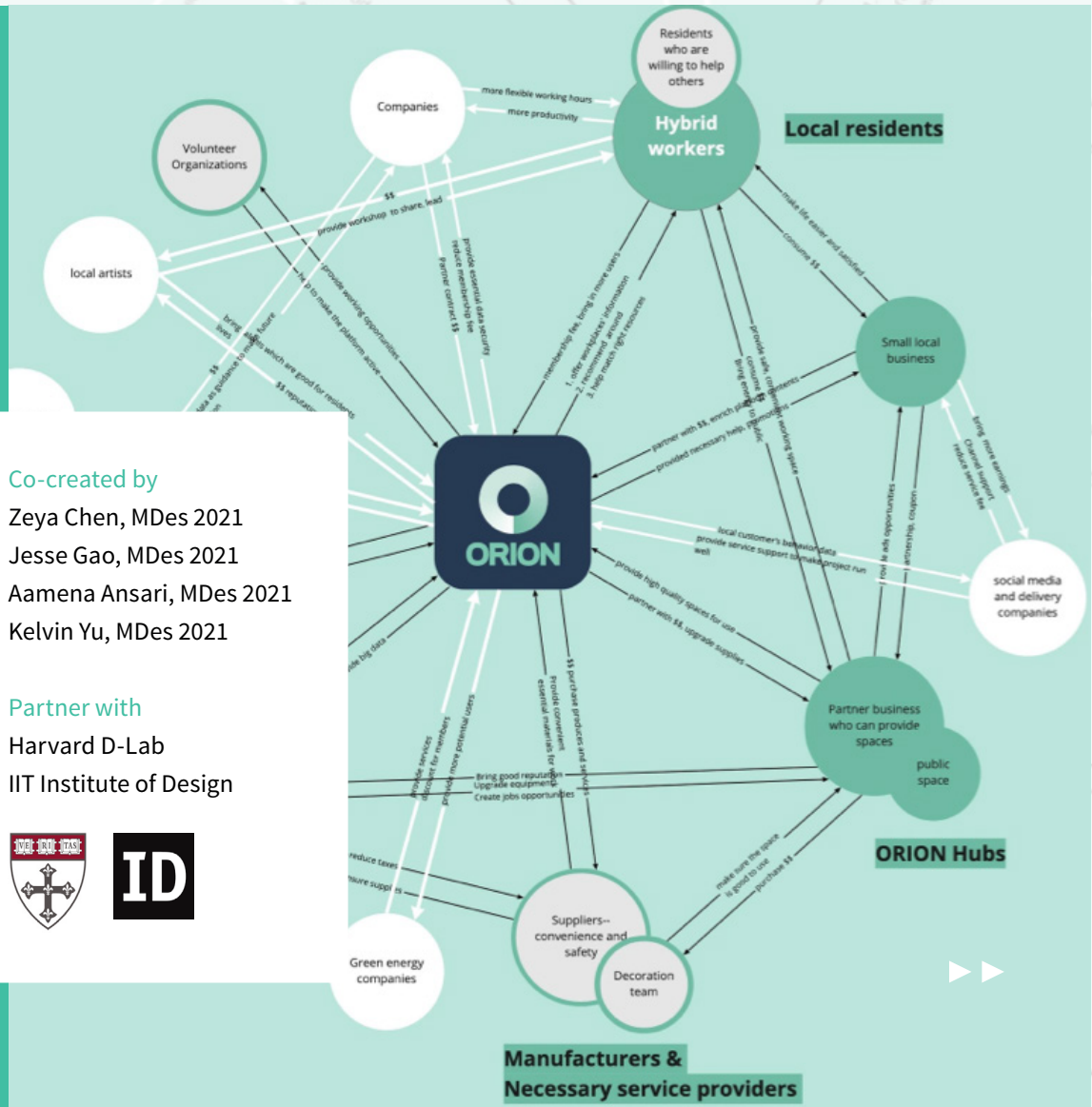




Project Time

July 2021

# Tactical Design Exploring Work-life Modes After Pandemics



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## 1.2 Overview

This brief is divided into three main sections:

1. **Introduction** | provides information about the research partner and context, and an overview of the methodology
2. **Tactical Solutions** | depicts speculative scenarios that demonstrate how new behavior, infrastructure, and value exchanges can build a more self-dynamic and healthier community life after COVID-19. This section outlines how these scenarios are interconnected at three levels: product & service level, platforms and infrastructure level, and public health social system level.
3. **Conclusion** | includes a high-level summary and closing thoughts.

## 1.3 Executive Summary

*What can we learn about people and organizational behavior today that will help us be better prepared to fight the epidemic of tomorrow?*

As the COVID-19 pandemic continues to sweep the world, organizations across industries are adapting their strategies, operations, and services to address emerging public health imperatives such as following stay-at-home orders, improving sanitation, and combating misinformation.

However, due to the scale and the systemic complexity of the current global pandemic, many adaptations are falling short of achieving their intended impacts. To rebuild with resilience for future disruptions, these organizations are searching for alternative approaches that can help them combine available competencies with their ecosystems to create new value. But to do so they will have to form new infrastructures and leverage existing ones in new ways. As a field driven by the logic of what is possible, design expertise is essential for organizations to both navigate this infrastructural complexity and tactically leverage their resources and competencies to create new value.

This report aims to support the government, businesses, and residents in local neighborhoods struggling to adapt their strategies and operations to respond to complex public health issues in ways that create genuine value. It presents design models and tools useful to lead transformational change and generate infrastructural interventions that can increase organizational resilience against public health challenges.

We worked with [Design Lab in Harvard T.H. Chan School of Public Health](#) and applied these tools to investigate systematic variables happening in the quarantine Working-From-Home period from over 1,000 households in 15 different countries. We share our learnings by presenting a collection of those that demonstrated the potential of entrepreneurial ecosystems in addressing public health imperatives. We also share our insights from interviewing people working in different countries to help us interpret the diverse manifestations of the infrastructures

we analyzed—and their role in translating public health policies and recommendations into practical interventions.

This study led to five major considerations for designers and local leaders—actionable responses to public health imperatives—that can help create value for both local government and the people it serves:

- **UNCOVER LOCAL RESOURCES:** Equip local leaders and residents with the knowledge and tools to uncover and reframe the invisible, idle but adaptive local resources for the usage of public health.
- **LEAD ADAPTIVE GOVERNANCE. :** Support local government work across organizations to build adaptive capacity and empower individuals to cooperate when needed.
- **MOTIVATE RESPONSIBLE CHOICES. :** Help residents and users when making choices that respond to emerging public health imperatives and motivate their responsible behavior to maximize the intangible cultural resources.
- **LEVERAGE ENTREPRENEURIAL ECOSYSTEMS.:** Identify available competencies within entrepreneurial ecosystems to rapidly combine expertise and seed, adapt, adopt, and transfer solutions.
- **FOSTER COLLECTIVE INTELLIGENCE.:** Invest in data-enabled intelligence to bridge organizational silos toward the design of integrated infrastructures for public health.

#### 1.4 Partner and Sponsor

- [\*\*Harvard D-Lab\*\*](#)

The D-Lab or Harvard Design Laboratory is created by Harvard T.H. Chan School of Public Health for studying the conundrums of human activities and beliefs conflicting with their well-being. The D-Lab is a network of people creating and demonstrating design methods and frameworks to improve well-being.

- [\*\*IIT Institute of Design\*\*](#)

IIT Institute of Design (ID), founded as the New Bauhaus, is the country's leading graduate-only design school. Teaching systemic, human-centered design, the school's pedagogical approach is centered on the methods and critical skill sets required to engage systemic and complex global challenges.

## 1.5 Designing Life After COVID-19

Orion: tactical design for work-life balance after a pandemic is an explorative spin-off project under Harvard D-Lab's study – [Whole Life: Designing Life After Covid-19](#).

The Whole Life study intends to help individuals and organizations be better prepared for future epidemics than was the case when COVID-19 emerged. It will help public health officials form plans for a rapid response to the first signs of an epidemic, government leaders differentiate between science and myth about fast and effective action, and the public realize that pandemics can arrive at any time and are probably the natural disaster that causes the most harm. Our premise is that organizations can design the objects, services, and environments that support people in daily life with built-in abilities to detect viruses and other pathogens.

The Whole Life has three interconnected projects: Remember Now, Sketch Tomorrow, and Prototype Futures.

- **Remember Now** is an ethnographic study to gather data about how people in different parts of - the world are coping with the COVID-19.
- **Sketch Tomorrow** is a series of ideation sessions where experts use their experience and data from Remember Now to quickly explore new organizations, services, and strategies to make a less toxic world. This process follows a similar logic to the sketches designers use to explore new products.
- **Prototype Future** includes experts in implementing bold policies to plan the best ways of implementing the sketches.

By collecting data from over 1,000 households in 15 different countries, we learned how people worldwide are coping with this pandemic. Together, these three projects should bridge the gap between data owned and controlled by research teams and organizations, and meaning, which is owned and controlled by people. Treating this initiative as a data system that leads to surprising insights and then using this to create prototypes that ensure the ideas are meaningful to those using the interventions will increase the speed and relevance of the work. Orion is an explorative combination of these interconnected projects under the Whole Life study by tactical design.

## Methods

Self-document  
Open Interview

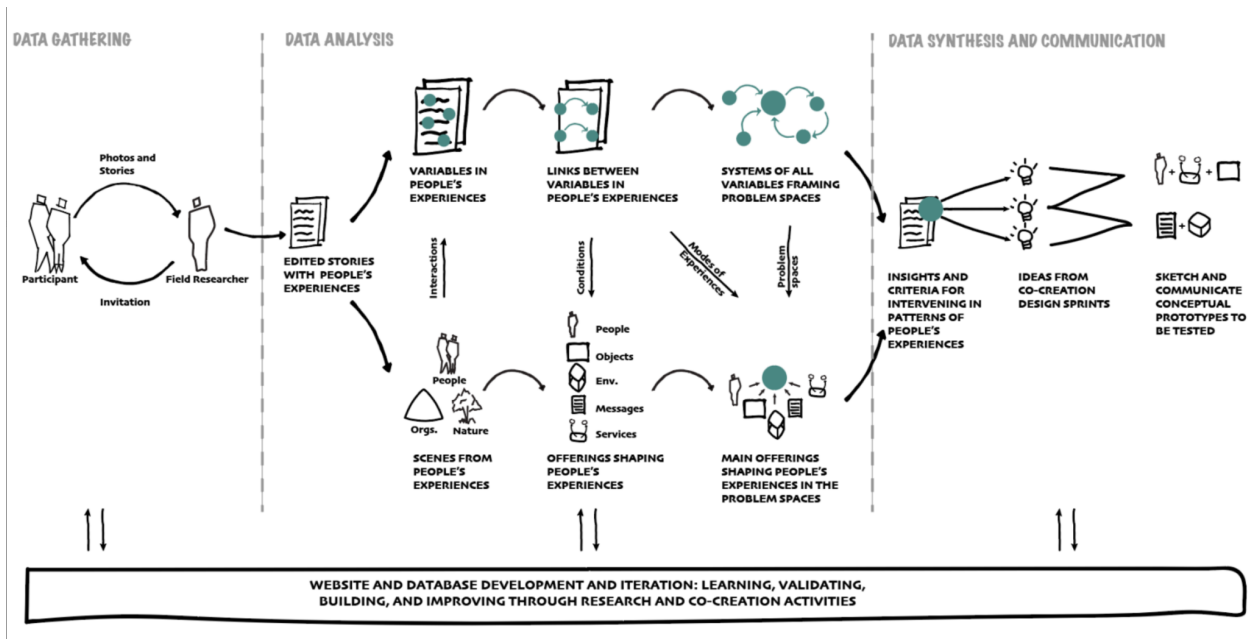
## Data Collected

1.1K+ subjects  
10K+ stories  
15+ countries  
12+ Languages

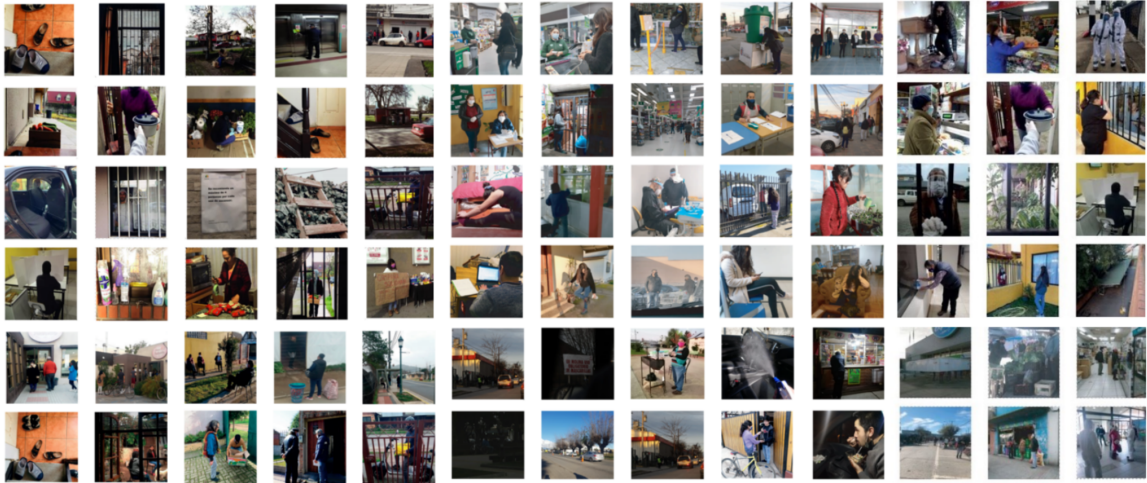


## 1.6 Approaches

- **Information Flow:** We leveraged the research by following three steps (Data gathering, Data Analysis, Data Synthesis) in the following information flow.



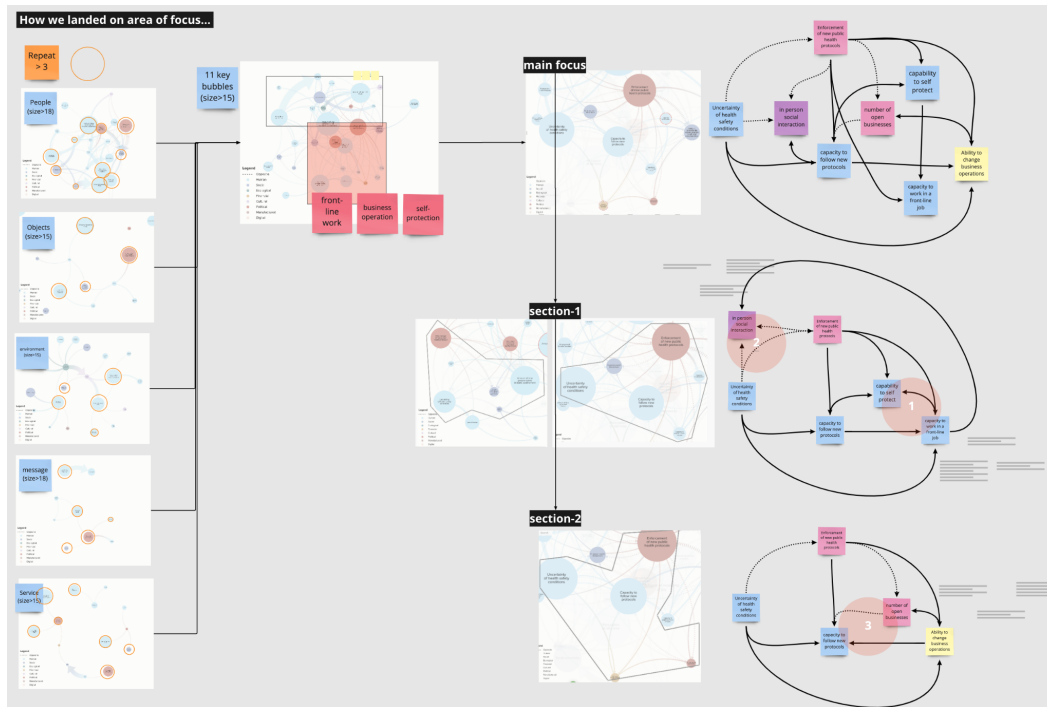
- **Data Gathering**  
Photo + Stories



- **Data Analysis**  
● **Edit Story + Identify variables + Create scenes of experience**

Subject (what is the code of the subject?)	Country of the Story (in what country did the story take place?)	University (Where is the field researcher from?)	Edited Story (Paste here the synthesized version of the stories from the transcripts you are analyzing)	Scene (Who was involved? Where were they? What were they doing? How were they feeling about it?)	Variable 1	Variable 2	Link (Does Variable 1 and 2 change in the SAME or OPPOSITE direction? Is Variable 1 Influencing Variable 2 positively (SAME) or negatively (OPPOSITE)? What Variable 1 increases, does Variable 2 also increase (SAME) or decrease (OPPOSITE)?)	Interactions (What types of interactions were happening in the story?)	Aspirations (What was the subject's main aspirations for the interactions?)	Offerings (What most offering enabled the interactions to occur?)	Primary Mode (How did the subject experience the interactions?)	Secondary Mode (How did the subject experience the interactions?)
HVD_047_09	USA	HVD	My old job used to see a daily influx of people as needed but since the quarantine we started seeing clients only when they didn't have a way for us to contact them. Everything else has been over the phone or through video. This has increased my workload, from in-person behavioral health work to mainly coordinating video and supporting nursing duties, like getting demographic information and patient history.	An individual adjusts to taking care of patients online and also in person with the new protocols in place. They have to take additional responsibilities on the job which is stressful.	Organizational efficiency in communicating new protocols	Capacity to follow new protocols	Same	People-Organizations	Health	People	Physical	Cognitive
HVD_047_09	USA	HVD	Then I got a new job and the search process was difficult during the pandemic because many agencies stopped accepting people due to limited funding. I would apply to several places and then find out they were no longer hiring.	An individual searches for a new job. They are frustrated because they would apply to jobs then find out they were no longer available because of lack of funding.	Search for new jobs	Level of frustration	Same	People-Organizations	Prosperity	People	Cognitive	Emotional
HVD_047_09	USA	HVD	I still have to do a lot of evaluations and contacts in-person. I'm wearing a mask and talking with people about the coronavirus. People are very scared of it. Often working with people who have a severe mental illness, some don't believe the pandemic is happening, it's hard to meet with them safely or ensure they get proper care because they refuse to follow city/state guidelines. I don't meet with my team in person and I am training at home.	An individual works with populations that have mental health disorders. These individuals have difficulty accepting the pandemic is real and struggle to follow public health protocol. This is difficult both for everyone involved.	Capacity to comprehend current events	Awareness of new public health protocols	Same	People-People	Health	People	Cognitive	Emotional
HVD_047_09	USA	HVD	I began spending more time going to grocery stores. Food seemed to be going bad earlier than usual, often before the expiration dates. I cut up shopping every 1-2 days versus shopping every week to make sure my food is fresh.	An individual visits the grocery store more often during the pandemic. They think food was spoiling quickly during this period so they needed to purchase food more frequently.	Perception of the quality of food	Ability to run errands	Same	People-People	Health	People	Physical	Cognitive
HVD_047_09	USA	HVD	I am doing therapy online and taking classes online. My program was scrambling to move everything online last minute. A lot of professors are struggling with the format, work full time and am a full time student. Before I was running around sick, going directly from work to school often without time to eat, working from home has given me more time to take care of myself. I get to be with my dog who is part of my stress relief most of the day vs. None of the day. I've connected with more people online that I haven't usually wouldn't usually connect with.	An individual adjusts to working and taking classes at home. Prior to the pandemic, they were away home and moving from place to place quickly, often skipping meals. The pandemic has been great for them to socialize more online and be at home with their dog.	Perception of life time	Ability to improve personal health	Same	People-People	Health	People	Physical	Cognitive

- System of variables in experiences framing problem spaces

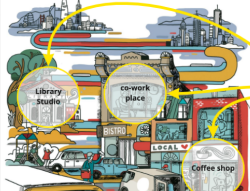



- Sketches of scenes from experiences

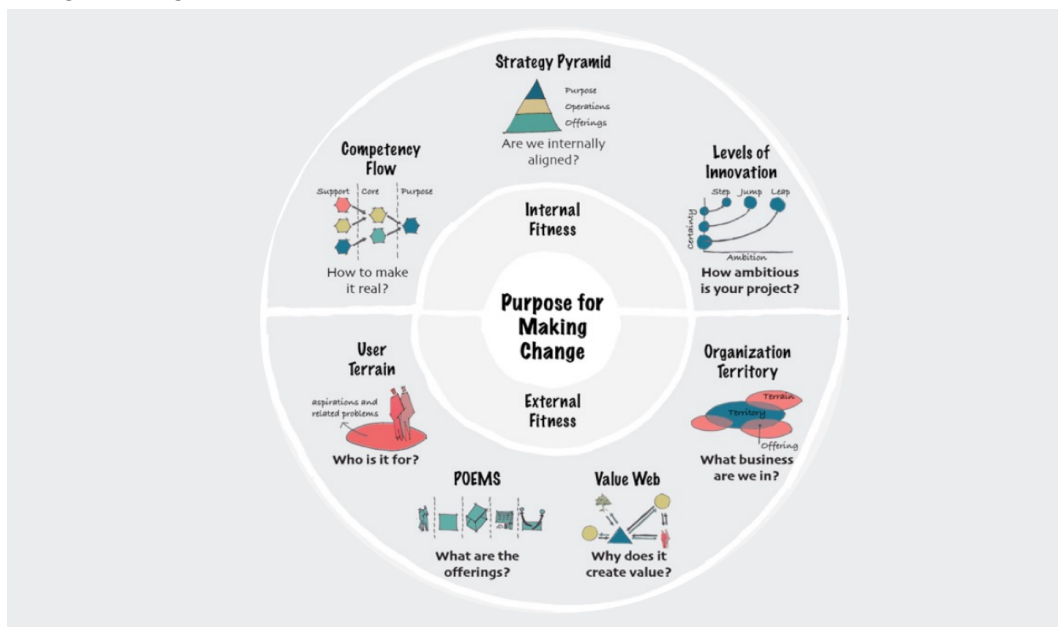




- **Data Synthesis**
- **Criteria + Insights for ideation**

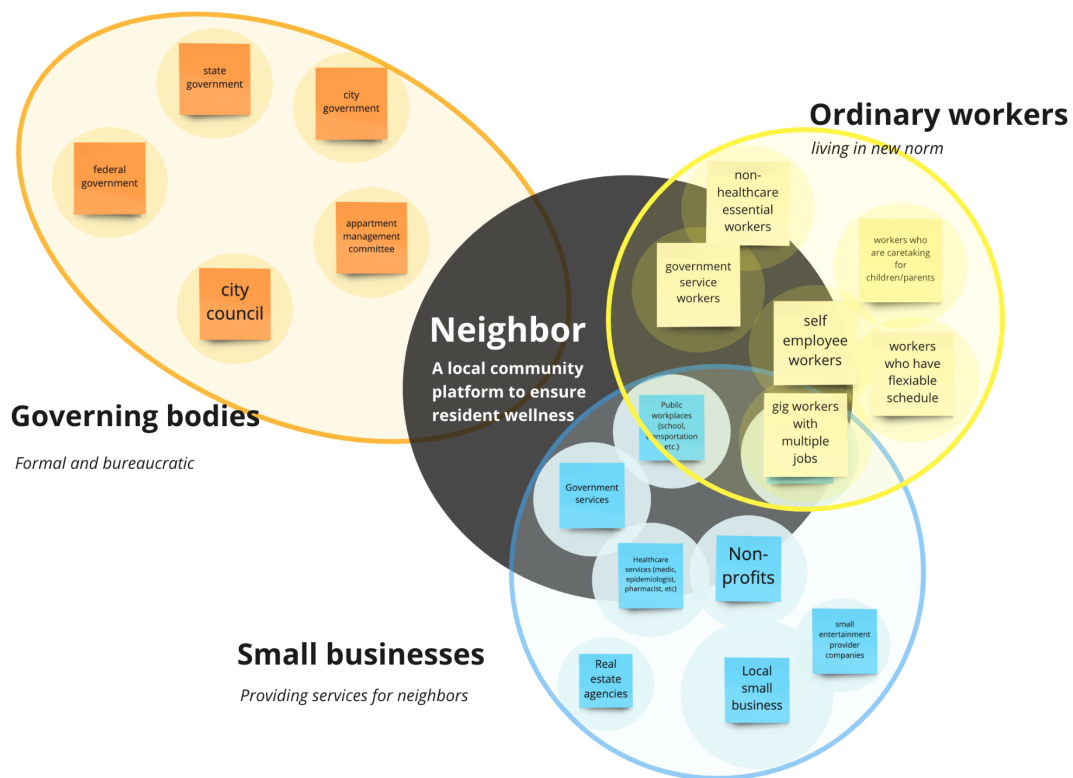
<p><b>Goal</b></p> <p>Uncovering local assets builds autonomy for hybrid workers.</p> <p><b>Design Strategy</b></p>	<p><b>WFN- Work From Neighborhood</b></p> <p><b>Neighborhood as a Workplace Platform</b></p> <p><b>What?</b> Identify on-site resources at a variety of scales in each neighborhood. Offer ideas that connect resources, such as existing local businesses, to existing local infrastructure.</p> <p><b>Why?</b> Offer the flexibility of a third working space (not office, not home), experimenting and getting inspiration from your neighborhood.</p> <p><b>Who?</b> Neighbors who naturally gravitate to remote working and are seeking more regional working dynamics.</p> <p><b>Impact</b> Support local economy by building work in urban spaces. Build community trust. Reduce reliance on WFN resources and/or inspiration. Build networks and resources around program place.</p> 
<ul style="list-style-type: none"> <li>• <b>Build and communicate safety.</b> Craft environments and interactions that build emotional, physical, psychological, and social safety. A sense of safety will allow individuals to be at ease, connect more meaningfully with one another, and target higher goals.</li> <li>• <b>Uncover and reframe resources.</b> Both tangible and intangible, local communities are full of resources that can activate meaningful offerings, but simply need to be called out and framed in a new light. Learning on community values can help center what knowledge, skills, tools, and other resources can be leveraged.</li> <li>• <b>Involve residents as partners.</b> Residents know best what would work for their communities, so they should play key roles in the solution. Residents as the face of innovation will ensure that the design dynamically represents and connects with the needs and interests of the community.</li> <li>• <b>Sustainable infrastructure.</b> Ensure that the solution integrates with other offerings and capacities, so that it does not require outside upkeep for its continuation.</li> </ul>	<p><b>We value emotional safety same as physical safety</b></p> <p><b>What?</b> Artists can design works in the public space of the neighborhood.</p> <p><b>Why?</b> 1. Local arts are a gateway to build 2. Information empowers community to make more choices.</p> <p><b>Who?</b> The worker who work from home or neighborhood, the artists who want to express themselves.</p> <p><b>Impact</b> create more emotional connection in neighborhood. Articulate messages of safety in local vernacular. Cultivate local identity, interests and hobbies.</p> 
<p><b>Design Principles</b></p> <ol style="list-style-type: none"> <li>1. Value both physical and psychological <b>safety</b> when hybrid workers changing to new work-style.</li> <li>2. Increase their <b>sense of safety and belonging</b> by gathering hybrid workers groups together in a safe and enjoyable environment</li> <li>3. Raise both hybrid companies and worker's <b>awareness about the cultural shifts challenges</b></li> <li>4. <b>Expose</b> hybrid companies and workers both the existing <b>resources</b> (such as parks, libraries and office appliances) and hidden resources (such as knowledge, skills and network) around them.</li> <li>5. <b>Involve local residents or business as partner</b> to help provide more valuable resources</li> <li>6. Collect and make all the <b>resources accessible</b> for all user groups to reframe and encourage their works</li> <li>7. Build a new infrastructure which can <b>self-circulate</b> and promote work-style innovation</li> </ol>	<p><b>Awareness of Cultural shift</b></p> <p><b>What?</b> Entrepreneurship Support local incubator to help employee and employer to be change</p> <p><b>Why?</b> the old organization or culture norms could not meet new needs in WFN</p> <p><b>Who?</b> the workers and companies</p> <p><b>Impact</b> delivering a meaningful, engaging, rewarding, reliable, and sustainable employee experience.</p> <p><b>Local Resources – Entrepreneurship</b></p> <p><b>What?</b> Provide business consulting services or training</p> <p><b>Why?</b> the local business and service meet the new needs and challenge</p> <p><b>Who?</b> the new business owner and organization leader</p> <p><b>Impact</b> provide more service at WFN. keep the business afloat.</p>

- **Design Springs with Whole View Model**



## 1.7 Thematic Clustering and Reframing

# How does work fit into the future of community life?



## Section II | Tactical Solutions

### 2.1 Purpose for Making Change

ORION is a matchmaking platform connecting hybrid workers with the right resources in their neighborhood. For neighbors who want to thrive in a hybrid work-life style, but lack inspiring community connection and easy ways to access resources in their neighborhood. ORION offers novel workspace rentals in the neighborhood, supporting individual and communal well-being, that provides public workspace for residents and increased engagement for small businesses. Unlike working from one's home setup, WeWork, or leaning on NextDoor that offers information to get support, ORION uncovers underutilized space, knowledge, and exchangeable resources that neighbors can share to deepen their spatial and social connections in their own neighborhoods.



## 2.2 Who is it for?

Hybrid workers are the type of people who have flexibility to work from a central organizational location, and also from anywhere remotely.

Through the data, we noticed Kate's observations. Adapting rapidly in isolation can make people feel left behind. This is something we centered on in the new opportunities with ORION.

“ When we started, some of the teachers were not ready which is one of the reasons that they are not employed anymore. **They were not ready to mold or change themselves to adapt to this new style of teaching**, like using Zoom, or learning something new or even make Powerpoints.

In the classroom, teaching is different. You have the blackboard, you have whatever your cards or your props. You can show the children easily at ease.

Now the teachers had to learn to make a PowerPoint presentation, to share the screen, to add an audio visual to it. So down the line, they learned, but there were a few teachers who said that **learning and adapting to all of this was beyond them**. So I think age is a factor. They had a mental block or mindset where they claimed to not being able to adapt due to their age. ”



Kate

According to the synthesized data, their aspirations and related obstacles are shown as the following examples:

- “I want to have meaningful connections that enrich my life beyond my work checklist, but virtual work makes it hard to build new relationships and grow beyond my pre-lockdown life.”
- “I want to work from whichever location best suits the work I aim to accomplish, but I am limited to my familiar central office and makeshift home workspace.”
- “I want to learn a new skill, ideally with a personal connection, but not sure who has this knowledge nearby, where I could offer value in exchange.”



**Kate, 27**

Math teacher at community college who is comfortable with new technologies. **Concerned about staying connected to students and families, and colleagues who are unable to adapt.**



**John, 48**

Math teacher at community college who is taking care of his aging mother. **The demands of remote teaching are wearing on him.**



**Lisha, 42**

Accountant who is new to the neighborhood. **Her small business is running well, but she doesn't know any of her new neighbors.**

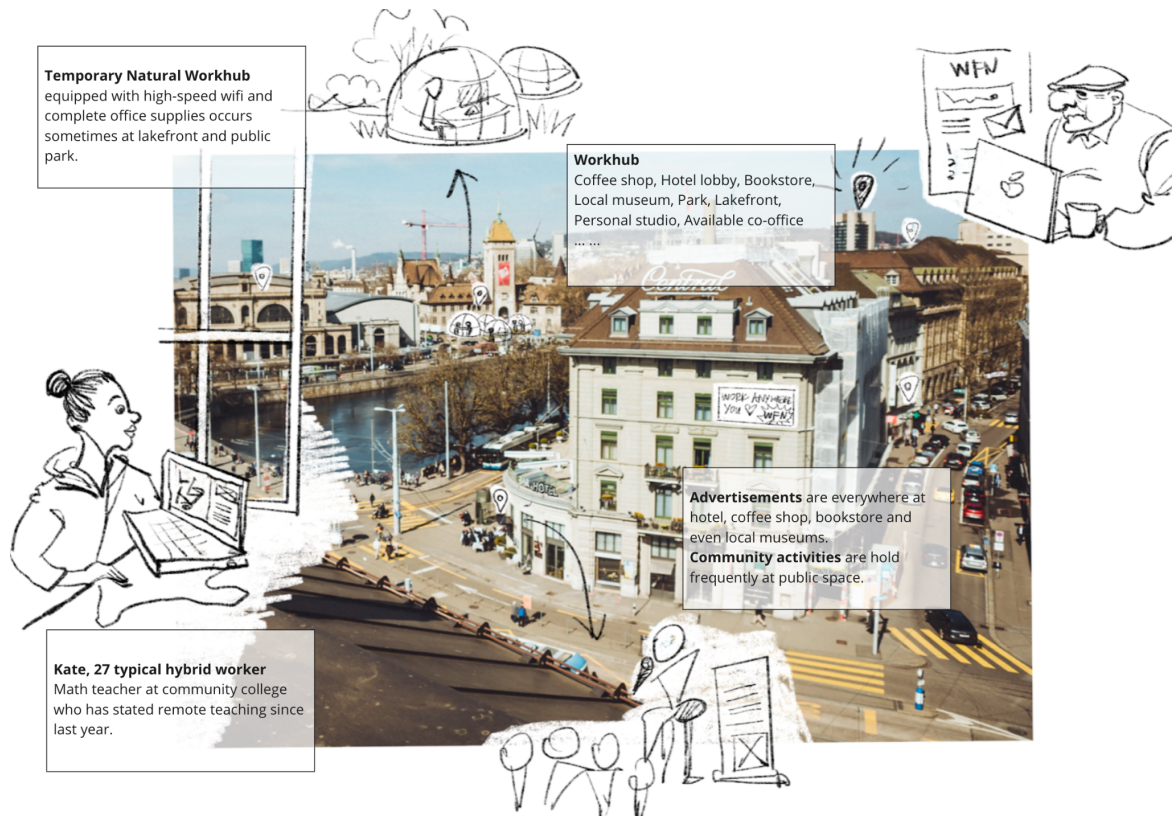


**James, 35**

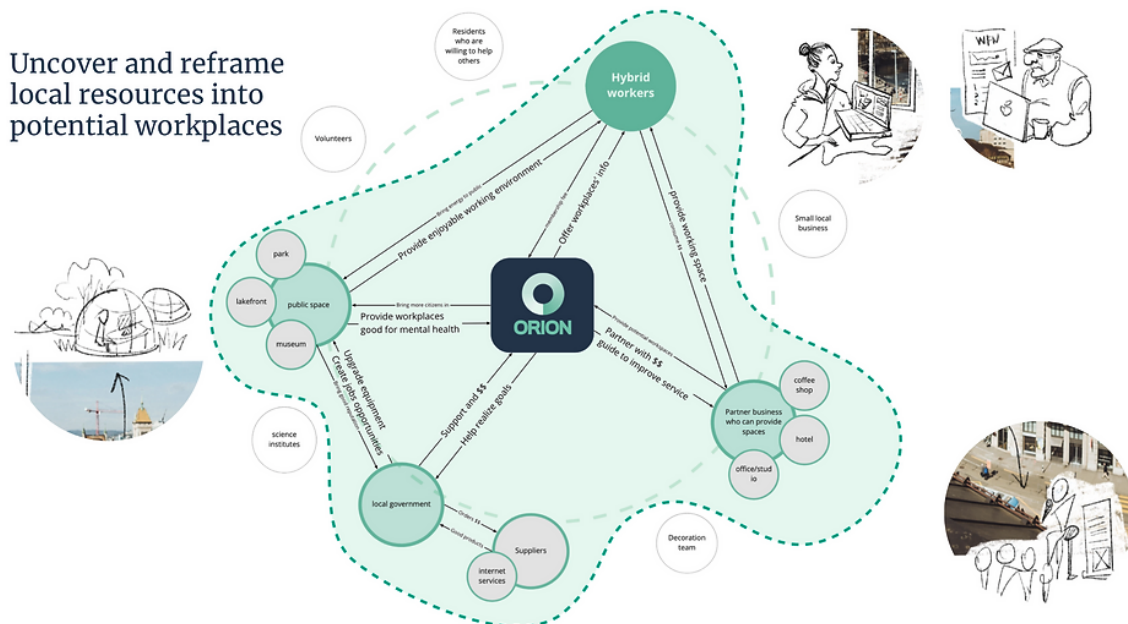
A small convenience store worker. **He lost his job during COVID, but started a mini shop to support neighborhood in his garage.**



## Phase 1: Uncover and reframe local resources into potential workplaces



ORION needs to work with local government and local business owners, who can provide extra space for public use purposely. Then, all those spaces, spots, including but not limited to coffee shops, hotel lobbies, bookstores, museums, natural places, would be improved for work use and equipped with Wi-Fi and other basic working utilities as ORION WorkHubs, which workers can book for use through the website. The whole neighborhood area will be shaped by advertisements prompting people to work from the neighborhood instead of home; every kind of community activity happens frequently in those WorkHubs, redefining the meaning of those public places and the neighborhood.



User-friendly online booking website allows hybrid workers to find where to go.

**ORION** Workplace Service Help Kate ▾

## Work from Neighborhood

Explore new workplace in your neighborhood

**LOCATION**  
Lakeshore ✓ Park ✓ cafe others

**CHECK IN** **CHECK OUT**  
Add Date Add Date

**People**  
2 ▾

People in Your Neighborhood also searched for

All →



**Design studio, Randolph st**  
Work space full of creativity and imagination



**Cafe, James R. Thompson Center**  
Postmodernist-style center



**Lakeshore, Gold coast**  
City beach on Lake Michigan



**Library, Swedenborg Library**  
Thoughtful, sane, and restore the soul



**Park, Washington Square Park**  
Large fountain surrounded by a floral garden.



**Incubator, Merchandise Mart**  
The Art Deco structure at the junction of the Chicago

[Explore more workplace](#)

### What ORION users are saying



Yifei Chen  
Lakeview | April 2022



What a great experience using ORION! I booked all of workplace from my community and never had any issues. When I had to cancel a workplace because of an emergency, ORION support helped me [read more...](#)



Kaori Yamaguchi  
Loop | February 2021



My colleagues and I go to Cafe every weekend, and we usually book our workplace using this services. ORION was recommended to us by a long time friend, and I'm so glad we tried it out! The process was easy and [read more...](#)

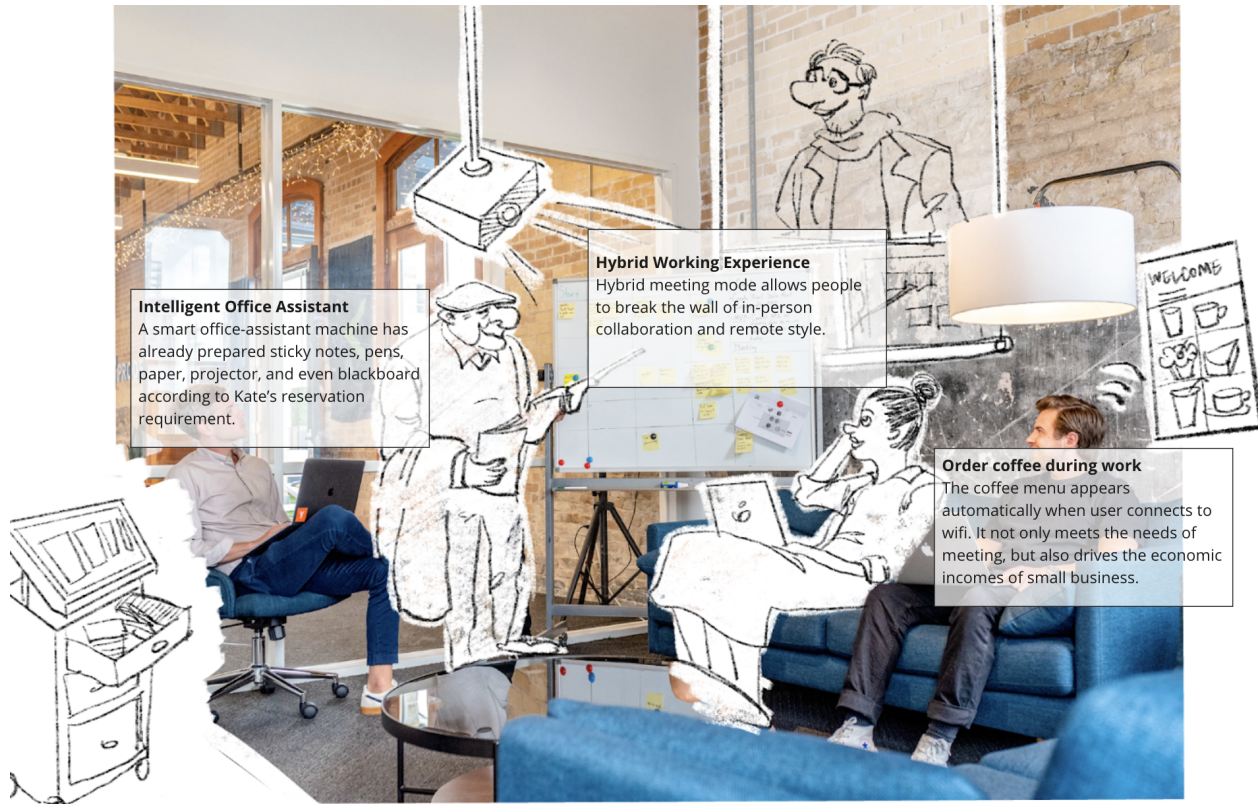


Anthony Lewis  
Gold coast | April 2022



When I was looking to book my workplace nearby, ORION had the best browsing experience so I figured I'd give it a try. It was my first time using ORION, but I'd definitely recommend it to a friend and use it for [read more...](#)

## Phase 2: Provide adaptable and inspiring places to work

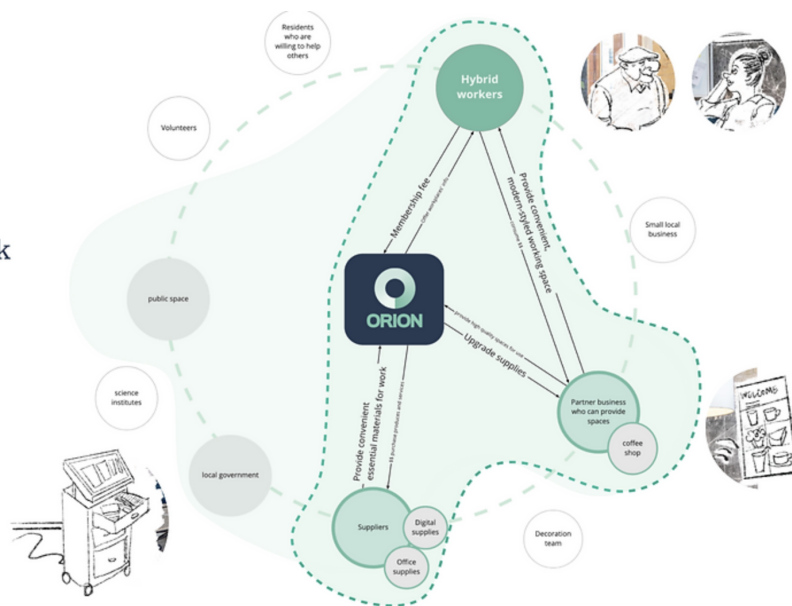


ORION needs to work with suppliers closely to upgrade the WorkHubs to provide customers with a convenient and modern working experience, such as self check-in system, group meeting equipment, and ordering system which allow customers to easily get access to the food and drinks around.

Uncover and reframe local resources into potential workplaces

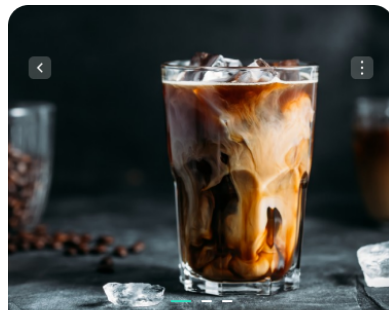
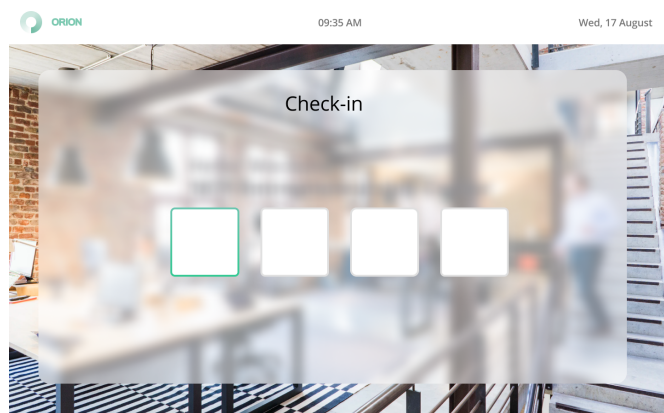
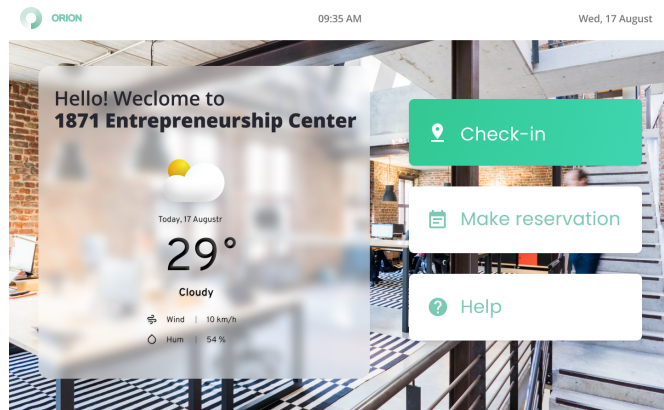
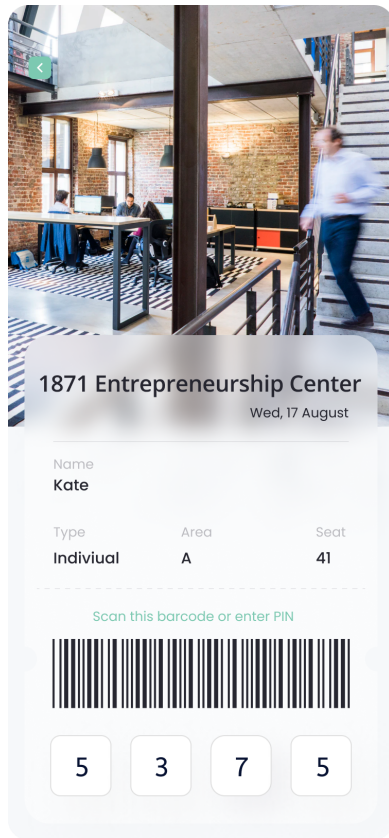


Provide adaptable and inspiring places to work





Check-in system enable high-quality working experience



**COLD BREW**

**DESCRIPTION**

Cold brew coffee is made chilled, never heated, and with a higher coffee to water ratio than regular drip coffee. It's made by creating a concentrate which is then mixed with fresh water (and optional flavorings) when it's time to serve. Though stronger than drip coffee, cold brew actually contains less caffeine.

**QUANTITY**

1 - +

**SUB TOTAL**

\$ 15.00

ADD TO BASKET



Hello, Kate! 1871

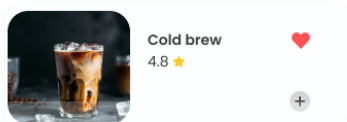
Search bar with magnifying glass icon.

1871 network  
Wifi

Screen mirroring

You have connected to the 1871 WIFI

**Drink and Food Near You**



Recommended shopping experience makes the WorkHub not only a working place, but also a life-style.

### Phase 3: Make intangible cultural resources accessible by involving local residents



ORION needs to find residents who are willing to share their knowledge, and partner with them to provide opportunities to hold events, seminars, etc. All of those activities could be recommended to customers while they are on break or off-work hours, letting them experience the neighborhoods beyond ordinary working. Meanwhile, this could encourage more people in the area to get involved into the system and ORION community.

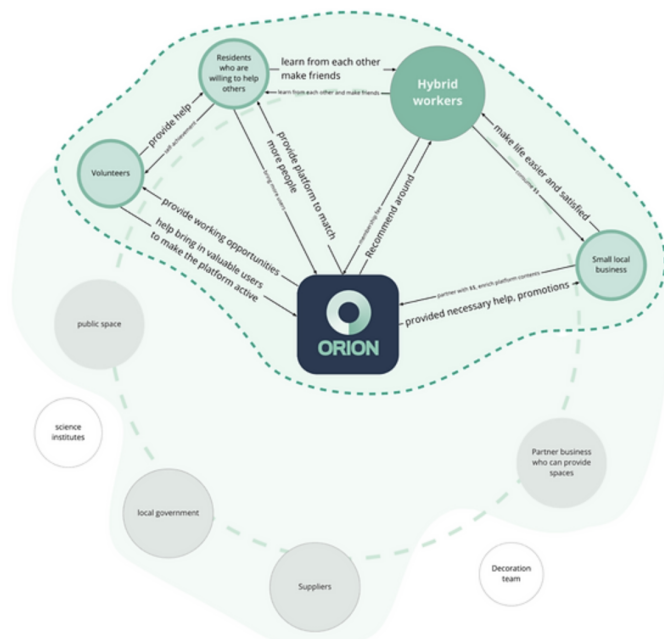
Uncover and reframe local resources into potential workplaces



Provide adaptable and inspiring places to work



Make intangible cultural resources accessible by involving local residents




System will lead the user where to go next, making the resources running efficiently in the neighborhood.

**ORION** now ^

**Hi Kate!**  
Take a break! Stand up and stretch your body 😊.

**ORION** now ^


**Hi Kate!**  
How are you doing today! There are some restaurants and activities nearby. Here is your plan to explore your neighborhood! 😊😊😊




[Cancel](#) | [Explore](#)

Hello, **Kate!** 1871 📍


**Top activities**



**Nearby activities**



**EL Farolito**  
📍 3 min



[🏠](#) [🔍](#) [❤️](#) [👤](#)

## Phase 4: Partner with government closer and keep an eye on neighbor public health



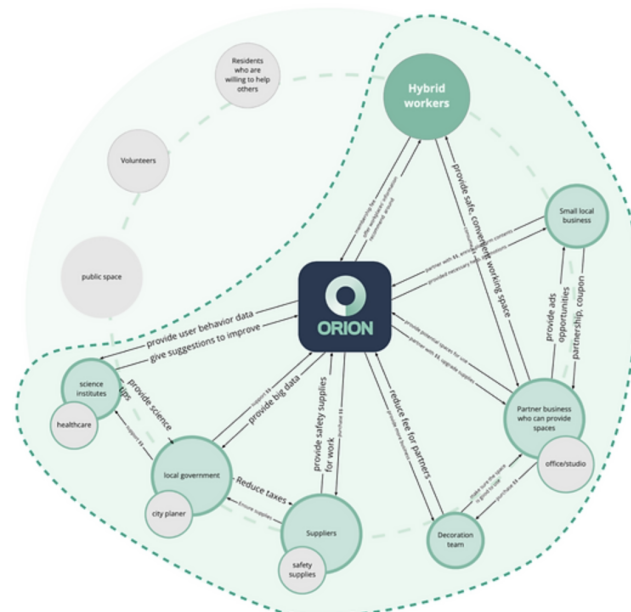
Each WorkHub needs to meet the requirements designed by the government and scientists to ensure the public workplace fits public safety and health needs. With more local small businesses involved, ORION provides a chance for them to have more exposure. A local tour package will be introduced to every member to enjoy the neighborhood they live in. Since ORION has the ability to gather the behavior data generated by members in the neighborhood, ORION could be an important tool to help the government deal with emergencies, data support with urban planning and public health.

Uncover and reframe local resources into potential workplaces

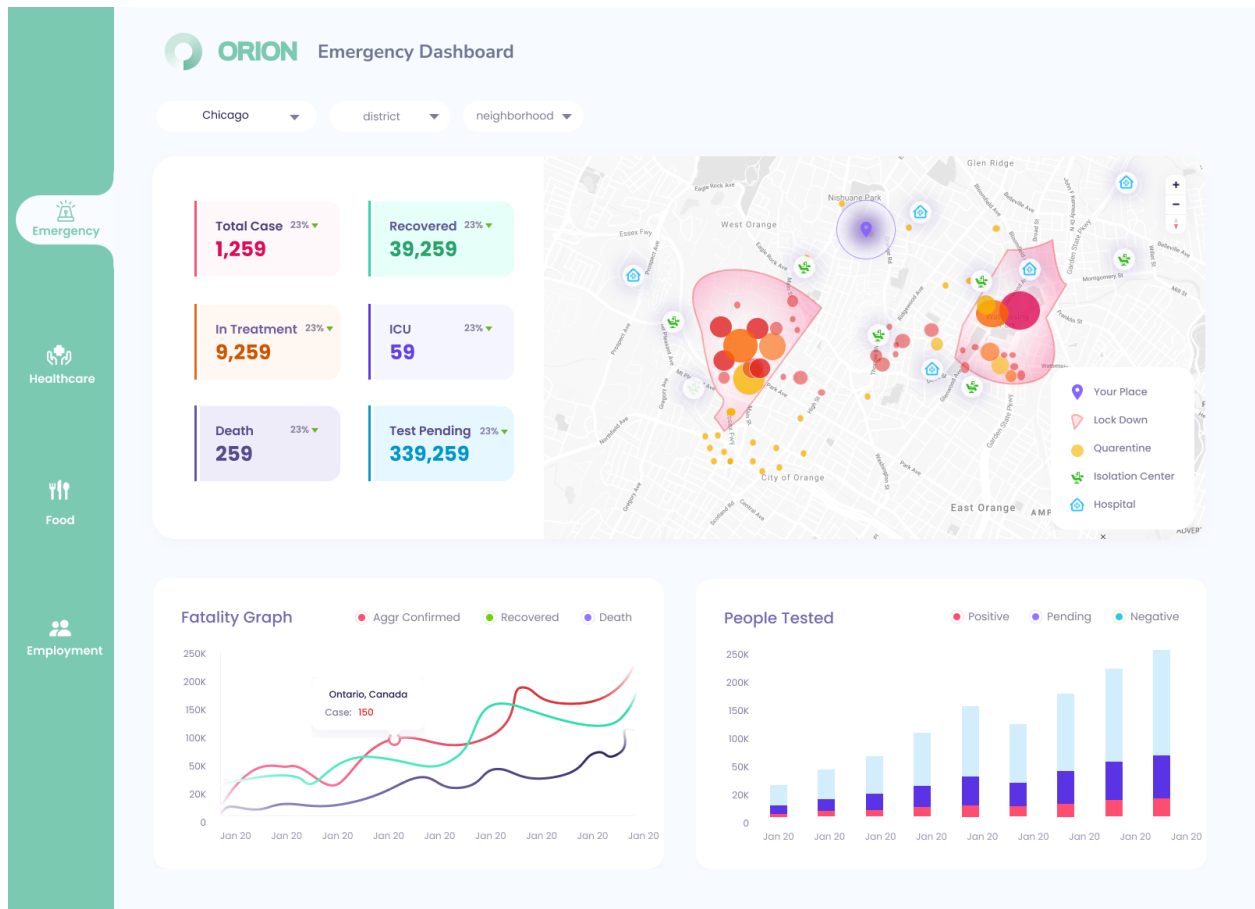
Provide adaptable and inspiring places to work

Make intangible cultural resources accessible by involving local residents

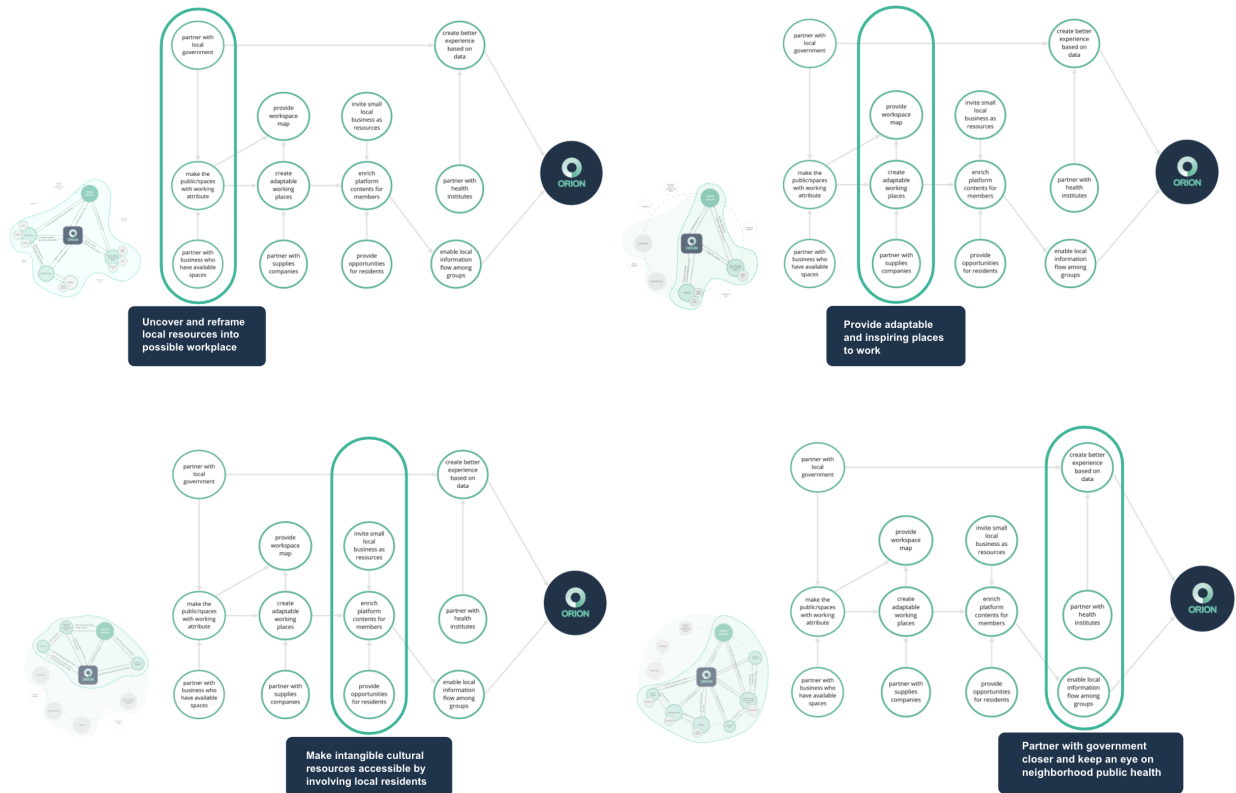
Partner with government closer and keep an eye on neighbor public health



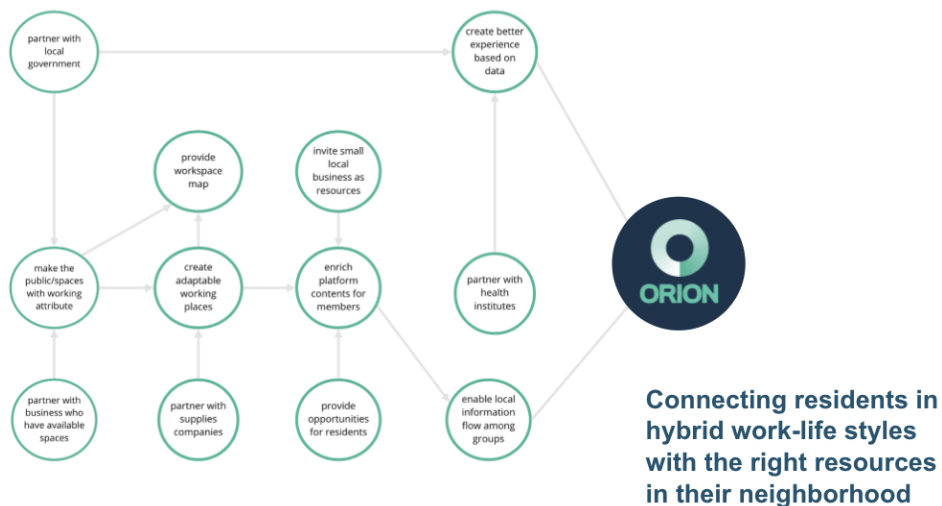
The collected data could be valuable and meaningful for public health purposes.



## 2.4 How to make it real?



First, partnering with local government and business can make the public spaces with working attributes, as a result, Orion uncovers and reframes local resources into the possible workplace. Next, working with supplies companies and creating alternative places could provide adaptable and inspiring places to work. In phase 3, inviting small local businesses as resources and providing opportunities and touchpoints for residents can enrich platform content so that it could make intangible cultural resources more accessible. Finally, in order to partner with the government closer and keep an eye on neighborhood public health, ORION needs to enable local information flow among groups and partner with health institutes. All of these are for one purpose — Connecting residents in hybrid work-life styles with the right resources in their neighborhood.



## Section III | Conclusion

### 3.1 Summary

The global mobilization of various types of resources in response to the COVID-19 pandemic continues to spur new solutions within and across borders. As countries implement new strategies to reopen and bolster their economies, the survival of organizations depends on their competency to adapt and address the emerging public health imperatives and rebuild their productive capacity amid the reality of massive disruption.

The context has changed, and now people are searching for alternatives to fit the new ways people are living, working, learning, and playing. In the absence of tested strategies, or guiding principles, organizations are developing their own tactical responses throughout their offerings and operations to translate public health policies and recommendations into practical, meaningful solutions. However, addressing the scale and complexity of this challenge is beyond the capacities of individual organizations.

Siloed organizational models, exclusionary policies, and fragmented interventions do not adequately address the complexity and diversity that arise from a global disruption such as the COVID-19 pandemic, including its diverse and connected manifestations throughout systems and across industries. The resilience of businesses depends on their ability to tactically participate in emerging infrastructures and leverage diverse competencies in their entrepreneurial ecosystems to improve the health of the public.

While rapidly adapting to new realities in the midst of large-scale disruptions, our design can support leaders by quickly exploring options and prototyping alternative pathways to change, reducing uncertainty about an organization's choices when there is no clear direction ahead. The structured use of design frameworks and methods can also help leaders transfer learnings from across their prototypical interventions, and combine and adapt meaningful solutions to create new infrastructures that can unlock healthier livelihoods.

This report supports local government, businesses and residents redefine and rebalance work-life style after pandemic for social wellness and public health from the following five main perspectives:

- **Uncover local resources**

*Equip local government, businesses, and residents with the knowledge and tools to uncover and reframe the invisible, idle but adaptive local resources for the usage of public health.*

A major disruption brought by the pandemic has been in the rigid operational structures of neighborhood organizations that are based on predefined task flows geared toward maximizing wellbeing. Faced with a rapidly changing environment and new needs of residents, the new offerings had to rapidly adapt their service offerings and operational flows in order to cater to the needs of society.

As the impact of public health policies have depended on the responsiveness of governments and industries to facilitate new interactions, Orion takes the role of translating public health policies and guidelines into concrete applications. By uncovering and reframing both tangible (physical materials) and intangible (knowledge and skills) local resources into a matching system, Orion can be a driver in the **creation of new infrastructures** and motivate the opt-in behavior of users.

- **Lead adaptive governance.**

*Support government works across organizations to build adaptive capacity and empower local residents and businesses to cooperate when needed.*

When the urgency of keeping everyone safe and healthy took priority over following rigid processes, governments had to adapt their decision-making processes to rapidly mobilize their resources and activate their competencies to address public health imperatives. Orion helps governments adopt a solution-oriented approach by encouraging local businesses and residents to exchange resources, and by activating the generation of insights in real-time, to inform fluid decision-making and reduce barriers between departmental silos.

Faced with fluctuating demand and uncertainty, Orion relies on **flexible collaboration and resource allocation** to increase its service capacity and unlock the capabilities of government beyond its traditional collaboration modes. Orion's digital platforms system provides not only resources exchange but also public health reporting services for local governments to address evolving needs of residents.

- **Enable responsible choices.**

*Present your users with new choices to address public health imperatives and motivate responsible behavior.*

The public health imperatives imposed multiple constraints on both daily interactions and work modes, requiring individuals to compromise their personal comfort to protect lives. When addressing the safety concerns took priority over other goals, organizations needed to offer new, safer ways for their users to access their services. But solely imposing limitations on organization-user interactions is not a viable long-term strategy. Therefore organizations need to present their users with new choices, new possibilities for interacting with their offerings, not only to motivate responsible behavior but also to create a virtuous loop in the neighborhood.

In many industries, public health is becoming a new currency, increasing the value of offerings related to risk management and improved well-being. However, since most existing infrastructures were not designed out of consideration for public health, our new offering, Orion, highlights social wellness as a privilege. By establishing a matching system that can connect the right resources of public health considerations in the design of new infrastructures, Orion **fosters positive behavior among users**, organizations to present choices that can enable



their users to receive feedback regarding the impact of their actions while experiencing a sense of comfort regarding safer interactions.

- **Leverage entrepreneurial ecosystems.**

*Leverage the capabilities of local entrepreneurial ecosystems to rapidly seed, transfer, and combine solutions—and accelerate local economic development.*

The scale and complexity of the disruption brought by the COVID-19 pandemic expand beyond the capabilities and territories of individual organizations and thus cannot be addressed by fragmented interventions. A local government's ability to rebuild with resilience depends on its capacity to quickly mobilize resources and knowledge, and leverage the competencies within its entrepreneurial ecosystem.

The multiple and interconnected manifestations of public health imperatives called for infrastructural interventions in areas beyond the immediate territories of individual organizations. This need triggered organizational partnerships that **combine competencies** to unlock new opportunities and leverage the impact of entrepreneurial ecosystems. In order to take advantage of the combinatorial possibilities of their competencies in the design of new infrastructures, By reintegrating locally available resources, Orion provides income-generating opportunities and safety support for local entrepreneurial businesses, hybrid services and employment opportunities for local residents, and economic development for local governments. Orion changes neighborhoods' structures, processes, and mindsets to bridge organizational silos for the upcoming future after the pandemic.

- **Foster collective intelligence.**

*Invest in data-enabled intelligence to bridge organizational silos toward design of integrated infrastructures.*

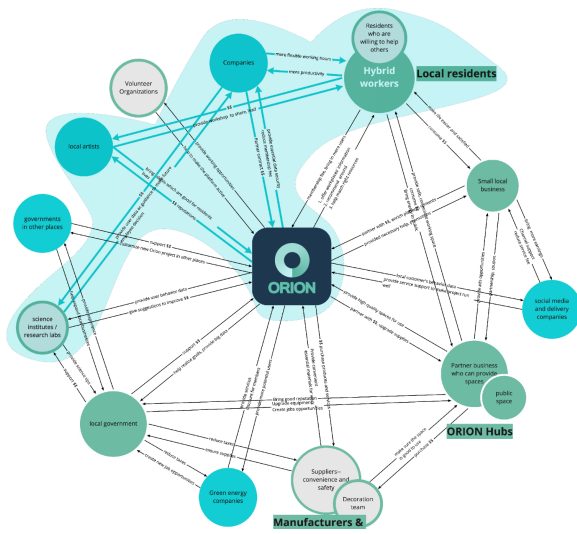
Building resilience against major disruptions such as a pandemic depends not only on the collective intelligence of government and industries to predict disruptions but also on the ability to rapidly implement preventive and restorative measures. In order to grow and leverage collective intelligence, organizations need to build infrastructures that can **enable integrated data collection** across industries and geography. The lack of infrastructures and protocols for **data sharing** leads to fragmented information that does not reflect the complexity of a large-scale event such as the pandemic. In order to address challenges across interconnected systems, government and industries need to build infrastructures with protocols that can enable sharing both data and knowledge. The one-way information flows that characterize current knowledge infrastructures need to be replaced by integrated feedback mechanisms for networks, organizations, and users that can help build collective intelligence—at all levels

While technological developments such as AI-powered data collection infrastructures reduce the time and cost of informing decision-making processes, over-reliance on devices can lead to exclusionary data collection mechanisms and skewed statistics. Organizations need to invest in inclusive, unbiased, and secure data collection infrastructures to access reliable data to build

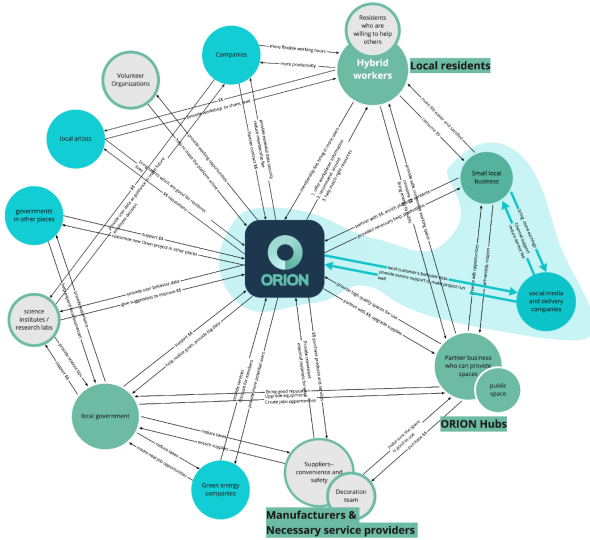
collective intelligence. Orion provides a potential solution for neighborhoods that every resident can be a data collector as well as a data user for public health reporting and social wellness maintenance.

### 3.2 Future Envision

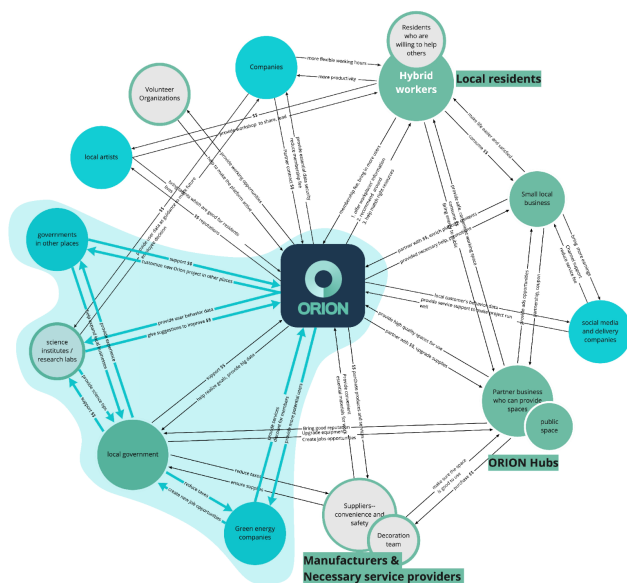
New players will be involved to improve the system in the following three aspects:



**Individual aspect:** Players like Artists will bring more joyful experience for people’s daily life, employers will cooperate with ORION to ensure employees’ benefits.



**Business aspect:** More big companies will come to serve every necessary parts, ensuring the development of the new norm.



**Society aspect:** Scientists will evaluate the data that the new norm creates so that it helps governments develop social well-being.

### 3.3 Design & Public Health

The disruption brought about by the pandemic has radically changed the ways humans interact with each other and their environments. In the midst of this transition, both governments and businesses have sought to translate public health policies into practical, accessible solutions to reshape everyday life, which call for an integration of design and public health practices. Without this essential combination, organizations cannot expect to improve their capacity to translate scientifically grounded policies into systems of offerings that will address public health imperatives.

However, the intersection of these two disciplines is still nascent, and the competencies that organizations urgently need are not readily available. Bridging the gap between the two disciplines requires a critical and intentional investment in new competencies at all levels of practice, as well as asking: “What if we could center design practices around public health?” Currently a few organizations such as the Design for Health<sup>5</sup> initiative of USAID and the Bill & Melinda Gates Foundation, and the Design Laboratory, or D-Lab, at the Harvard T.H. Chan School of Public Health are undertaking this mission. Only by advancing this mission we can be capable of addressing the common good, alongside the needs of individuals and organizations.

It is essential to remember that the imperatives that have been rendered obvious by this pandemic are part of a larger endeavor—one that calls for audacious leaders to move the purpose forward. Although not extensive, we regard this report as an explorative step of tactical design for envisioning a public health challenge in the emerging transdisciplinary field of social innovation.