# USING CREATIVE FACILITATION TO SOLVE 'WICKED PROBLEMS': ENTREPRENEURSHIP FOR ALL

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#### Abstract

This paper discusses a case study based on a major charity operating in Scotland, UK, exploring opportunities to create value driven entrepreneurship opportunities for older people using design thinking. We developed a series of co- creative online workshops using design thinking methods to illicit issues older entrepreneurs were having in their professional lives, subsequently explore concepts and develop both practical and strategic solutions for the charity.

We found that for entrepreneurs, establishing personal and professional connections and networks was the key issue. We consider how our design thinking approach provides value to an organization aiming to provide facilities for entrepreneurs of all ages. Although this project has limitations as a single case study, a second design thinking project has now been completed with a range of stakeholders across a variety of service sectors to uncover the issues around the future of work skills deficit post COVID-19 and to develop skills training opportunities.

This paper details the co creation process involved in developing online workshops and gives a detailed description of the tools used and the co creation model that has been developed. We explain the value creation process obtained from using a user-oriented service approach rather than a product centric approach.

Keywords: Design thinking, online creative facilitation, entrepreneurship.

#### **1 INTRODUCTION**

This paper discusses a series of creative workshops designed to provide insight and solutions for an organization providing facilities for entrepreneurs of all ages and sets out to offer new thinking on how organizations can adopt a different and more creative approach to explore difficult 'wicked' problems. We seek to demonstrate that through in-depth training and using creative and innovative thinking, sustainable solutions emerge.

This project was generated and managed by a team within a UK University working with a major charity in Scotland who are already involved in several activities related to healthy ageing. Our goal was to contribute to social innovation and public sector transformation by using value creation via design thinking to meet entrepreneurs' needs. New solutions were sought by co-creating and applying the process of design thinking, a user-centered method of innovation, and combining the experience of the charity's stakeholders with the expertise of creative facilitators. We developed specific online tools, from what was initially designed as face-to-face activities, to help uncover insights into the needs faced by the many stakeholders involved in the charity and their aim to develop solutions for older entrepreneurs.

This project aimed to make the idea of examining issues, ideas generation and creation, and communicating with older people exciting and enticing, eliciting their ideas and views to use in concept creation.

The design thinking method was chosen for this project because it is ideally suited for organizations in the public domain; those that provide important services and work in different, often complex, contexts. Design thinking looks at the complete experience of how a service, product or process is delivered. It is a holistic approach that considers all the various factors and touch points that influence the context.

There are a few models of design thinking, but we used the five-stage design thinking model (below) which was developed by the Hasso Plattner Institute of Design at Stanford (2009).

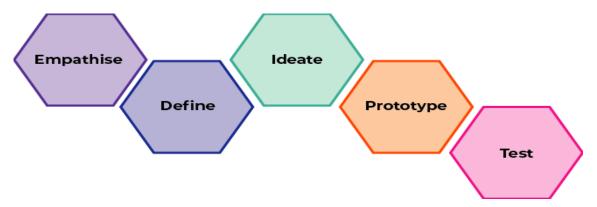


Figure 1. Five stage Plattner Stanford design thinking model

The Plattner Stanford model separates the prototyping stage from the ideate stage; this has the advantage of giving a prompt to iterate between these two phases. The remainder of the paper is organised as follows. The methodology describes our creative facilitation design, its rationale and its execution. A presentation of our results on the role of creative facilitation in value creation follows, with a subsequent discussion of the findings and conclusions of the project. Finally, we consider the limitations and directions for further research.

# 2 METHODOLOGY

To explore and understand opportunities to create a value driven entrepreneurship opportunity for older people we developed a series of co- creative online workshops using design thinking methods to illicit issues entrepreneurs were having in their professional lives and to subsequently explore concepts and develop both practical and strategic solutions. We included participants from a variety of companies, stakeholders, individuals and professionals in third sector roles as well as entrepreneur experts. The table below details the stages in the workshops and the tools and concepts used.

Content	Tools used
Initial brief meetings	Opposite thinking
	Analogy thinking
Introducing team to design thinking	Pre workshop meeting
Outline of process and creating empathy	Explanation and intro tasks
Design research undertake by participants prior	Empathise: Gathering user insights
to workshops	Preparing empathy map
Identifying user insights through empathising	Empathise: Workshop 1
	Hopes and Fears; 5 W's and H; User diaries
Workshop outcomes agreed with participants	Final empathy map
Identifying stakeholders and user types	Define: Workshop 2
	Creating personas; Problem and opportunity statement;
	HMW umbrella question
Ideate	Ideate: Workshop 3
	Scenarios; Solution Storyboard
	I like, I wish, what if; Worst possible idea
Prototyping	Prototype: Development of a range of prototype for
	evaluation in workshops
Reviewing concepts	Prototype: Workshop 4
	Discussing prototype; Drivers and Hurdles
	Customer journey map; Market opportunity sizing
	Business model creation
	Workshop 5
	Stakeholder Mapping; Design strategy sprint
	Value proposition
MVP testing	Test: Workshop 6
	Test; Feedback loops; Feedback capture
Project evaluation	Audio and video data collection

#### Table 1: Process of design thinking workshops.

The creative facilitation team consisted of two design thinking facilitators, a knowledge exchange manager and a project manager working with a student team of seven design innovation students. We met with our charity partner several times to develop a working brief for the workshops that outlined the issues facing the charity going forward. This was a consultative process and involved meeting face to face to discuss the issues the charity was facing within the context of entrepreneurship for older people. We used several techniques such as opposite thinking and analogy thinking to assist in our development of the brief. Opposite thinking helped participants and stakeholders to challenge their assumptions about the problem and possible solutions and come up with non-obvious ideas. Analogy thinking helped identify and apply the best features from other solutions.

Ultimately, we decided to run separate workshops detailed in Table 1 to illicit issues around the problem areas and then following on from this working collaboratively towards generating potential solutions using the Five-stage Plattner-Stanford design thinking model (Plattner, Meine & Weinberg, 2009. With the charity, we sent out invitations to a variety of companies, stakeholders, individuals and professionals in caring and health roles, business development consultants as well as internal staff. In the middle of the project, in March 2020, the Covid-19 pandemic hit. During the review and planning process that followed, the team recognised the need for creative problem-solving as organisations and employers wrestled with the 'new normal' of remote working, furlough and all the business impacts of the pandemic, was even greater than ever. The challenge was how to deliver all the benefits of design thinking workshops that would engage its audience online as effectively as in face-to-face workshops. Whilst it meant the team had to adapt the project to online delivery, in many ways, it intensified even further the need for a rich and diverse new skill set within organisations to enable them to be prepared to engage with the challenges ahead. An innovative workshop space and design thinking process was designed and built on Miro, an online visual collaboration tool, and workshop participants were familiarised with the platform in advance of the sessions.

The initial workshops took place with participants who were a mix of employees from the charity along with some of their business partners and network contacts. The theme of the workshops was enabling innovation and connections across the extended charity community, its businesses and networks to meet the big challenges of age-friendly entrepreneurship. The workshops led participants through the design thinking process by working collaboratively on a series of innovative exercises. We then worked together on from Workshop 2 onwards to explore how to tackle practical ideas around age-friendly living environments and working environments - themes which are a core interest of the charity's work. The charity was in the process of renovating a space for collaboration and innovation called CC. Our workshop explored how CC could become a truly intergenerational co-working space, using a user-centric approach to provide workspace solutions for the charity's changing environment.

#### 2.1 Creating online workshops during COVID-19

We redeveloped our creative workshops for online delivery. We were very sensitive to the issues that stakeholders and participants, the students and our own team were facing at this time. Management has a long history of fostering decision-making attitudes that are most effective in a stable environment and that develop advanced skills in analyzing and choosing between decision alternatives. Yet as the increasingly complex and turbulent business environment challenges management, organizations have on occasion been criticized for not sufficiently developing their employees' skills to adapt to the turbulent contexts. We decided that we would try to develop our workshops so they would alleviate concerns and not exacerbate them. Drawing on different design-thinking approaches in organizations we identified five principles—user focus, problem framing, experimentation, visualization, and diversity—as common denominators. If we were to assume a design attitude in managing within a turbulent context, we knew we needed to understand problems as undetermined or wicked and to anticipate more than one solution. Within an online and social distancing environment we focused on putting the user to the forefront. We

emphasized the practices of understanding and empathizing with the participants explicit and latent needs and kept in touch with the users from the beginning by understanding the problems and through a first-stage solution of testing first ideas and incorporating feedback. We had to embed an inquiring, non-judgmental mind-set into the workshops. In order to undertake problem framing, participants and stakeholders need to be comfortable with complexity, ambiguity, and unexpected events. Experimentation, the iterative aspect of design thinking, encourages working in quick feedback loops on rapidly produced prototypes and we had to consider how to do this within a virtual environment. To enable participants to go through a visualization process will foster a deeper understanding of the situation by externalizing knowledge and undergoing a concrete experience. We also wanted to ensure the teams were diverse as this would foster openness to various perspectives and radical collaboration.

Firstly, we scoped out the challenge and set objectives. The main purpose of a remote design thinking workshop is to get a diverse group of people together to tackle a single problem. The first step in the planning process was to determine the challenge everyone would be working on. A clear workshop objective was key to ensuring that everyone knew why they were there and making sure that everyone was prepared and motivated to contribute. In the first instance we used the question: How might we use design thinking to improve the user experience within the charity in turbulent times?

We had an onboarding call with participants and assigned pre-work in advance of the online workshop. In a face-to-face workshop, we would go through the "building empathy" phase together; however, for an online workshop, we needed to set this as an assignment for participants to complete two weeks in advance. For the pre-workshop assignment, we wanted the participants to gather as many insights as possible about the charity. They were asked to speak to target users to find out what challenges they are currently facing when working with or at the charity, as well as their expectations and desires when it comes to their experience with the charity. At this stage, the best way to build empathy with the users was to ask them to walk through a particular experience that is relevant to them and to us as workshop facilitators. This way participants could gather feedback in real-time and experience the users' frustrations first-hand. For the second part of the pre-work, they were asked to create a simple empathy map. They were asked to put all the insights they have gathered from the interviews with their users into the relevant quadrants ready to discuss at the workshop. The map is essentially categories of Says, Does, Thinks, and Feels. The resulting collaborative empathy map is illustrated in Figure 1.



Figure 2. Completed Empathy Map

#### 2.1.1 Empathy: Workshop 1

This is the first "phase" of design thinking -empathy, although this is not a linear process with iteration taking place throughout the phases. In this workshop we brought everybody's insights from the preworkshop assignment together on the virtual whiteboard and started to examine and identify common themes. We started by asking each participant to briefly present their findings and share their empathy maps. Then, using Miro, we created one final empathy map which incorporated the main themes and insights. In this way we produced a collective understanding of the charity's users and where their main challenges lie. We then progressed to a discussion session about what has been learned so far and to ask and answer questions.

#### 2.1.2 Define: Workshop 2

From the interviews undertaken by the participants with users and stakeholders we drew insights and developed three personas illustrating the type of user for CC. A persona is an archetype of a user us empathize by understanding the users' business and personal contexts. Using the personas as a reference we then moved on to defining a problem statement and this moved us into the 'define' stage. We narrowed down the broader challenge (How might we use design thinking to improve the user experience for CC stakeholders in turbulent times) to a more specific focus. For this part of the remote design thinking workshop, we created a point of view (POV) statement and developed a more focused "how might we" (HMW) question. The POV statement followed the simple formula: "User" (Entrepreneurs of all ages) needs a way to "do something" (set up and continue business activity) because of "surprising insight" (intergenerational lack of communication during a crisis). The POV statement was human-centered, broad enough to leave room for creative solutions, but by now also narrow enough to ensure that it has a specific focus and is geared towards action. From this the participants moved into developing HMW questions. This was framed to invite action. (How), focuses on possibilities and potential (might), and encourages teamwork (we). The resulting HMW question is 'How might we enable a culture of community whist maintaining a sense of personal space?'

#### 2.1.3 Ideate: Workshop 3

Workshop 3 was dedicated to ideation, by coming up with ideas and potential solutions to address the user problem. This is where our participants had a chance to get creative, perhaps the most enjoyable aspects of a design thinking workshop. However, within an online environment where participants are working from home this meant some distractions occurred and of course we were also reliant on the technology functioning.

We used several activities at this stage. Using the "worst possible idea" technique, we asked the group to spend around ten minutes coming up with "anti-solutions" to the problem they're trying to solve. Then, having explored the opposite of what would be helpful to the user, it was easier to find potential solutions. The group sketched words and visuals on the virtual whiteboard at this stage. We then shared ideas and got feedback on the solutions. Our last activity was about refining the solution. Incorporating what they've learned about the user and the feedback they received on their initial ideas, we pulled everything into one single ideation board illustrated in figure 2.

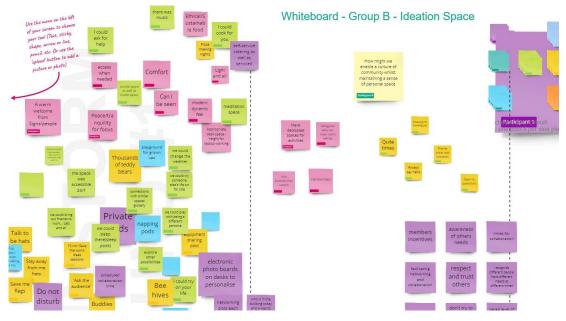


Figure 3. Ideation board

### 2.1.4 Prototype: Workshop 4

Having detailed what we considered users would need we compared this with a customer journey map which involved a visualization of the process that a person goes through in order to accomplish a goal. In this second stage of ideation, we compiled a series of user actions into a timeline. Then we added desires and pain-points for each step in the user's journey, based on the one solution decided on previously. For this part of the workshop, participants used the online whiteboard. To do this we defined the activities and steps in the users' experience, then asked participants to combine any steps that are too similar, narrowing it down to 8-15 steps. We then grouped the steps into phases and aimed for three to seven phases in total. Phases were labelled from the user's perspective. For example: Getting started, trying to contact, interacting with other users, etc. Then participants were asked to come up with goals and pain-points that relate to each step in the user journey. Goals are what propel the user from one step to the next, while pain-points prevent the user from moving forward. Finally, participants presented and reflected on all the user journey maps created.

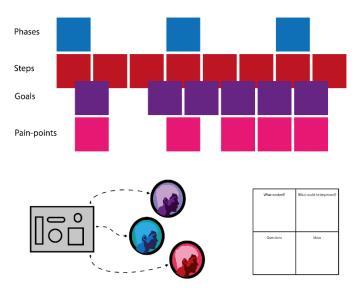


Figure 4. Sample User journey map

If we were conducting an in-person workshop, this is where we would have moved on to create physical or digital prototypes of the ideas, ready to be tested on real users. However, we needed to adapt this stage slightly and so we had a design student develop prototypes based on the ideas generated in the workshops and these were then given to our participants to test The participants used use a feedback grid with the following quadrants: what worked, what could be improved, questions, and ideas. For some participants who were keen to test their ideas, they emailed them to the users and then called them to walk them through the process, gathering feedback. A sample of the prototypes are illustrated in Figure 4.

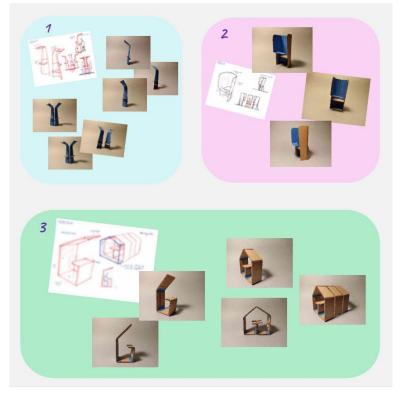


Figure 5. Prototypes for evaluation

# 2.1.5 Strategy Design Sprint: Workshop 5

In this workshop we widened design thinking tools from the micro level of the user to strategic thinking for the charity by undertaking a design strategy sprint. The process of this is illustrated in Figure 5.

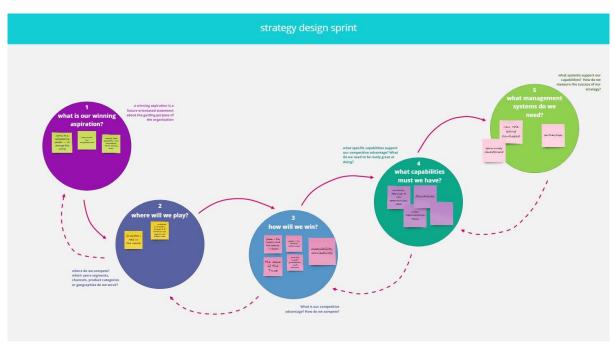


Figure 6. Strategy design sprint

Design strategy sprints are a dynamic tool designed to enable the aligning of a business strategy with the market and the users and consumers. We undertook this sprint in a time-bound, structured, and intensive manner aimed to solving the overall business challenge the charity was facing (the HMW question) but using this to define a strategic path forward. They foster creativity, collaboration, and rapid decision-making.

A Strategy Sprint typically unfolds in several stages, each designed to expedite strategic planning and increase its efficacy. Firstly, we used a stakeholder mapping tool which we used within the online workshop, and which was facilitated by the CEO of the charity. This enabled open discussion of stakeholders. This tool is used for the team to collectively identify priority stakeholders and identify how a chosen design concept or project might offer value to different stakeholders in different ways, thereby tying in the operational decisions on the project to the strategy. The Stakeholder Value Map is a visual map of the key stakeholders and the value propositions that a particular design solution or concept offers to them. It enables the creation of the value proposition which was created as a result of this activity and involved stakeholders, employees and importantly users and consumers. Doing this activity collaboratively deepens empathy for the diverse needs of different stakeholders. Solutions and concepts that are developed differently considering what value propositions they offer.

Using insights from the stakeholder value map and the sprint, the capabilities required were discussed and finally a value proposition was created which all participants agreed on.

'connecting people to place, the past, inspire ideas and nurture well-being in an emerging future'

# 3 RESULTS

This creative facilitation project, using design thinking to deliver collaborative online creative workshops found that establishing personal and professional connections and networks was key. The use of design thinking tools via the use of Miro engendered trust amongst the participants and it enabled them to be both collaborative and creative. Overall, the results inspired the charity to develop design thinking capabilities among staff to promote and sustain advanced services for their clients and stakeholders. The incorporation of design thinking capabilities resulted in intentional practices in the development of more service-oriented, customer-focused, and human-centred skills in the entrepreneurial project.

After the charity launched their entrepreneurship centre, they continued to use design thinking approaches to test new concepts and ideas internally, across departments and external to the organisation. We also found that by creating the value proposition with the client and users in collaboration with stakeholders forged a commitment to ensuring that the organisation delivered on this promise. This contrasts with the findings from Skålen et al. (2015) who claim that the value proposition should be created without involvement from the user or consumer. Our findings concur with Blomkvist and Segelstrom (2014) who proposed that visual tools play a central role as co creation tools when embarking on projects that culminate in designing value propositions and making decisions. We also agreed with Tauscher and Abdelkafi (2017) who state that visualizations influence mind sets and help establish shared understandings both within the organization and with stakeholders. Below is a quote from the charity's CEO.

The charity sees real benefit in embedding the use of both design thinking techniques and collaborative cross-organisation tools such as Miro into our day-to-day leadership, development and management. At a time when we need to be nimble and responsive to the emerging future, there is a continuous need for design and adaption; only by utilising these techniques and tools will we succeed in connecting people, place and the past to shape the future." CEO

Our adapted approach developed in this project offers additional value to stakeholders and individuals by using a service approach to co-creating solutions for entrepreneurs of all ages.

## 4 CONCLUSIONS

This paper contributes to the gap in practice-based research on exploring the needs and wants of entrepreneurs to enable them to engage with the changing professional work environment post COVID -19 by taking a design thinking, value creation approach with a set of tools and practices that product-centric organisations can use for service innovation and effective implementation. The way we interact with users, clients or consumers is changing and now rather than interacting with them on a sporadic basis we are moving towards continuous personalized interactions. Organisations are now being forced to rethink and reinvent their business model and pivot towards a service model to stay relevant. To do this they need to employ methods of obtaining key insights into issues facing employees and stakeholders and creative facilitation using a bespoke framework of design thinking concepts and tools is a way of achieving this.

### 4.1 Limitations and further research

The study is based on a single case study so despite having undertaken further trials of these concepts it is too early to assess the generalisability of our findings. Further research is being undertaken involving different organisation and industry types in an international context. The occurrence of COVID-19 and its effects during our creative facilitation project shaped the implementation of the strategic design sprint recommendations. As a result, developing further creative facilitation projects aimed at understanding how organisations develop their design thinking capability and what practices are adopted over the medium to long term requires more attention.

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