

Power in Your Hands: Transition Design Practice for Community Service

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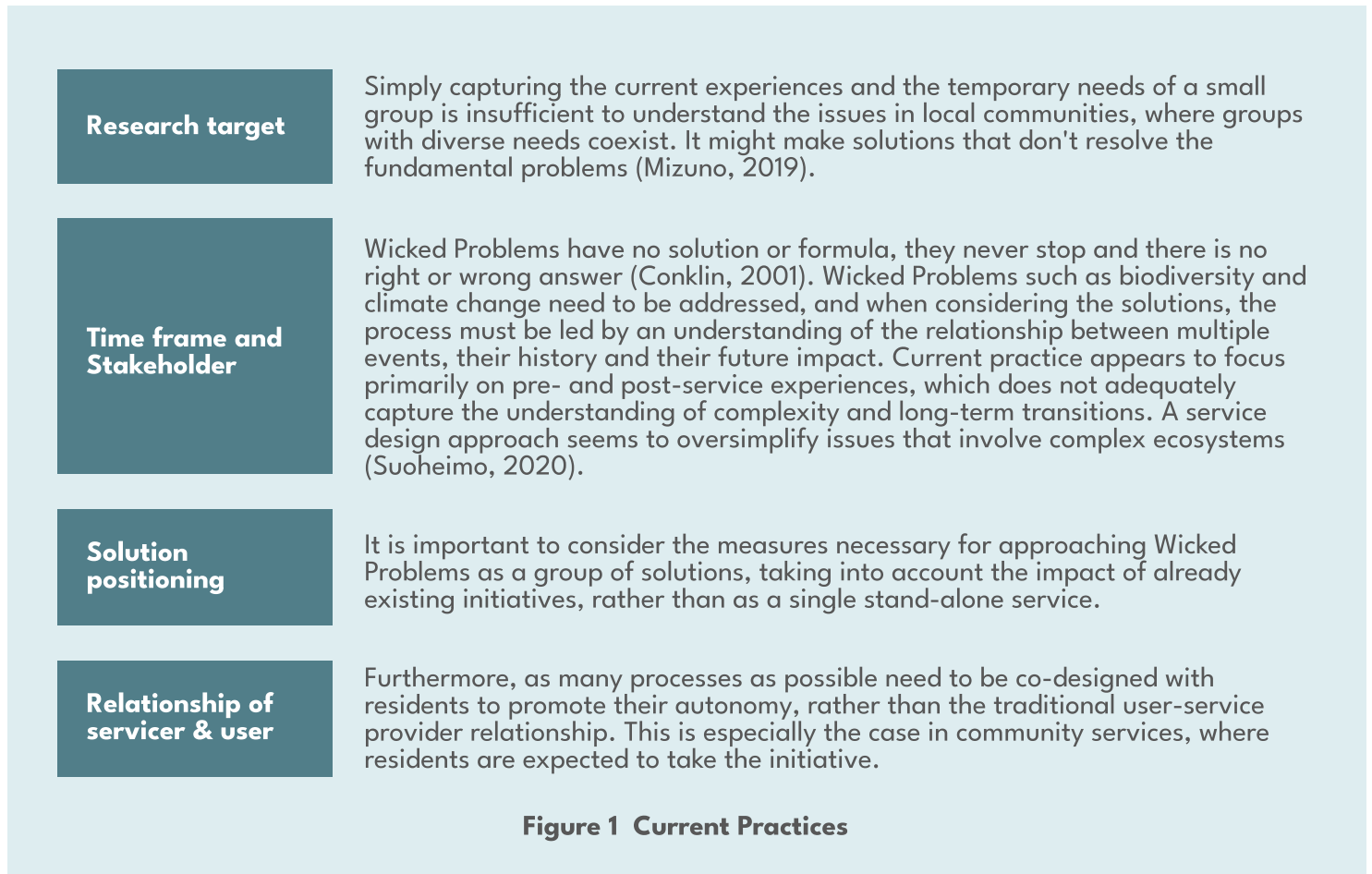
How might transition design methods be applied when co-designing a future vision with a community, and what are their benefits in formulating a community service?

INTRODUCTION

The presence of design thinking in the public sector has grown larger, especially since Tim Brown from IDEO published “Design Thinking” (Brown, 2008) at Harvard Business Review. Service design and design thinking have played a major role not only in the creation of service innovations but also in the process of understanding residents' needs and examining services in solving social problems and shaping communities.

On the other hand, there are still issues not adequately addressed by current service design practices, which tend to be oriented to the individual user. (Irwin & Cameron, 2015) The details are shown in Figure 1.

In this context, Transition Design may provide some insights into practices that the public sector should embrace. Transition Design was proposed in 2012 at Carnegie Mellon University, led by Professor Terry Irwin, as a “a transdisciplinary approach aimed at addressing the many ‘wicked’ problems confronting 21st century societies” (Irwin and Mortensen Steagall, 2021), and provided a skill set and methodology for systems-level change and societal transitions toward desirable long-term futures. Therefore, as a design methodology that encompasses and extends service design, it can be an approach that can bring long-term solutions to the complexity (Figure 2).



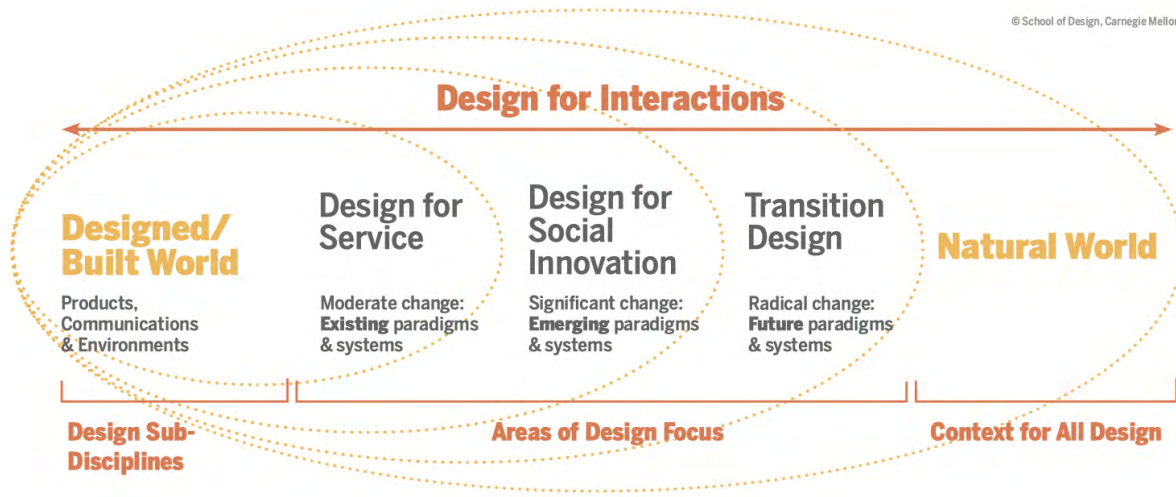


Figure 2 Areas of design focus (Irwin et al., 2015)

This case study examines the application and benefits of the Transition Design approach and mindset when developing a future vision with a local community and the creation of new community services by adopting participatory design and generative design methods integrated with Social Practice Theory. Due to time and resource constraints, this project concludes with a prototype, evaluation and impact analysis including estimations.

CASE STUDY OVERVIEW

London has experienced a serious energy crisis since late 2022. South London, in particular some parts, are areas with relative lower income households (Heren, 2022), and the impact of rising energy costs on the lives of its residents is significant. Heating, cooking and connecting with others are all fundamental human rights- directly linking energy supply to our wellbeing. Globally, there is a need to move to green energy to reduce carbon emissions, but green energy is usually also expensive and does not include vulnerable groups (Cook, 2021). Further exacerbating this problem is UK's individualistic tendencies due to increasing urbanisation and modernisation of life (Stone, 2017).

On the other hand, our research found out that while community facilities such as churches are promoting the introduction of solar power, the siloed lifestyles are still struggling to find ways to utilise energy as a communal asset.

In this project called Power in Your Hands (PIYH), vision-making, including new daily practices and values, will be carried out in a South London community with the aim of strengthening community relations and transitioning to green energy, in addition to reducing the cost of living. The final intervention is designed as the first step of establishing a community-endorsed vision for the future.

PROCESS AND FRAMEWORK

The process in this case is divided into four stages based on the Transition Design approach and framework: EXPLORE, PROVOKE, DESIGN and PLAN (Figure 3).

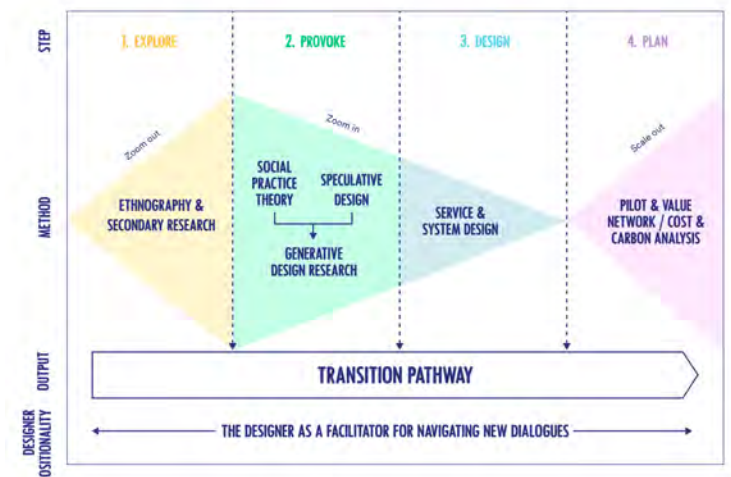


Figure 3 framework

1. EXPLORE

First, in order to understand the causes and effects, the problem was observed by taking a step back and looking at the big picture, before breaking it down into smaller elements to understand the relationships between them. Ethnographic research, expert interviews and a literature review were conducted.

The elements and relationships of the problems discovered in the above process were put into a Multi-Level Perspective (MLP) map organised by time, series and scale. The original MLP map (Geels 2002) had 3 scales: Landscape, Regime and Niches shown in Figure 4, and Ecology and Ideology & Mindset were adopted by Niki Wallace (Wallace 2020). This time, some terms of the MLP were refined into more thematic categories, and key

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elements such as the several design questions and the starting points of the interventions are defined in the mapping process. In addition, the map was used for positioning the interventions and drawing the future transition pathway. Therefore, the MLP map is used as a framework in all subsequent stages.

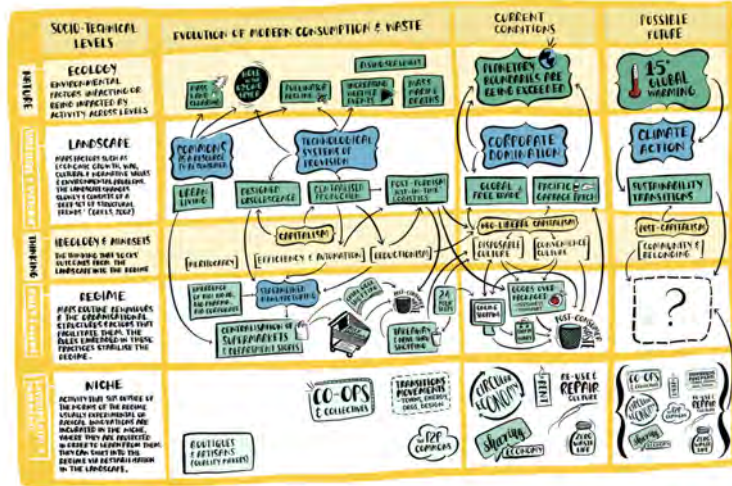


Figure 4 The Multi-level perspective by Niki Wallace (Wallace 2020)

2. PROVOKE

In the process of co-designing a future vision, several patterns are formed based on the starting points of the interventions identified in the previous step. This step was to use Social Practice Theory framework (Shove and Spurling 2014) and Speculative Design (Dunne and Raby, 2013) to develop a future vision together with the community, stimulating their thinking by asking them provocative questions in order to understand their values and explore the possibilities for change.

Based on the findings, several speculative scenarios were examined, tested and evaluated together with the community, and a concrete future vision and scenarios were formed.

3. DESIGN

The future vision was re-formulated and drawn as a transition pathway on the MLP map. Based on the transition pathway, the new daily practices are defined as the beginning of the pathway and the system and actions of realising the patterns are considered. The main outputs are a service blueprint and website as platform.

4. PLAN

Finally, prototyping tests, suggestions for necessary actions and feedback from the prototyping with the community are organised in order to actually assess the feasibility and predict its impact.

PRACTICE

1. EXPLORE

Observation of the problem

The modern lifestyle is one in which everything around us moves with electricity and where digital devices have become an integral part of life. It is predicated on the need for energy consumption in order to maintain human dignity, from eating and keeping warm to connecting with and learning from others. Not being able to afford energy costs is tantamount to not being able to live a dignified life. This has dealt an unprecedented blow to the lives of low-income people in South London, many of whom are experiencing poverty they have never experienced before.

Based on the visits to residents' homes and interviewing local authorities, voluntary organisations, pension groups as well as energy industry experts, it could be concluded that the more that individual life practices become increasingly defined by societal values the more vital it is for behaviour change that requires social recognition and environmental improvements, rather than improvements in individual lifestyles. Simply put, a lack of energy is not an individual failing (Image 1).



When volunteering to visiting several households in South London who were having difficulty paying their electricity bills and advising them on how to review their lifestyles to save money, it was found that a series of small habits, from using the kettle to leaving digital devices charging equipment unattended, were mostly putting pressure on the electricity bill.

Image 1 Home visit

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On the other hand, in terms of social practice, London has seen a huge wave of initiatives such as Warm Spaces during the energy crisis, which has opened up spaces such as libraries and community centres to people who cannot get enough warmth in their homes. During the visits to some of the Warm Spaces, some positive aspects such as fostering community were identified, but some challenges were also found, such as; the spaces are only open for a few hours during the daytime on weekdays, and there is a perception that going to a warm space is socially embarrassing in itself, making it difficult for those who are experiencing financial difficulties for the first time.

In parallel, a number of measures have been taken to transition to renewable energy in the Southwark region. However, environmental awareness is not particularly high in Southwark, according to the Brixton Energy case study (We are Repowering London, 2019), and the main motivation for residents to participate is economic benefits. Interviews with a CREW Energy's director indicated that some community facilities such as churches are considering installing solar by using the government grants, but some facilities are not used as much as 90% of the time, and many facilities have quit considering it without finding answers regarding its effective use.

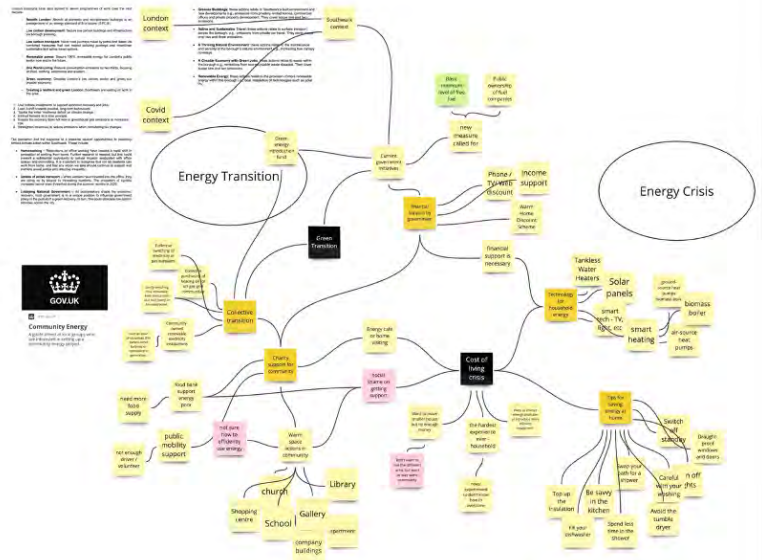


Figure 5 Key elements and links of observation

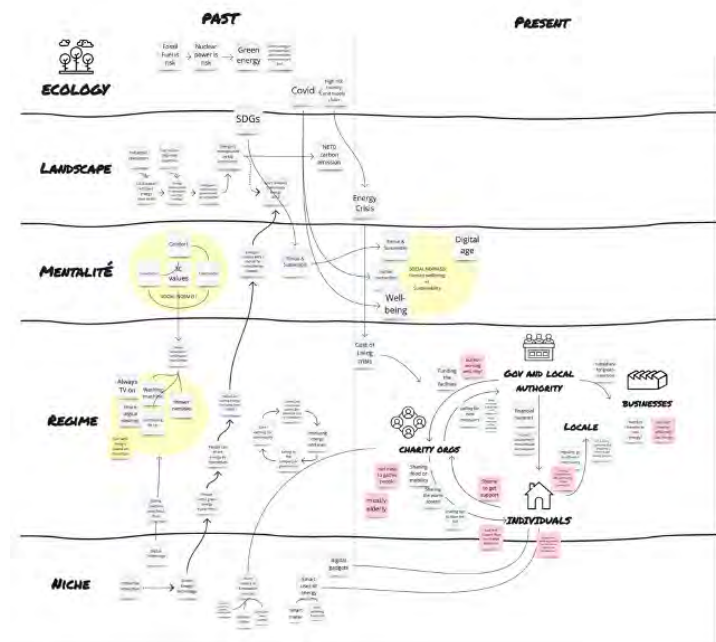


Figure 6 The first MLP map

The First MLP map

In order to organise the above information, the refined MLP map was used and the elements were mapped around the past and present (Figure 6), and possible points of intervention were explored. We focused on interventions in the behavioural domain, as this is an area where it is easier for communities to understand concepts and to imagine changes that are integrated with their current lives, in order to co-design together. Furthermore, when taking into account the community building and the spread of renewable energy to low-income areas, as well as the characteristics of the historic city of London (the need for retrofitting), one of the keys would be to utilise existing community assets.

Therefore, the goal was set to reduce per capita energy consumption and to foster a sense of community is by breaking away from the individualistic lifestyle patterns of convenience and sharing parts of life with the community. In order to overcome the barrier of going to community facilities, which has been an issue for existing warm spaces, the project aims to change behaviour as a collective practice, by incorporating it as daily practices and providing meaning and value to it.

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2. PROVOKE

An approach to shaping a future vision

Transition Design draws the future based on an understanding of both the dynamics of social and environmental systems and the mindset underlying them, and the focus is on reconstructing entire lifestyles derived from the micro and macro dynamics and on depicting everyday life as a narrative (Irwin et al., 2015). In order to link it to community measures, this project aims to develop a community-acceptable goal and to incorporate a bottom-up co-design approach with the community to reflect community's ideas and feedback. This was partly to help the project to operate autonomously in the future, but also to make it emotionally positive for the community.

As speculative design has also been used in public policy to obtain feedback in UK as "Future of Ageing: Speculative Design Workshops (2015)" and this project also took the concept of speculative design as a tool to get feedback as well as to promote people's environmental awareness and consciousness. And through dialogue about such speculative futures, the project aimed to bring about a change in people's attitudes and acceptance levels.

Co-Design Methods

A card game based on Social Practice Theory

A card game was designed to find out to what extent people are willing to tolerate and what could be the trigger to establish new daily practices of sharing part of their lives with the community, by doing that daily practice in a community space instead of their home. It was designed to draw new scenarios from random combinations of Activity cards, Place cards as a collection of materials and Value cards (Figure 7), which was inspired by social practice theory's components.

Through the game, multiple scenarios were generated, as well as information on the affinity of the combinations, examples of already close practices and keywords that could be enablers.



Figure 7 Card game



Image 2 Mapping of community perceptions

An illustration of the Southwark-Camberwell area was prepared and the participants drew in the community facilities they use, the stories they tell and the places where the ideas from the card game above might be applicable.

Mapping of community perceptions

The next step was a mapping activity to understand where the above combinations could actually take place in the community and what the places meant to the people (Image 2).

The participants were able to understand the main community facilities in the Camberwell area, the connections that are made around the landlets, how people understand and perceive their neighbourhood, for instance, some participants say that Camberwell is a town of art and creativity, and the history and background of places and facilities. backgrounds.

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Based on a consideration of these barriers and enablers, the ideas were narrowed down and three scenarios were identified (Figure 11).



Figure 11 Three scenarios

WEEKLY KITCHEN-SHARING

ual: university of the arts london

ANITA'S STORY



Figure 12 Scenario of Weekly Kitchen-Sharing

In each of these scenarios, people share a good time while forming a sense of community, and also reduce their overall energy consumption and electricity bills by sharing a part of their lives. In order to use these scenarios as prompts for social behaviour change,

the next phase of the project was to define a path of change that incorporates these scenarios and to examine the structuring of the service.

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The second MLP map

The three scenarios finally selected were incorporated into the practice layer of the MLP map to organise the changes that the scenarios would create and what could and should happen around them (Figure 13). In particular, we will draw out what mindset changes could occur, what is needed now to achieve this, and what further changes could occur in urban development. Our workshops are already intervening at the level of mindset, and the dialogue and the experimentation with new scenarios are enabling change at the level of day-to-day practice. In the long term, this can have a positive impact on class and generational inequalities and increase demand for shared renewable energy systems and communal buildings.

Although the vision of the future here might seem optimistic or idealistic, we believe that additional necessary measures can be considered later on as we concretise this ideal vision. In addition, although the services to be concretised this time are small community services for the realisation of practical scenarios, the MLP map may also include existing services and multiple projects may be created to realise long-term change, and it is important to understand how each service and project can provide value and support each other to realise the vision. In solving such long-term issues, it is desirable to build organic relationships between projects as a solution network, rather than considering a single solution.

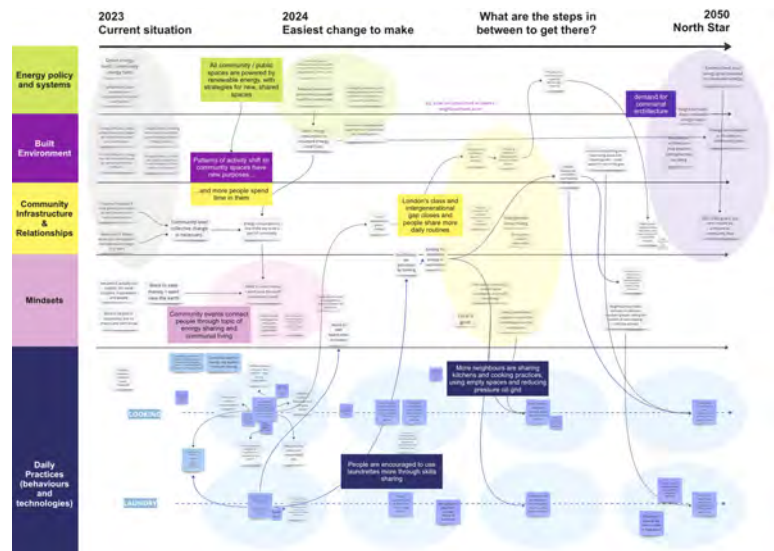


Figure 13 The second MLP map

For future development, we plan to map the projects in chronological order and by dividing them into layers at the policy level, business organisation level, community level, etc., to understand the implications and relationships between them.

Concretisation of activities towards the realisation of the scenario

A short animation and story book (Figure 14) were created as a means of storytelling to inform stakeholders about the scenarios, the long-term transition and its benefits. As far as possible, the new scenario was created as a simple story in a way that community members could understand how the new scenario could change people's mindsets and the region.



Figure 14 Story book

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In addition, a service blueprint has been developed (Figure 15), which concretises the mechanisms needed to realise the scenario. This was to be a three-month pilot project at the partner church-based Copleston Community Centre. While the proactive and active involvement of volunteer groups is essential for the beginning, a mechanism to evoke community ownership is needed for scale. In addition, the practices that fit outside of the Camberwell area where the research was

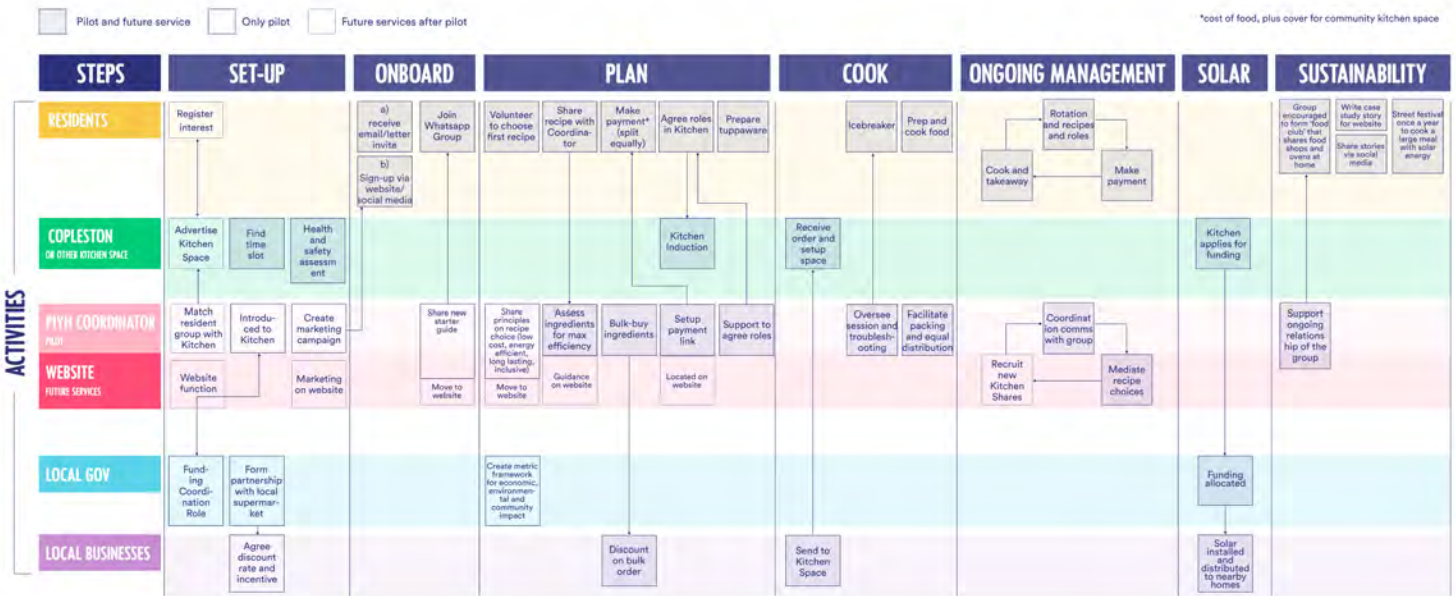


Figure 15 Service blueprint

conducted may be different. A prototype of a website (Figure 16) was created to provide the necessary elements for this service: (i) mapping of available public spaces and (ii) matching community's ideas for shared practices. It is based on the idea of digitally extending the mapping activities with communities that were conducted during the research, allowing people and public space owners to freely map spaces and ideas in their own neighbourhoods. This also allows people to find and participate in activities by visualising existing activities on a map.

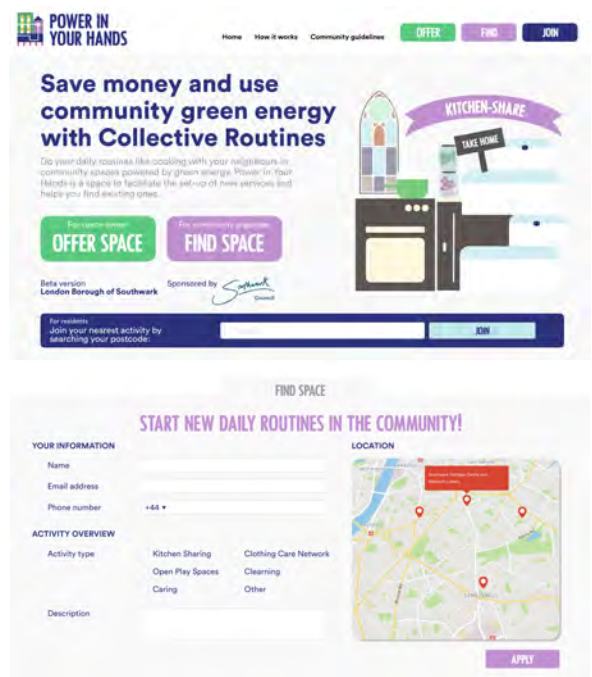


Figure 16 Website prototype

4. PLAN

Proof of Concept

For the testing the scenario, the Weekly Kitchen was chosen out of the practices for its ease of implementation and needs. The target audience was the people who gather at the Copleston Community Centre and Herne Hill Market, and after explaining the scenario to the participants, they experienced the activity of cooking with people in a public place, taking the food home and eating it at home. Vegetarian Temari Sushi, which is unfamiliar to many African and South American immigrant communities, was used as the subject of the workshop to test whether it crosses the racial and cultural divides that have been raised as barriers.



Some of the participants had never tasted sushi in their lives and some did not usually cook, but as a result, everyone, including those who were hesitant at first, enjoyed the workshop and commented on the delicious taste of pickles and vinegared rice for the first time. We also received positive feedback on the concept, with people looking forward to the next one and church representatives expressing a desire to hold the workshops on a regular basis.

Image 3 Workshop

Feedback

Through the workshop, some operational challenges were identified, and it became clear that a certain amount of volunteer involvement and mechanisms to encourage people's participation were needed to get started (Figure 17). In parallel, the impact of this scenario on households and the community was estimated.

		Positive	Negative
PROCESS	EXISTING NEEDS	<ul style="list-style-type: none"> Don't have enough kitchen spaces at their home, so want to use the shared kitchen. Similar initiatives are going around, such as Jacket Potato Monday. People want to start activities as it is economical and actually possible. Local businesses want to reach more residents, outside of their stores. 	<ul style="list-style-type: none"> Prefer a larger scale in the actual kitchen, a few times a month. <p>3MO PILOT PROJECT</p>
	SUSTAINABLE AND INCLUSIVE SYSTEM	<ul style="list-style-type: none"> People don't know the owner of shared spaces, but they want to start something if they can access and use the spaces. Finding the available community spaces are key. Nice to have stimuluses for encounters here. 	<ul style="list-style-type: none"> Logistics are very hard - who pays for the space? who cleans it up? who manages it? <p>3MO PILOT PROJECT</p>
IMPACT	GREEN ENERGY TRANSITION	<ul style="list-style-type: none"> Some churches are considering solar installed but worry about efficiency of uses because none are there for most of time. Individual house does not afford solar but community spaces can do. <p>IMPACT ESTIMATION</p>	<ul style="list-style-type: none"> -
	COST OF LIVING	<ul style="list-style-type: none"> "Imagine how much you could save if your street cooked together?!" "Sharing kitchen or spending time at community spaces are very economical" <p>IMPACT ESTIMATION</p>	<ul style="list-style-type: none"> Sometimes it is hard for family with small children to share things. <p>INITIAL TARGETING & 3MO PILOT PROJECT</p>
	COMMUNITY RELATIONSHIP	<ul style="list-style-type: none"> Kitchen Sharing - good for new people to the area to meet each other. Open Play Spaces would really help bridge gaps between people of different ages and backgrounds (Groundwork Charity) Love learning a new cultures cuisine, very pretty and fun and look loads of photos. Tried Sushi for the first time of their life. 	

Figure 17 Evaluation

Impact estimation

In qualitative aspect, the Value Network Analysis (Peppard and Rylander, 2006) was organised as shown in Figure 18 to visualise what value would be created for each stakeholder. The quantitative analysis (Figure 19) provides a simplified estimate of the one-year financial benefits and impact on CO2 emissions at three years after launch, estimating that £12 million in energy cost savings and 95,000 tonnes of CO2 emission reductions will be generated across the Camberwell area.

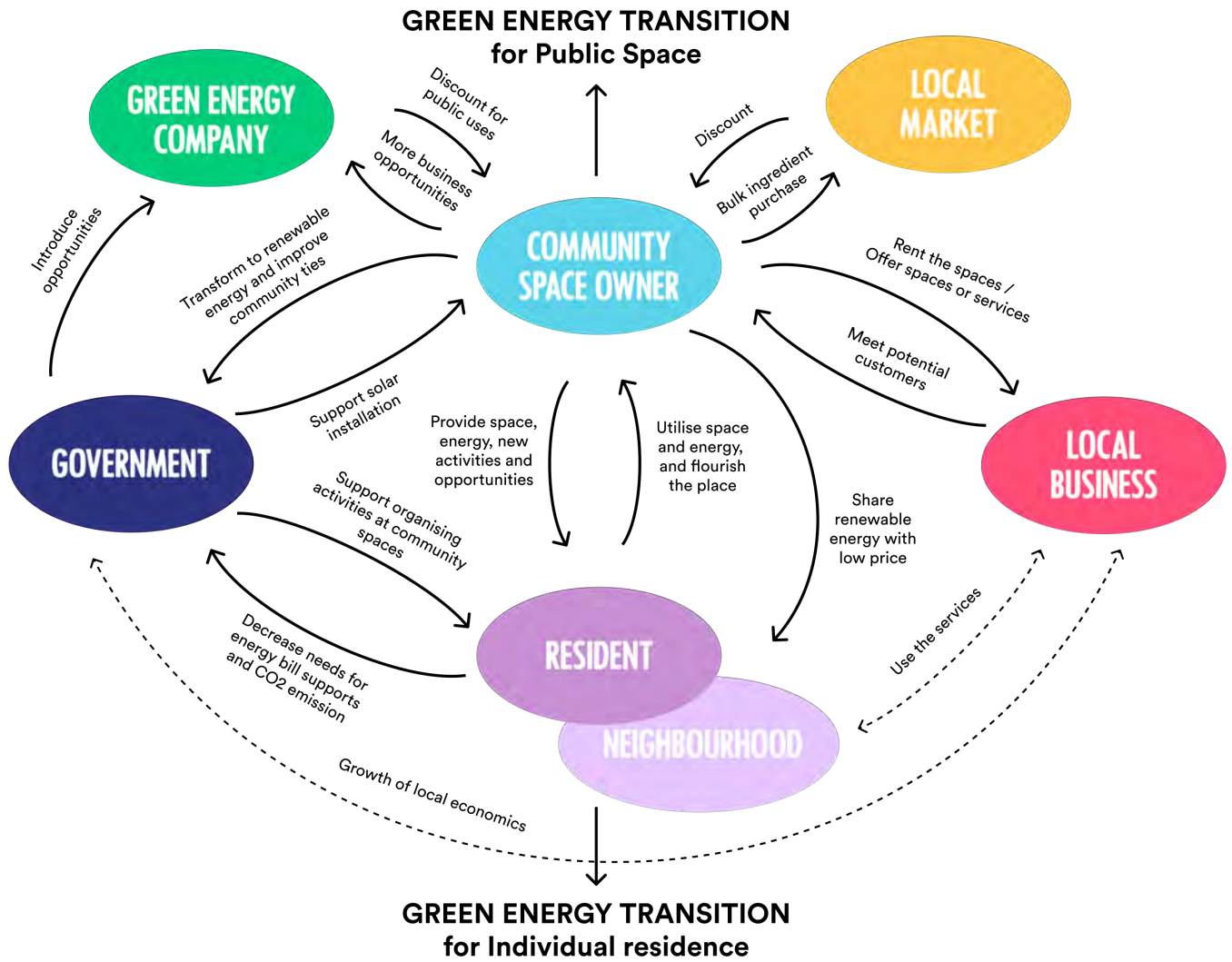


Figure 18 Value Network Analysis

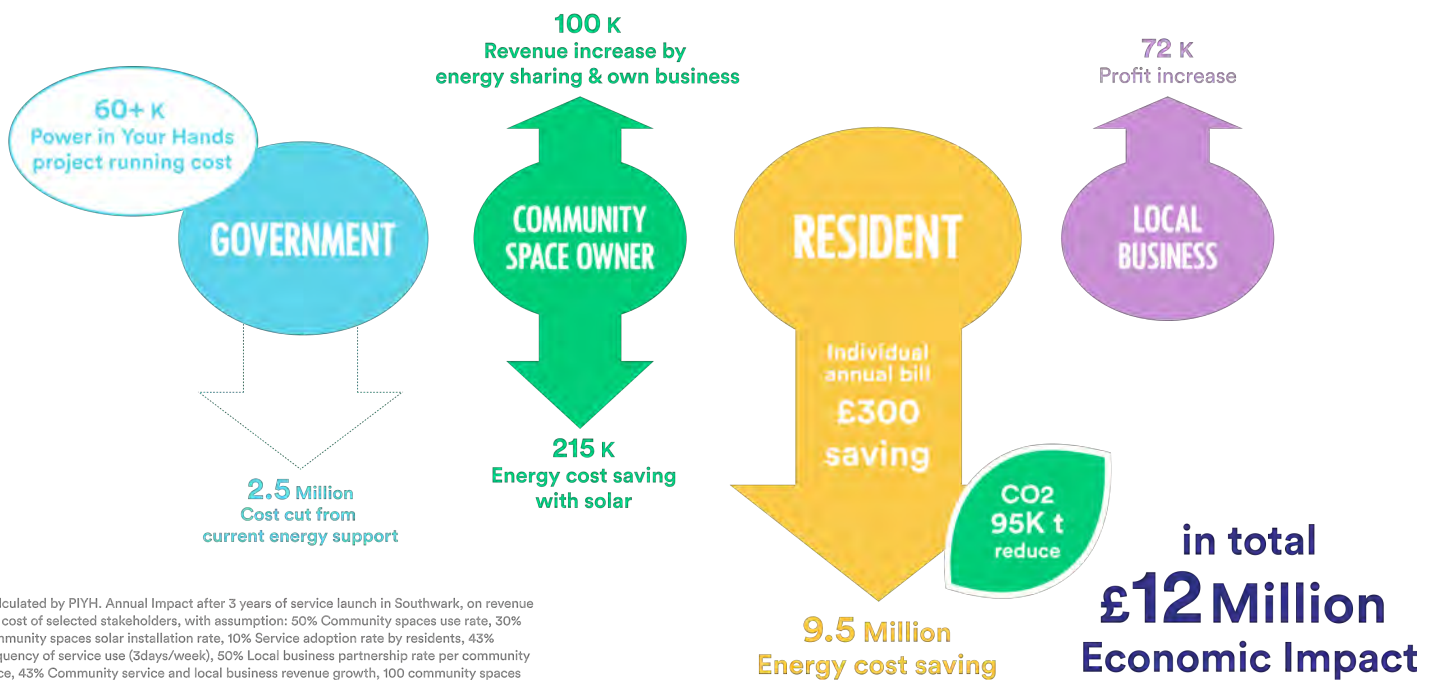


Figure 19 Quantitative impact estimates

SUGGESTION

Through this project, it was found that an approach based on transition design allows for concept-making on a longer time frame and is seen as more compatible with locating multi-stakeholder initiatives and its connectedness across various layers. In particular, the energy issues dealt with in this study required designing the behavioural changes of people and the impact on the surrounding environment over a long time span and considering the necessary interventions, and the MLP map had the function of organising these changes. Through the thematic refining of the MLP map this time, it was considered that setting additional, important and unique axes to the basic framework was a useful constant reminder of the impact on those axes.

Visualising the pathway to resolution can also clarify the future direction of the project's scale and the next necessary steps to be taken. On the other hand, the vision and relationships drawn at a certain point in time are only as of that point in time, so the map must be constantly updated and nurtured as a living plan.

The idea of viewing existing initiatives (warm spaces, community energy and grants for solar powers) not as competition but as possible collaborative projects in a problem-solving ecosystem is a useful concept in the public sector. However, it is almost impossible to capture all stakeholders of issues as well as to reach consensus on a single concept among stakeholders. In this regard, the Value Network Analysis clarifying each stakeholders' roles and gains might work well for communicating to confirm and agree with some parts of the concept or specific layers such as actions and roles. Additionally, such as the animation we have created, may be agreeable in terms of far-future value. Designers need to reposition themselves as ecosystem facilitators, become empathetic communicators, follow up on the progress of initiatives and new stakeholders, and constantly update their plans.

Transition design is considered in theory with interdisciplinary knowledge, but it was not easy to extend the consideration to ecosystems and non-human organisms in co-designing with communities in practice. As a result, we had to adopt a simple method based on people's real life. Learning for the future will require in-depth exploration of this point through co-designing with experts.

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