IRP Realisation

Topic: Urban Resilience against a future disease “X”

Date **23rd July**
Student name **Sacchita nandi SriGanapathiraju**
Student number **10050519**

Royal College of Art

Table of contents

Statement of authorship
A.Project overview
1.Summary statement
2. Key research findings
3. Project development
4. Stakeholder map and audience - updated
5.Scenarios
6.Preferable future(s)
7.Theory of change, design strategy & roadmap
8.Outcomes
B.Reflection
9.RCA2025
10.IRP
11.Next steps
12.Professional futures
Reference List - updated
Appendix 1: Project outcomes
Appendix 2: RCA2025
Appendix 3: Public documentation
Appendix 4: Final presentation

Royal College of Art

Statement of authorship

I, Sacchita Nandi, confirm that this Independent Research Project is my own original work. All sources and references used have been appropriately acknowledged, and any collaborative contributions or external materials have been clearly cited. This work has not been submitted for any other academic assessment. I have not used chat gpt or other AI tools in any use here, apart from a few text enhancements in one instance in the personal objectives page.

Signed,
Sacchita Nandi
Date: 23rd July 2025

Royal College of Art

A. Project overview

1.Summary statement

As per predictions, by 2050, antimicrobial resistance virus *(or others too based on past patterns)* could cause 10 million deaths annually without intervention *(O'Neill Report, 2016).* We are not equipped for this. Our last pandemic, the Covid 19 was a clear indicator of an overworked system that killed over 20 million people worldwide.

Grounds up herd immunity and community support helping each other in an orderly manner, is our best best. My intervention is to hence help preparedness teams within local councils facilitate this grounds up preparedness within communities. Preparedness efforts have always been reactive, and it is time to make them focus on preventative measures.

2. Key research findings

/ Key research insights:
1.Top-down and ground-up approaches must work in a loop: Real impact requires continuous feedback and collaboration between communities and policymakers, with public health teams best positioned to facilitate.This insight came from studying the systems responsible for responding to a new pandemic. Top down approaches alone have not worked without community voices, opinions and needs being taken into consideration. Grounds up approaches often lack the power, funding and resources to work and impact at scale.

2. Shift ownership and solution-building back to communities: Move beyond extractive data collection and empower communities to set visions, co-design interventions, and track progress with public health teams supporting and amplifying these efforts.This insight came from secondary research where it became clear that while grounds up work was being done, it was many at times done in an extractive manner that did not give back to communities. This meant people often had no idea why their data was being collected and what it was being used for, whereas this data if feeded back could help the community see a clearer picture of their core issues..

3.Futures thinking and agency: Interventions should provoke futures thinking and agency, especially among the least advantaged, using speculative and participatory methods to disrupt "business as usual" and trauma narratives. Herd immunity remains a key strategy.This insight comes from secondary research that herd immunity is our best shot for most foreseeable future pandemics.

4.Policy must be driven by community- Effective policy should be informed by lived experience, speculative outputs, and clear community priorities and not by one-size-fits-all solutions.This insight came from the Covid 19 Inquiry that existing policy decisions made during the Covid 19 were not effective as it failed to take in other factors like social income disparities, language barriers and distrust into account when it came up with interventions.

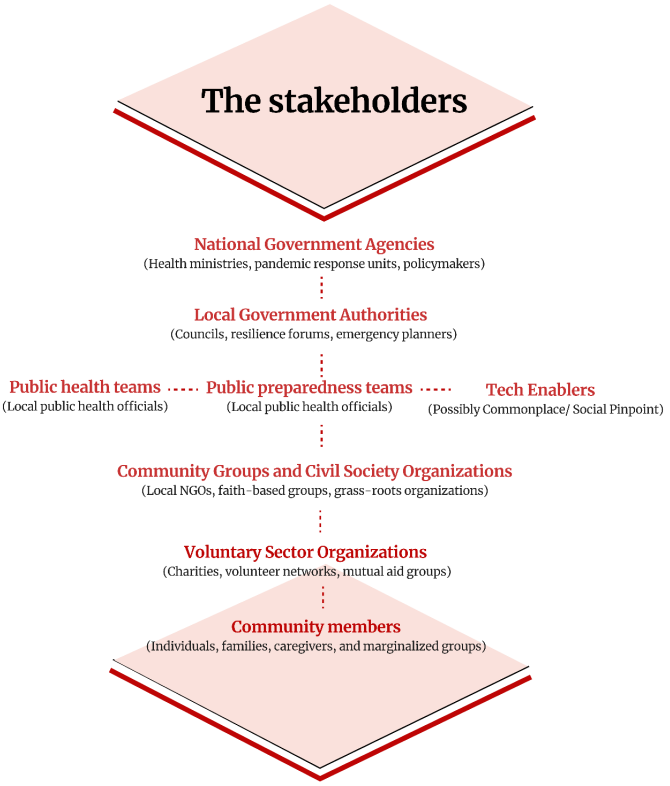
These insights fit in very well with my previous research as most of them originated from my secondary readings. These were validated through my primary research interviews with experts who talked about this in much finer detail. Conversations with the experts from the Public Health team in Newham Council especially helped as they pointed out the incredible support from community organisations to get things moving as they were not sure who needed what support and how to reach people.

These insights have since shaped my intervention which is a toolkit designed to equip preparedness teams to build back trust, and help communities tackle existing issues within their localities. This

would give them and the communities a clearer understanding of what existing barriers stop them from reaching their collective future visions and how to overcome them together.

3. Project development

4. Stakeholder map and audience



The audience for this project is:

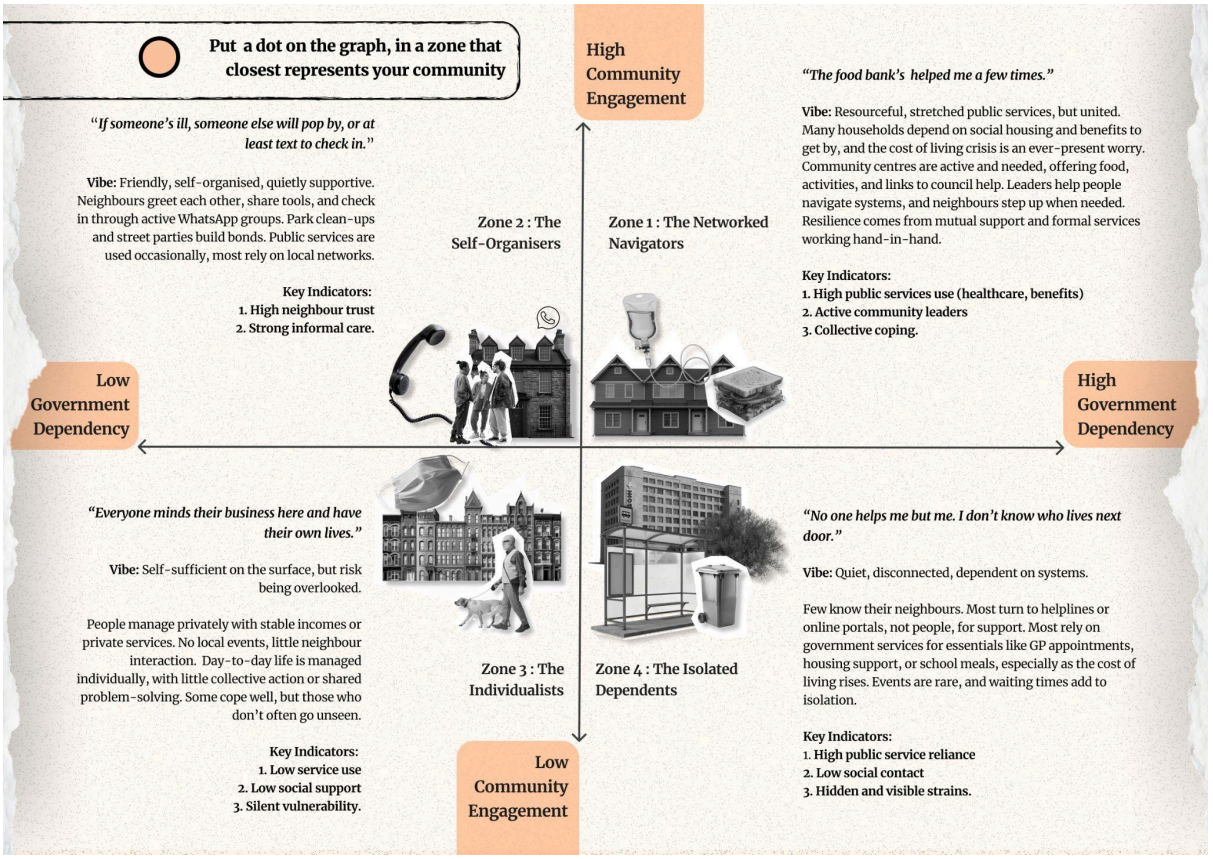
1. **Preparedness teams within London** - equip them with the right toolkits needed to gather insights from the ground, foster better relationships and build preparedness training within communities.
2. **Local people living within different boroughs** in London. My target is to start with the council of Newham as they have been collaborating in the research project and the insights are contextually relevant to them.

I have also included community organisations and other voluntary sector organisations as it was clear through my research that the backbone of most community faced work was dependent or heavily supported by these NGO's , food banks, and faith groups within the areas. They knew the people and their needs the best.

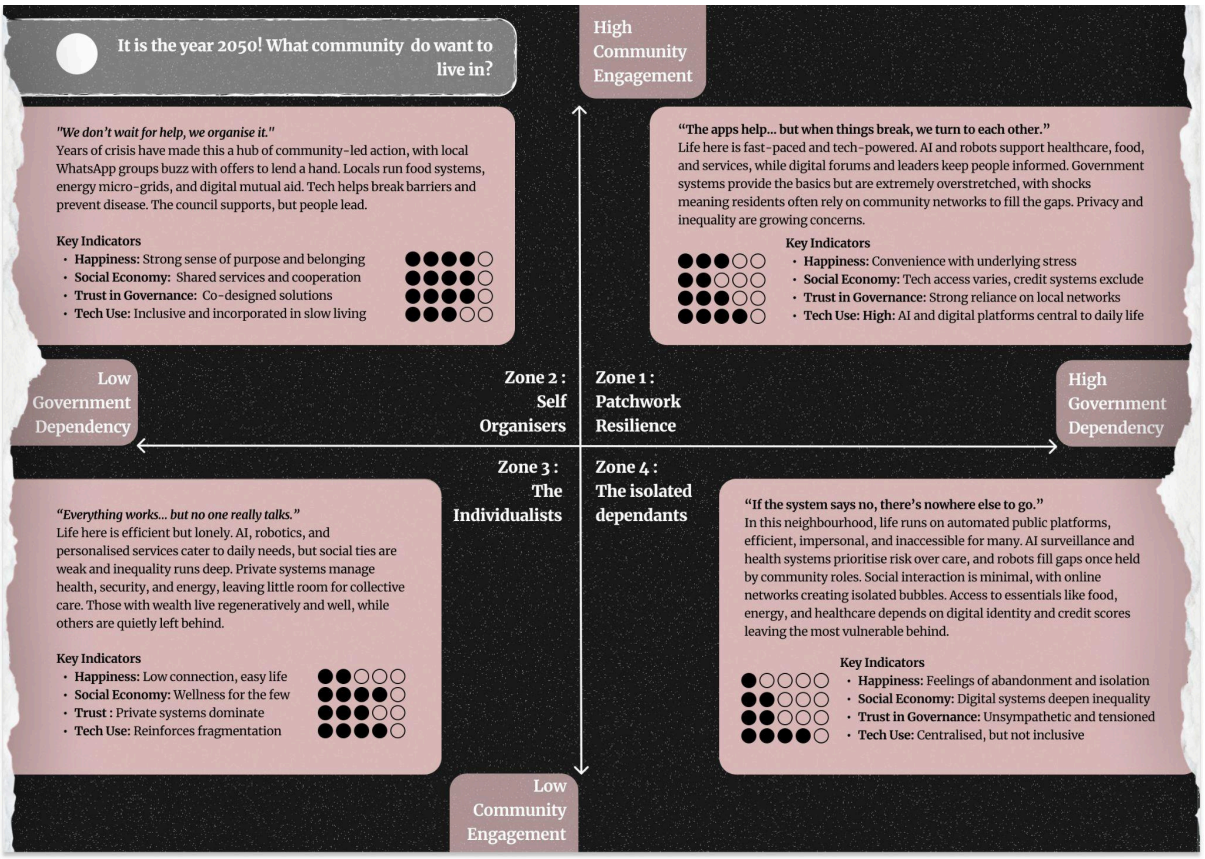
Tech enablers also become key, like "Social Pinpoint" as possible enablers within this intervention to document all the data digitally (through a knowledge management system) so it can have maximum visibility for all actors involved. This would also be needed to scale the intervention to other councils.

5.Scenarios

Present scenarios



Future Scenarios



The first part of my intervention is designed to help communities:

1. Envision collective, better futures for themselves, and
2. Identify where they currently stand, and what steps they would need (and offer) to move toward that future.

To enable this, I developed four distinct scenarios for both the **present** and the **future** using **two axes**: level of **government dependency (high ↔ low)** and **level of community engagement (high ↔ low)**.This intentionally maps how trust in public systems intersects with a community's capacity to act collectively, both today and in 2050. It also maps existing social economic conditions and needs of people within the government for that community.

For the **present-day scenarios**, I began by plotting qualitative data from local interviews and workshops along axes of socio-economic inequality and levels of community involvement. These were overlaid with geospatial data using interactive maps from London.gov, filtering for boroughs with:

- High ethnic diversity
- Deep socio-economic disparities
- Low trust in public institutions (especially policing)

This analysis led to identifying boroughs such as Newham, Barking, Lewisham, Croydon, Hackney, and parts of Chelsea & Kensington (due to RCA partnerships). These provided a grounded base for developing present-state community profiles and needs.

The **future scenarios** operate within the same framework but are shaped by key signals and trends identified through horizon scanning. These include:

- Climate migration and growing urban density
- Rise of AI, surveillance technologies, and geopolitical instability
- Increasing health vulnerabilities due to socio-environmental breakdowns
- Widening inequality, isolation, and energy scarcity
- Ongoing pandemic risks from human-nature spillovers

Each future scenario imagines a distinct 2050 world that reflects how communities might evolve, or regress, based on how they engage today. These narratives act as provocations in my intervention, helping participants locate their current context and co-imagine pathways toward collective, resilient futures.

6.Preferable future(s)

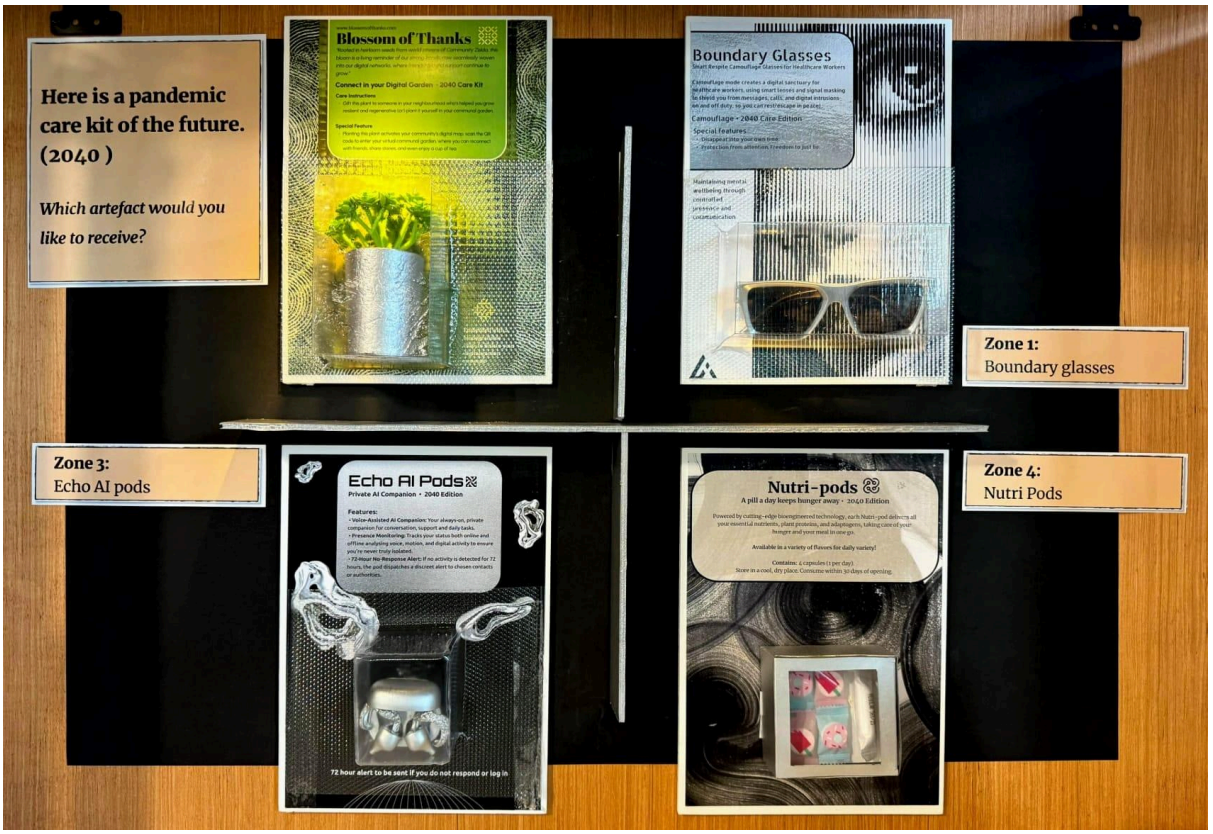
My preferable future was grounded in foresight research and community wellbeing insight. After mapping present-day neighbourhood types using axes of **government dependency and community engagement**, I defined "Zone 2" , *low government dependency, high community engagement*, as the **preferred quadrant**. The aim: build futures where people trust institutions but do not wait for them, instead taking collective action into their own hands.

Set in 2050, this future responds to compounding crises: **climate migration, pandemic recurrence, energy instability, and growing socio-political fragility**. In this world, resilience is built locally. Communities operate their own **food systems, health services, energy micro-grids, and digital mutual aid networks**. Migrant integration is made possible through inclusive design and digital tools, and AI-supported health surveillance focuses on prevention, not control.

This future directly addresses the complex challenge identified in my research: the erosion of trust between communities and public systems during COVID-19, and the lack of preparedness, equity, and cohesion that exacerbated its impacts. Through interviews, workshops, and spatial analysis, I observed that in moments of crisis, **community capacity often filled institutional gaps**. This insight shaped my problem framing: how might we strengthen that capacity and rebuild trust, not through top-down control, but through shared ownership?

In this scenario, the government remains a key actor setting ethical standards, providing infrastructure, and enabling communities. But people lead. They act swiftly, self-organise, and co-create adaptive responses. “We don’t wait for help, we organise it,” becomes the shared ethos.

Limitations include the assumption of widespread digital access, sustained social cohesion, and equitable migration outcomes, all of which require long-term investment and support. Further work is needed to prototype policy scaffolds and behavioural shifts that make this future plausible. This is also a utopian future with a seemingly relative and balanced economic background for most people, which is not the most realistic turn of events we might be heading towards. But the intention is to enable communities in the now, to visualise better futures for themselves.

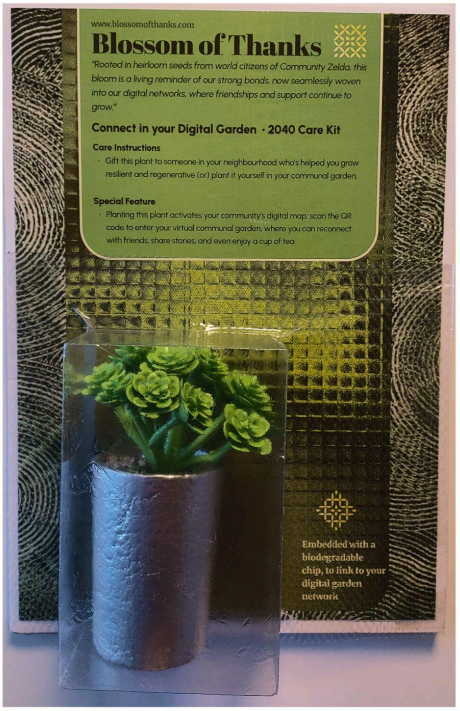


Picture 1: Provocation about the future scenarios using Artefacts to depict the scenarios better. The blossom of thanks artefact is the preferred future world.

Zone 1

The world and your community:
These smart glasses camouflage your presence in both online and offline spaces, a tool healthcare workers use to take time off without being found. They offer a critical glimpse into a world where rising health issues and deepening social inequalities have pushed healthcare systems to the brink. However amidst overstretched services, strong community support is evident through the artefact that seeks to give nurses respite from being bombarded by unofficial queries too.

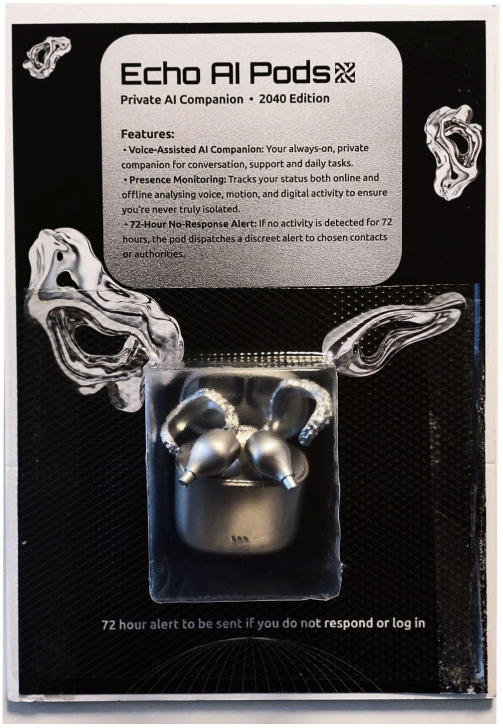
.



Zone 2

The world and your community:
This token is a gift, a symbol of ongoing rituals of gratitude and connection with each other. It's planted in the communal garden, so one can seamlessly transition into digital VR spaces to connect during pandemics. It belongs to a world shaped by regeneration, strong neighbourly ties, ritualised care, and collective responsibility. Here, decentralised healthcare and self-organised communities mean people turn to each other first.

.



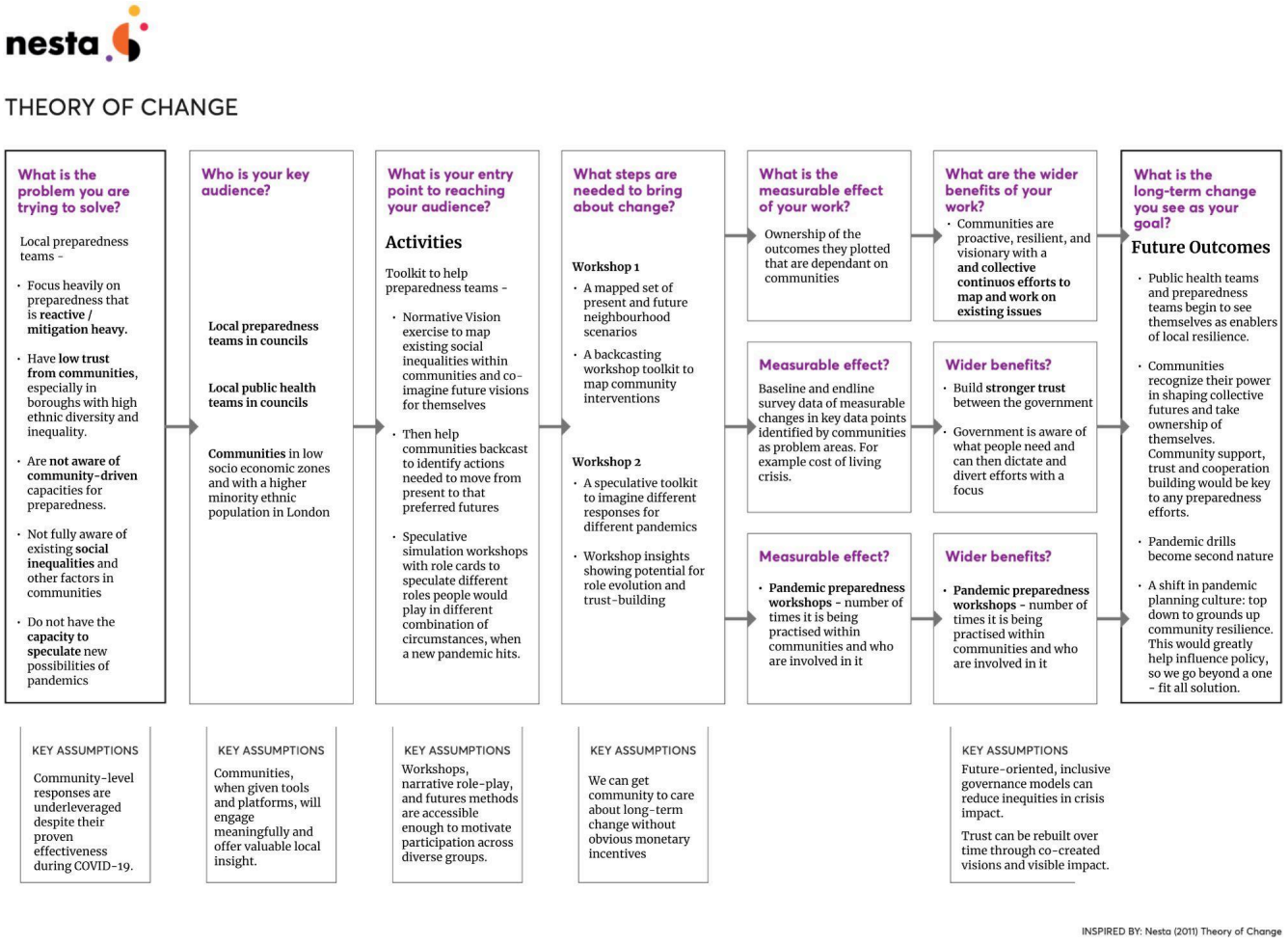
Zone 3

The world and your community:
This AI-powered ear wear acts as a companion and silent guardian, tracking your presence and alerting authorities if you go quiet for too long. It reflects a world where loneliness is widespread despite material stability. People rely on personal AI for connection, and safety, in a society where social bonds have weakened and human touch is rare. While the economy functions smoothly, emotional well-being depends on digital systems.

Zone 4

The world and your community:
These all-in-one nutrient capsules are designed for survival in a future where food systems are overworked and community ties have eroded. They reflect a slightly desolate world shaped by a lack of preparedness, where public services are minimal, isolation is the norm, and hunger is a quiet but constant threat. With no neighbour to turn to and no system to rely on, this is a stark reminder of what's left when safety nets break down.
.

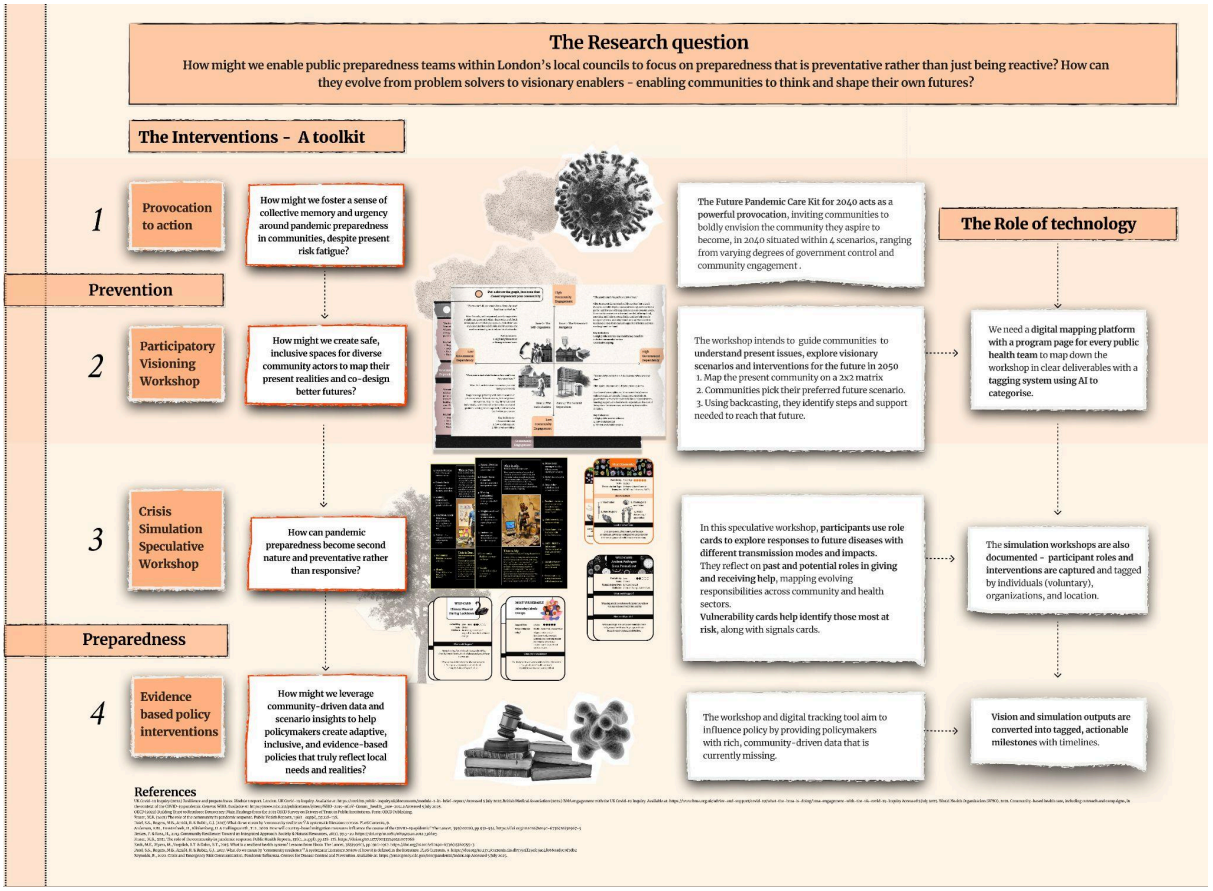
7.Theory of change, design strategy & roadmap



My project aims to shift the current reactive, top-down approach to public health preparedness in London boroughs toward a more proactive, participatory model. Through a speculative and systems-based methodology, I explore how local councils and public preparedness teams can evolve from problem-solvers into visionary enablers, supporting communities to imagine and shape their own futures. The intervention point lies at the intersection of trust, foresight, and governance. By creating a simulation-based toolkit and running a pilot workshop using future scenarios and role cards, the project helps both citizens and local authorities reimagine their roles in pandemic preparedness.

The outcomes of my IRP, ranging from co-designed future visions to tested engagement tools are designed to be scalable and adaptable across boroughs. The anticipated impacts include increased community trust, agency, and collaboration, particularly in areas most affected by systemic inequality. For councils, the approach provides new tools and insights for engaging with diverse publics. Ultimately, I hope to enable long-term, citizen-led resilience planning. Impact can be measured through qualitative shifts in trust, participation, and preparedness behavior, as well as policy adoption and toolkit replication. A phased roadmap however can only be formulated in consultation with preparedness teams based on how much time shifts in behaviour and adoption would need. This is an ongoing project and the talks to get details about the estimated timelines and milestones will be happening next.

8.Outcomes



Outcomes & Rationale

The outcomes include 4 present scenarios and four future community scenarios, a speculative simulation toolkit (with role cards and prompts). These were designed to help local councils and communities collaboratively explore and prepare for future pandemics. Grounded in interviews, systems mapping, and socio-economic data of London boroughs, the outcomes reflect key trends such as climate migration, rising health risks, and digital trust. For each output was tailored to provoke reflection, support preparedness planning, and shift public health teams from reactive response to visionary enabling.

B.Reflection

9.RCA2025

For the exhibition, the display included the workshop plans on the table but the main attraction was the **"Museum of the future 2040"** - where I invited people to choose a **"Future pandemic care kit"**. The idea was to use the artefacts to provoke thought about what future scenarios could look like. This invited them to think about what futures they would like for themselves and how they would get there. Many people ended up choosing the glasses or the flower pot, making it **Zone 1 and Zone 2**, which were intended as probable and preferable futures respectively.

I then walked them through the importance of the workshop plans, starting with predictions on when

the next pandemic would be. In our case, with WHO predictions of a high risk zone from 2040, I then talked about whether they felt they were prepared for it. Most replied in the negative. I proceeded to ask them if they felt our systems were equipped to deal with it and got a stronger negative reaction. This was my cue to talk about my intervention, where I highlighted the importance of being prepared and thinking about different pandemics that may affect us. I introduced my speculative simulation cards, and asked them to choose from a pandemic. When they did, I asked them what roles they might play in the future, questioning them to think about the help they might need and help they give. This led to a few interesting conversations that led to my point that without mapping existing social inequalities we cannot get to our collective future visions. My workshop set 1 was a way of mapping that.

The general reception was that people took it quite well. People were quite amused and fascinated by **the artefacts from the future**. They found some a bit bleak but surprisingly quite realistic. That provocation was a great starting point, though many were quite dismayed by the notion of another pandemic, as they looked a bit sad when it was mentioned. The notion that a new pandemic has unfortunately been predicted to afflict us not long from today, does seem to not surprise people, and they really liked the various wildcards. The wildcards opened up thinking of new permutations and combinations of pandemics as well as other factors like a climate evacuation for example that might affect people at the same time.These were part of another set of Wildcards, designed with the intention and understanding that we have to be prepared for other external factors like climate change to either aggravate or ease the situation when a pandemic hits us, as most disasters do not happen in isolation.

What I truly was not expecting was that many people did think of worst case scenarios that they would have to fend for themselves, so this toolkit gave them a chance to test out their preparedness and survival skills in theory (*the younger generations*).

As for improvements within the outputs, it would have greatly helped if I could have done a few workshops with the existing decks I had, to test out the idea. However, while that was not possible due to time constraints, I was able to conduct a speculative workshop leading to the final outputs that gave me a lot of insight. In terms of improvements to the exhibition, physically in the space in retrospect I had a lot of information to display that would have been overwhelming for the audience. This might have surely confused people, making it harder to focus on a core or key area. So while one change would be a simpler layout, I also realised I could have also used the opportunity to gather data from people on what future roles they would play and what they would do if a pandemic affects them. This could have become the grounds for data collection, but it was a slightly missed opportunity.

10.IRP

My updated research question and aims:
How might we enable public preparedness teams within London's local councils to focus on preparedness that is preventative rather than just being reactive? How can they evolve from problem solvers to visionary enablers - enabling communities to think and shape their own futures?

Shift the role of public preparedness teams

- Move from reactive, crisis-based models to **preventative, systems-oriented approaches**

- Reimagine preparedness teams not as top-down problem solvers, but as **facilitators and enablers** of long-term resilience within communities.

Empower communities to co-design their futures

- Equip local communities with tools, narratives, and agency to **imagine preferable futures** they want for themselves.
- Support them in mapping their present context and identifying steps to move toward collective preparedness and autonomy.

Prototype speculative, community-led interventions

- Prototype tools that help both councils and communities better anticipate and adapt to future crises and build rituals of conducting these drills within communities.

Initially during my secondary research phase I had three major directions that I could take.
1. Community memory and archival histories - What would leveraging community memory for a cause look like within this context, so we do not forget the trauma of the past?
2. Speculation and Simulation - How can we speculate what future modes of transmission, scale and impact would look like for a future pandemic? How can these models then be given to communities to prepare future preparedness especially to detect and contain a disease?
3. How might we strengthen local governance systems and what are the variations needed to build/strengthen trust between existing government and community?

While I did not end up focusing on the first direction, I pivoted and narrowed down on the other two directions around speculation and trust building. The rationale was that there was a lot more research to be done when it came to communal and archival histories as they were organisations that worked on these topics. Like any other systemic level issues or wicked problems with a multitude of directions to take, it made sense in the moment to tackle grounds where I had the most research on.

Secondly it came to me during expert interviews and from the UK covid 19 Inquiry module that the systems may be overworked, but preparedness if focused on prevention can drastically help mitigation efforts. My angle then focused on what prevention means when we think of preparedness, and there were 2 aspects to this. Preparedness from the government standpoint and preparedness from the community standpoint. **Marrying these two efforts into one collaborative bond was where I saw my role as a futurist.** So I considered myself as the enabler of a social experiment, with the abilities to help preparedness teams with the right tools.

For this I was quite intrigued by **Transition design** as a methodology. The core of transition design being to shift focus to community led “visioning” is what I was inspired by. Now visioning is different from normative futuring as I wanted to go beyond just identifying probable futures we would end up in with various STEEP signals.
Transition design from my understanding would also be extremely crucial since my Workshop 1 was to help communities to backcast from future preferable scenarios. They would then as communities guide how they wanted to get there based on their existing dynamics and conditions. Now with transition design being embedded in consensus-based vision, it is also fundamentally looking at systemic change. Within my context for me at the local level, I want preparedness teams to think beyond mitigation and at the community level I want people to think for themselves and for the futures they want. Conducting social experiments to understand the reception of the tools would be integral parts of the project for which I am in talks of doing soon.

Methods I have used -

Research Methods

- Expert Interviews- Conducted in-depth interviews with a diverse set of stakeholders including public health officials (local councils), policymakers (House of Lords), NHS doctors, and community members to understand multi-level perspectives on preparedness and systemic challenges during past pandemics.
- Thematic Analysis -Synthesized qualitative data from interviews by clustering insights to identify patterns in trust, institutional failures, and behaviours across different communities.
- Historical Timeline Analysis - Mapped over 2,000 years of pandemic events to uncover long-term drivers, recurring signals, and patterns related to the origin, spread, and impact of disease outbreaks — informing a deeper understanding of how responses have historically evolved.

- Systems Mapping & Causal Layered Analysis - Visualised the pandemic preparedness problem across structural, cultural, social, and mythic layers. This helped surface root causes, identify leverage points, and position the challenge as a complex “wicked problem.”
- Socio-Spatial Mapping of Communities - Plotted real London boroughs and community types into a 2x2 matrix based on socio-economic status and levels of community engagement/trust in governance informed by interviews, datasets, and local council data.
- Signals and Trends Analysis - Mapped environmental, technological, and geopolitical trends (e.g. climate migration, surveillance tech, health vulnerabilities) and signals of emerging governance shifts, to contextualise possible futures and future community compositions.

Intervention & Futures Methods

- Speculative & Participatory Futures
  Employed a 2x2 scenario framework, backcasting, and design fiction methods to provoke dialogue, question assumptions, and co-create preferable futures with communities.
- For the exhibition I used diegetic artefacts as a provocation to think about future scenarios as well.
- Roleplay & Simulation Workshops
  Developed and facilitated future simulation workshops using character role cards and scenario immersion to help participants rehearse future pandemic responses, reflect on agency, and critique current systemic readiness.
- Bias Interrogation & Co-Ideation
  Integrated speculative provocations into workshops as a method to challenge personal and participant biases, spark imagination, and ideate collectively on radically different futures.

11.Next steps

I have been in discussion with the Newham public health team and the preparedness teams to help me with the implementation of my workshop. It would be interesting to see their response and insights into how they would like to take this forward as part of their work.

12.Professional futures

As someone with a systems and service design background, I find the world of speculation extremely fascinating. I would like to see myself use speculative methods more within my work especially in traditionally rigid structures that tend to use less of futures like the social impact space. That being said, government systems seem to take futures thinking quite seriously in the UK, with many departments starting to have their own futures spaces within their teams.

I am also quite interested in what corporations take on futures thinking,,, and would like to work with early startups to understand how they view futures thinking as a part of their longer term visions.

Roles like strategic design, or systems design, futurist, innovations design are the top of the ideas that come to my head. I would like to work for the UK government, companies like Dark matter labs, Reimagined futures, Arup, Superflux etc.

Reference List - updated

About (no date) *Zoonotic disease: emerging public health threats in the Region*, World Health Organization - Regional Office for the Eastern Mediterranean. Available at: http://www.emro.who.int/fr/about-who/rc61/zoonotic-diseases.html (Accessed: 28 April 2025).

Barnsley, G. et al. (2024) 'Impact of the 100 days mission for vaccines on COVID-19: a mathematical modelling study', *The Lancet Global Health*, 12(11), pp. e1764–e1774. Available at: https://doi.org/10.1016/S2214-109X(24)00286-9.

Baroness Hallett (2024) *Module 1 report: The resilience and preparedness of the United Kingdom*, UK Covid-19 Inquiry. Available at: https://covid19.public-inquiry.uk/reports/module-1-report-the-resilience-and-preparedness-of-the-united-kingdom/ (Accessed: 28 April 2025).

BBC News (2021) 'What is the UK Covid inquiry and how does it work?', 12 May. Available at: https://www.bbc.com/news/explainers-57085964 (Accessed: 15 April 2025).

BBC News (2023a) 'Five takeaways from Boris Johnson's Covid inquiry evidence', 7 December. Available at: https://www.bbc.com/news/uk-politics-67651883 (Accessed: 15 April 2025).

BBC News (2023b) 'How inquiry is exposing deep flaws in Covid decision-making', 26 November. Available at: https://www.bbc.com/news/health-67514356 (Accessed: 15 April 2025).

Borrett, A. and **Oliver, J.** (2024) 'London hit by record downturn in affordable housing', *Financial Times*, 27 December. Available at: https://www.ft.com/content/68ba72e3-08fa-465e-ab61-cfa94a58382c (Accessed: 28 April 2025).

CEPI 2.0 and the 100 Days Mission | CEPI (no date). Available at: https://cepi.net/cepi-20-and-100-days-mission (Accessed: 29 April 2025).

Costanza-Chock, S. (2020) *Design Justice: Community-Led Practices to Build the Worlds We Need*. Cambridge, Massachusetts: The MIT Press.

Environment, U.N. (2020) *Preventing the next pandemic - Zoonotic diseases and how to break the chain of transmission* | UNEP - UN Environment Programme. Available at: https://www.unep.org/resources/report/preventing-future-zoonotic-disease-outbreaks-protecting-environment-animals-and (Accessed: 28 April 2025).

Escobar, A. (2018) *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds*. Durham: Duke University Press.

Every Story Matters (no date) UK Covid-19 Inquiry. Available at: https://covid19.public-inquiry.uk/every-story-matters/ (Accessed: 15 April 2025).

Figma (15:19:36 UTC) *Figma*. Available at: https://www.figma.com/file/apC6GEXomaYpVxYZbFRSLh/IRP (Accessed: 15 April 2025).

Hussain, A. et al. (no date) 'The Anti-vaccination Movement: A Regression in Modern Medicine', *Cureus*, 10(7), p. e2919. Available at: https://doi.org/10.7759/cureus.2919.

Jennings, W. et al. (2023) 'Trust and vaccine hesitancy during the COVID-19 pandemic: A cross-national analysis', *Vaccine: X*, 14, p. 100299. Available at: https://doi.org/10.1016/j.jvacx.2023.100299.

Lomax (no date) *What the UK population will look like by 2061 under hard, soft or no Brexit scenarios*, Consumer Data Research Centre. Available at: https://www.cdrc.ac.uk/research/population-housing-and-infrastructure/what-the-uk-population-will-look-like-by-2061-under-hard-soft-or-no-brexit-scenarios/ (Accessed: 29 April 2025).

Lomax, N. et al. (2019) *What the UK population will look like by 2061 under hard, soft or no Brexit scenarios*, The Conversation. Available at: http://theconversation.com/what-the-uk-population-will-look-like-by-2061-under-hard-soft-or-no-brexit-scenarios-117475 (Accessed: 29 April 2025).

NCID (no date). Available at: https://www.ncid.sg/News-Events/News/Pages/21-million-deaths---Over-7m-Covid-19-fatalities-recorded,-but-actual-number-may-be-3-times-higher-WHO.aspx (Accessed: 28 April 2025).

Platt (2021) *Ethnic minorities are bearing the brunt of COVID-19. Here's why.* Available at: https://www.lse.ac.uk/research/research-for-the-world/race-equity/why-ethnic-minorities-are-bearing-the-brunt-of-covid-19 (Accessed: 28 April 2025).

Platt, L. (2021) 'COVID-19 and Ethnic Inequalities in England', *LSE Public Policy Review*, 1(4). Available at: https://doi.org/10.31389/lseppr.33.

Pudding, T. (no date) *Who killed the world?*, The Pudding. Available at: https://pudding.cool/2024/07/scifi (Accessed: 29 April 2025).

Reed (2025) *BBC News*, BBC News. Available at: https://www.bbc.com/news/articles/c1jgrlxx37do (Accessed: 28 April 2025).

Rise of vaccine distrust - why more of us are questioning jabs (2025) *BBC News*. Available at: https://www.bbc.com/news/articles/c1jgrlxx37do (Accessed: 28 April 2025).

Skafle, I. et al. (2022) 'Misinformation About COVID-19 Vaccines on Social Media: Rapid Review', *Journal of Medical Internet Research*, 24(8), p. e37367. Available at: https://doi.org/10.2196/37367.

UK 'failed citizens' with flawed pandemic plans (2024) *BBC News*. Available at: https://www.bbc.com/news/articles/c6p2dng6z04o (Accessed: 28 April 2025).

UK Covid-19 Inquiry (no date a). Available at: https://www.bbc.co.uk/iplayer/episodes/p0ftvpkn/uk-covid19-inquiry (Accessed: 15 April 2025).

UK Covid-19 Inquiry (no date b) YouTube. Available at: https://www.youtube.com/channel/UC9eFdKVwD1ARs3j9BSoGndw (Accessed: 15 April 2025).

UN DESA (2018). Available at: https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html?utm_source=chatgpt.com (Accessed: 28 April 2025).

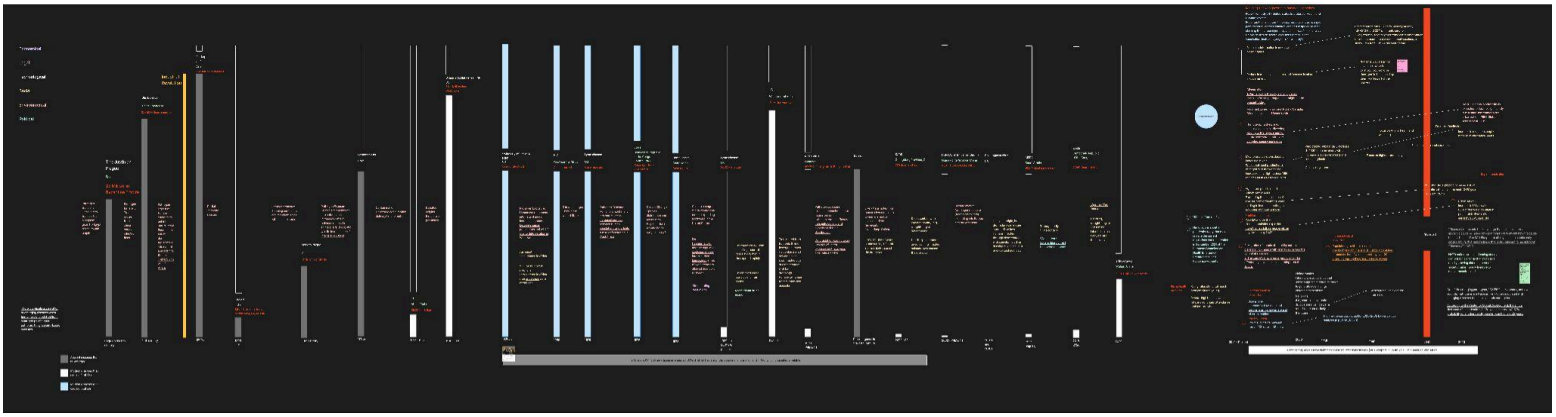
Voros, J. (2003) 'A generic foresight process framework', *Foresight*, 5(3), pp. 10–21. Available at: https://doi.org/10.1108/14636680310698379.

What's Next? Predicting The Frequency and Scale of Future Pandemics (no date) *Center For Global Development*. Available at: https://www.cgdev.org/event/whats-next-predicting-frequency-and-scale-future-pandemics (Accessed: 28 April 2025).

Zoonotic Diseases: What we need to do next - UNEP-WCMC (no date). Available at: https://www.unep-wcmc.org/en/news/zoonotic-diseases--what-we-need-to-do-next (Accessed: 28 April 2025).

Appendix 1: Project outcomes

Maps:
Historical Timeline analysis: Full resolution in DRIVE -



https://drive.google.com/drive/folders/1_vMEoI-H0qwnlDI87dyOmkr1UuUUVe5t

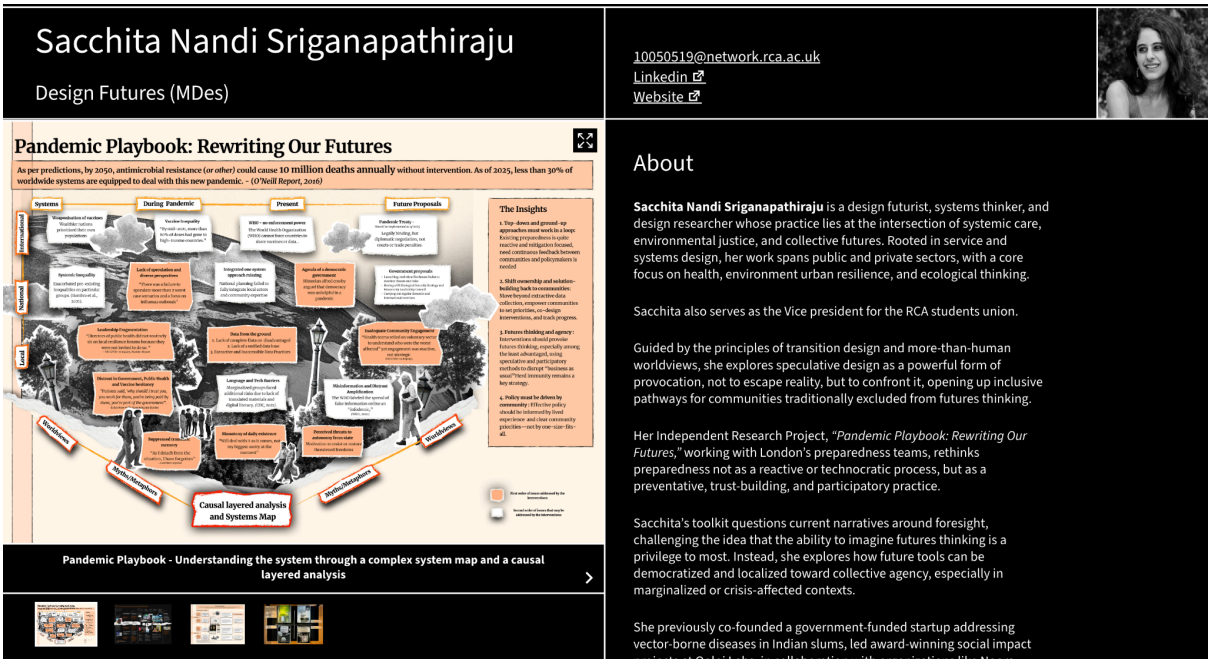
All my documentation and final deliverables are in the folder above - Labeled “ Appendix 1”

Appendix 2: RCA2025

https://drive.google.com/drive/folders/1_vMEoI-H0qwnlDI87dyOmkr1UuUUVe5t

All my documentation and final deliverables are in the folder above - Labeled “ Appendix 2”

Appendix 3: Public documentation



Appendix 4: Final presentation

https://drive.google.com/drive/folders/1_vMEoI-H0qwnlDI87dyOmkr1UuUUVe5t

The handout pdf is in the folder above - Labeled " Appendix 4"