can become the futures of work employment and policy ideas that govern it.

Within this broader goal, is situated the design of Plause which emphasises the inclusion of lived experience and qualitative research to be encoded and presented as evidence of substantive significance (Burstein, 2013) of preferred changes in decision-making. Thus, the role of design and facilitation to drive conversations among groups as a vehicle to build images of the future is the most important way to build accessible and plural futures of work.

Substantive significance (Burstein, 2013), as opposed to statistical significance, significance is the goal of why I sought to create a platform for Plause to surface imaginations of the future to create qualitative evidence based change. Can the impact of public opinion be investigated through seeing how policymakers actually take responses of this platform to make policy change?

This question is particularly important and relates to the exercise in my design activity where I ask workers to place scenarios and provocations of the future into the four quadrants in experiment 1 (see page 36). In some aspects, participants don't think that they have agency in change, in others they do, identifying the provocations that they think they have agency in is important. Issues that can be legislated in a straightforward manner are few, examples of participatory policy have included examples where citizens have been asked to collaborate on budgeting for their city or community. Burstein argues that interest groups can enhance rather than impede public opinion when their agendas are aligned with public opinion (Burstein, 2003)

He writes, “..discovering a relationship between opinion and policy is only a first step toward ascertaining how much power the public has. We also need to know the answer to the third question: To what extent do interest organizations, political parties, and political and economic elites influence policy even when opposed by public opinion?”” (Burstein, 2013, p. 31)

For changes to happen to policy, stakeholders consider statistical significance that serves to show if a relationship of a variable with the phenomena being tested is significant, but it may not point satisfactorily to how much impact it have, or how important it is, in terms of policy changes? And in creating a futuring vocabulary to imagine changing scenarios of work can create that substantive evidence.

## closing

Sohail Inayatullah argues that a creative minority (Inayatullah, 2008) often shapes a the most broadly and commonly heard narratives of the future. But, in our daily lives, we all plan, think about the future and anticipate what we would do in the face of change we did not expect. Design methods offer a way to scaffold futures thinking. To that end, a design probe such as Plause can make value systems explicit. But my thesis most importantly acknowledges that shaping the future should be democratic. A collection of images of preferred future woven by multiple voices and lived experiences, is richer material for future work rather than the predictions of a select few experts. It was important for me in this thesis to learn and acknowledge the details of everyday life that keep us away from imaginings of the future - especially as workers who are soaked in the hourly, daily and repeating nature of wage, work, efficiency and payback. In this moment of unprecedented change, it becomes important for all of us to take a peek into our personal and professional futures to turn present-day pain points into strategies that make us aware of what steps we might take toward change.

Work is deeply personal: we all work and that is why researching into the lived experience of working was my approach to finding a personal entry point into the vastness of an ambiguous future. Personal futuring is an approachable way to imagine a future instead of thinking of paradigm shifts and global trends. At the same time, acknowledging that as individuals we operate under a certain trend is helpful to think of what my actions must be to achieve my preferred future and

understand my agency in this version of the future world. For example, for a server at a bar that continued to remain shut for months, must she start thinking of obtaining a new skill that may keep her essential to the restaurant industry or must she find strategies to continue in the service industry but as a food delivery worker? Or must she change course and enroll in a course that trains her to manage restaurants remotely? While all these may be personal considerations, they reveal clues to a future. Similarly a stated trend might nudge one to take personal decisions to navigate change.

Plause is not only a way to make the future tangible, but make the future self tangible. As participants indicated during my research that it was rare for her working in restaurants, being on her toes all day to set aside a moment to think about how these changes affect her decisions for the future. Anticipating a future of one’s own work alongside the imagination of others exemplifies the idea that the future of work is a collection of images with individual lived experiences embedded with those rather than being a patchwork, rather than being a monolith.

We perceive the future as an unknown and therefore remain unfamiliar with our future-selves as well. But instead of making claims about an abstract future, my thesis is an attempt to place the individual in a boat that sails into the future and urge the worker or any group of the ‘represented’ to feel an active sense of agency and voice in shaping how organisations and institutions can become inclusive by listening to the future visions of the many.

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IN 5 YEARS

All small restaurants  
are owned by big  
brands or chains

READ MORE →

50 YEARS

Sustainability is the  
most priority for all  
companies and  
businesses, including  
restaurants

READ MORE →

your work  
requires a  
set of skills  
you don't

50 YEARS

work is measured  
in terms of  
companies and  
employers in terms of  
our efficiency alone

READ MORE →

IN 25 YEARS

The number of  
restaurants in a  
city will be much  
smaller in years to  
come.

trends & time

A trend with a timeframe hints at a general  
direction in which something is developing  
that might impact your work.

THINK OF:

If this direction is true, what are some  
of the encounters you may have in  
this world?

What kinds of encounters will you of in  
a world where this trend is common?

chan

A change randomly sele  
scenario is something th  
as they are. How does t  
you conduct work?

THINK OF:

How does the change  
is the effect positive c

Does this change c  
reconsider your valu  
Do new values take

Do trends char

5 YEARS

al businesses  
prosper and  
materials and food  
s locally sourced

READ MO

IN 5 YEARS

The number of  
restaurants in a city  
will be much smaller  
in years to come.

READ MORE

providing comfort  
for family

Not enough provisions or benefits forces you  
to look for new avenues.

\_\_\_\_ YEARS

skills and  
ledge

values/priorities

Each value allows you a certain set  
actions in the play. Does change l  
stick to a value or trade it off with

IN 25 YEARS

are owned by big  
brands or chains

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are owned by big  
brands or chains

a sense of b  
and commu

you look for avenues whe  
across a work related con