Weaving the threads: Service innovation with textile artisan communities

Francesco Mazzarella, Val Mitchell, Andrew May, Carolina Escobar-Tello
F.Mazzarella@lboro.ac.uk
Loughborough Design School, UK

Abstract

This paper reports on a participatory case study conducted for a doctoral research project, investigating how service design can be used to activate textile artisan communities to transition towards a sustainable future. Using multiple service design and co-design methods, a meaningful intervention was activated within the context of a textile artisan community in Cape Town (South Africa). The service designer elicited tacit knowledge into compelling narratives and facilitated a process of making sense of sustainable futures. As a result, the artisans joined together as a community, with the common purpose of sharing information throughout the supply chain and making it accessible through a service platform. In conclusion, this paper discusses the diverse roles the service designer can play in order to activate meaningful social innovations with communities and outlines the limitations of this case study as well as recommendations for further research.

KEYWORDS: community-centred design, situated services, sustainable futures, social innovation, textile artisan community

1. Introduction

We are witnessing an increased interest in artisanship as a more meaningful and sustainable approach to design, production and consumption. Artisanship has emerged as an economic activity, grounded on the personal identity and material culture of artisans, who use locally available resources to make, by hands or directly controlling machinery and digital tools, small batches of culturally and socially significant artefacts. However, artisans often find themselves working in an isolated and precarious economic condition (Scrase, 2003), being placed at the 'bottom of the pyramid' of an ecosystem, which has proven unsustainable in terms of livelihood, cultural heritage, social equality, and environmental stewardship. To alleviate this problem, 'top-down', 'one-size-fits-all' strategies have been deployed, but they have often resulted ineffective in addressing the specific needs and aspirations of diverse local communities (Ostrom, 1990). Instead, thanks to its human-centred, strategic and systemic strength (Blomkvist, 2010), the contribution of service design for social innovation is gaining currency and recognition, as a grounded and localised way to address social needs while also creating new social relationships (Murray et al., 2010). This has built momentum

for the service designer to adopt a 'community-centred design' approach (Manzini & Meroni, 2012) and activate a 'community of practice' (Wenger, 1998), i.e. a group of people driven by shared motivations and goals and engaged in a participatory process of development within a sociocultural context. However, this also poses challenges as it requires the service designer to embrace new methods of community engagement, as well as hybrid forms of organisation (Penin et al., 2009).

Within the heterogeneous service design discipline, the research project presented in this paper is aligned with the evolution of the field and its latest shift towards 'designing for service' (Sangiorgi & Prendiville, 2017). This implies an on-going and participatory approach to innovation, focused not on the design of touchpoints, blueprints, or servicescapes, but on the value co-creation system, and the creation of complex sociomaterial outcomes (Kimbell & Blomberg, 2017). Moreover, this research adopts a design anthropological lens (Gunn & Donovan, 2012), and focuses on co-designing 'collaborative services' (Jégou & Manzini, 2008), developed by following a 'social innovation journey' (Meroni et al., 2017). Service design in this context is therefore moving away from 'parachuting' into communities using fixed tools, commoditised into a recipe transferable across contexts. Such toolkits are often separated from the skills of the practitioner (Akama & Prendiville, 2013), who conceptualises blueprints in an overly neat way, overlooking the social life and intangible issues of his/her designs (Blomberg & Darrah, 2014). With this in mind, this research addresses the need for a more situated and embedded approach to designing for service, entailing context sensitivity, elicitation of tacit knowledge, adaptation of methods to local contexts, as well as on-going and collaborative transformation (Sangiorgi & Junginger, 2015). The overall aim of this project was to investigate how service design can be used to activate artisans to join together as a community in order to transition towards a sustainable future.

2. Participatory Case Study

Building on the theoretical premises outlined above, an anthropological approach to service design was developed through engagement with a community of textile artisans in Cape Town (South Africa). South Africa was chosen as an exemplary context for co-designing social innovations with communities, inspired by the concept of 'Ubuntu' or 'humanity towards others', meaning a traditional form of self-reliance and mutual support (M'Rithaa, 2008). This broadly inspires the South African way of thinking and doing, grounded on values of empathy, participation, interactions, sharing, cooperation, and communication. Moreover, South Africa has a long and varied tradition in artisanship, and the government has recently invested in poverty alleviation through numerous initiatives to support artisans (Rhodes, 2011). In particular, Cape Town was chosen as sample of a textile-manufacturing cluster rich in material culture, with a design sector in rapid development (Paul Duncan Media, 2015), which, however, is affected by social inequalities, cultural appropriation issues, market competition and manufacturing challenges (Morris & Reed, 2008).

2.1 Methodology

Due to the exploratory purpose of this research, bounded by time and activity, case study was chosen as a qualitative methodology to investigate a contemporary real-life phenomenon in its actual setting and gather socially and culturally rich data (Yin, 2004). Furthermore, due to the emancipatory purpose of this project, the case was studied through a participatory design research approach (Simonsen & Robertson, 2013), consisting of the collaboration and mutual learning between the researcher and multiple participants in order to activate meaningful social innovations. This study encompassed five stages, as outlined in Table 1.

Stages	Objectives	Results
1 (Design Ethnography)	To conduct a scoping activity using methods drawn from ethnography in order to empathically discover the context around a service design intervention	Identified scope for the case study; Refined plan for data collection; Contact list of potential study participants.
2 (Storytelling)	To use storytelling in order to map the current state of the art of Cape Town textile artisans	Shared understanding of current state of the art of Cape Town textile artisanship; Photo-story documenting the artisans' current practices; Awareness of holistic sustainability issues.
3 (Sensemaking)	To use sensemaking methods in order to generate meaningful visions for the future	Visions for sustainable futures; Future trends reframed in relation to the artisans' realities; Ideas to achieve sustainable futures.
4 (Co-creation workshop)	To facilitate a co-creation workshop in order to engage artisans with the design of situated service propositions for a sustainable future	Opportunity areas for a service design intervention; Design directions towards a sustainable future; Reframed future direction; Map of stakeholders to support the future direction; Service storyboard to encourage the stakeholders towards the future direction; Social business model canvas outlining the service implementation; Shared values to be embedded into the service innovation.
5 (Roundtable Discussion)	To conduct a roundtable discussion in order to leave a legacy within the local community	Showcase of the outcomes of the project; Action plan for the service implementation; Shared understanding of the designer's role and local legacy.

Table 1 – The stages of the study.

2.1.1. Multiple Methods of Data Collection

Data was collected through multiple service design and co-design methods meeting the objectives of this research. An initial scoping activity allowed the designer to step into the community and identify a meaningful scope for the case study. Ethnographic methods (Salvador et al., 1999), such as participant observations and unstructured interviews, were used with thirteen stakeholders (i.e. artisans, retailers, educators, members of support organisations) within their work routines and spaces. Throughout this stage, field notes were written, reporting comments and insights while interacting with participants, paying great attention to contextual elements.

Storytelling (Bertolotti et al., 2016) was used as a method to collect the fragments of the artisans' past and current practices and weave them together into compelling narratives. This was conducted through contextual interviews in the workspaces of eight artisans, where materials, tools and environmental assets were regarded as prompts to trigger a comprehensive discussion around the artisans' work routines (Figure 1). A combination of observations and interview questions was used by the researcher, supported by four cards reflecting the four pillars of sustainability, i.e. society, culture, environment, economy (Walker, 2011).

Figure 1 – Contextual interview with one artisan and cards used to aid the storytelling.

Sensemaking (Klein et al., 2006) was used as a method to aid each of the eight artisans in exploring 'what a sustainable future may look like for their businesses'. This encompassed three subsequent activities, supported by adapting tools – 'framing', 'what if…', 'ideas generation' (Stickdorn & Schneider, 2011) – and adopting 'future trends cards' specifically designed for the purpose of this study (Figure 2). Respectively, these tools enabled the artisans to frame their visions for a sustainable future, map out what would have happened to their businesses if some future trends occurred, and generate new ideas to inform the co-design of a situated service.

Figure 2 – Templates and cards used to aid the sensemaking.

A co-creation workshop (Stickdorn & Schneider, 2011) was conducted with ten textile artisans as an act of collective creativity (Sanders & Stappers, 2008). The purpose of this was to co-design a situated service proposition, with the support of seven tools adapted from various sources (Figure 3). The artisans were invited to collectively identify the key challenges and opportunities to achieve the envisaged sustainable futures. A template adapted from the 'Frame Your Design Challenge' tool (IDEO, 2015) was used to aid brainstorming around a design direction to be followed, taking into consideration the target beneficiaries of the innovation, the sociocultural factors shaping the problem, the evidence to support an investment in this direction, and possible solutions to the problem. The artisans then synthesised their diverse ideas into a future direction by using a given template, outlining a title, a brief description and a visualisation of how the innovation could work. In order to support the future direction, a 'stakeholders map' tool, inspired by the 'Platform Design Toolkit 2.0' (Cicero, 2016), was used to identify target stakeholders and prioritise among them according to their impact level into: (co)managers, (co)producers and (co)consumers of the service. At this point, a service storyboard template, adapted from Corubolo et al. (2016), was used to draw the key actions of the users' journey, define the main challenges and opportunities, and design service features needed to fulfil them. Drawn from The Young Foundation (2012), a social business model canvas was then used to think and communicate the social impacts and business model behind the service. A manifesto was co-designed in order to outline the key values unifying the community and that needed to be embedded into the process of service innovation.
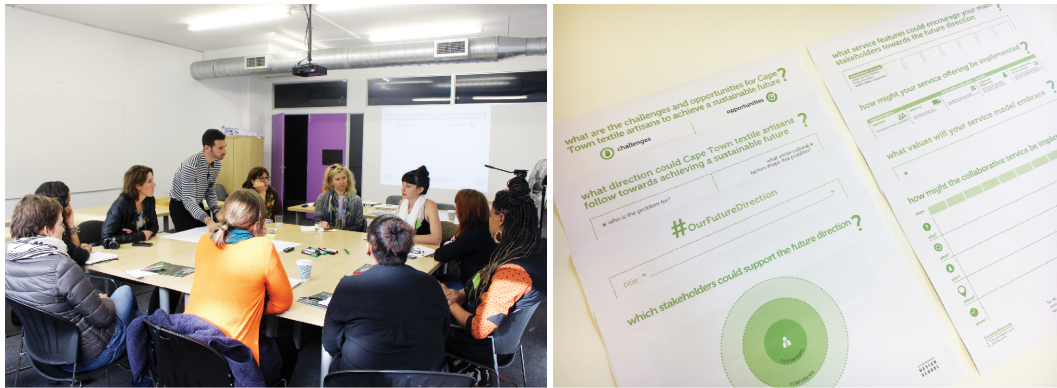
Figure 3 – Co-creation workshop and tools used to aid the co-design.

Finally, before the researcher left the community in Cape Town, a roundtable discussion was conducted as a 'farewell activity' (Meroni et al., 2013), encompassing a showcase of the outcomes of the project to a group of thirty-five stakeholders in order to discuss the possible implementation of the outlined service proposition.

2.1.2. Thematic Analysis

Throughout the case study, the data was captured in the form of notes posted on the given templates as well as photos and audio recordings, which were then transcribed. The audio transcripts were thematically analysed following a procedure that encompassed data reduction, display and conclusions drawing (Miles & Huberman, 1994).
The data collected through storytelling was analysed by using the coding system in Table 2. *A priori* themes (i.e. culture, society, environment, economy) were derived from the quadruple bottom line of sustainability (Walker, 2011). This led to the identification of sub-themes (i.e. identity, tradition, place, people, skills, materials, tools, making, sustainability, textile design, retail and communication). These were used to structure the findings of this research stage into a photo-book (hereafter called photo-story) documenting the artisans' narratives.

Theme	Sub-theme	Description
Culture	Identity	Artisan's profile, motivation, value proposition
	Tradition	Background, history, development
	Place	Cultural values, local identity and aesthetic
Society	People	Role, scale, approach to collaboration
	Skills	Expertise, training, innovation
Environment	Materials	Supplies of fibres/yarns/fabrics
	Tools	Suppliers, equipment, workspace
	Making	Production phases and volumes
	Sustainability	Life cycle, end-of-life, financial sustainability
Economy	Textile Design	Product types, product identity
	Retail	Cost, price, retailers, packaging
	Communication	Target customers, communication channels

Table 2 – Coding system for the analysis of the data collected through storytelling.

As per Table 3, from the analysis of the data collected through the sensemaking sessions the artisans' visions for the future were derived; these were clustered around the sub-themes of cultural, social, environmental and economic sustainability. Moreover, the data captured through the 'what if…' tool was clustered in relation to eight future trends (i.e. redistributed manufacturing, flexible production, circular economy, alternative economies, slow fashion, advanced artisanship, designer entrepreneur, enabling ecosystem) resulting from a previous

Francesco Mazzarella, Val Mitchell, Andrew May, Carolina Escobar-Tello
Weaving the threads: Service innovation with textile artisan communities
Linköping University Electronic Press

683

study (Mazzarella et al., 2016). These trends were used as *a priori* coding, to then categorise the results into three sub-themes (i.e. now, near future, far future). The ideas for the future generated through the sensemaking sessions were clustered around sub-themes in relation to the future trends, and then prioritised according to the frequency of data.

Theme	Sub-Theme	Description
Vision	Culturally sustainable futures	Artisans' visions for holistically sustainable futures
	Socially sustainable futures	
	Environmentally sustainable futures	
	Economically sustainable futures	
Redistributed Manufacturing	Now / Near Future / Far Future	Trends reframed in relation to the artisans' current practices or (near/far) future possibilities
Flexible Production		
Circular Economy		
Alternative Economies		
Slow Fashion		
Advanced Artisanship		
Designer Entrepreneur		
Enabling Ecosystem		
Future Ideas	Making Skills	Ideas for the transitions towards a sustainable future
	Production Process	
	Supply Chain	
	Marketing Strategy	
	Consumer's Behaviour	
	Product Type	
	Business	
	Support System	

Table 3 – Coding system for the analysis of the data collected through sensemaking.

After the co-creation workshop, a process of thematic analysis was conducted using the coding system in Table 4. Themes were derived from the data collected through the templates (i.e. challenges, opportunities, design directions, future direction, stakeholders, service proposition, social business model, values).

Theme	Description
Challenges	Contextual factors hindering the transition towards a sustainable future
Opportunities	Contextual factors enabling the transition towards a sustainable future
Design Directions	Opportunities for reframing the problem into a viable design direction
Future Direction	Direction framed to encourage the transition towards a sustainable future
Stakeholders	Target stakeholders to support the chosen strategy
Service Proposition	Service features to enable the implementation of the future strategy
Social Business Model	Business plan of social enterprise supporting the service implementation
Values	Values shared by the community to assess the sustainability of the service

Table 4 – Coding system for the analysis of the data collected through co-creation.

Finally, Table 5 outlines the themes (i.e. aesthetic, technology, collaboration, promotion, legacy) that emerged from the data collected at the roundtable discussion.

Theme	Description
Aesthetic	'Glocal' style to embed into meaningful textiles
Technology	Tension between traditional handmade and digital technology
Collaboration	Synergies across stakeholders to address collective aims
Promotion	Collective exhibition for disrupting the status quo
Legacy	Local assets to facilitate follow-up actions

Table 5 – Themes derived from the analysis of the data collected at the roundtable discussion.

3. Findings

3.1. The Challenging Context Around Textile Artisanal Businesses

Through the initial context immersion, it emerged that Cape Town used to be a textile-manufacturing cluster, but recently most of the production has been outsourced due to economic issues, and only a few fabric manufacturers are still active locally. Therefore, contemporary textile artisans struggle to find suppliers for their collections. On the other hand, resource constraints have mobilised local creativity and triggered artisans to start up businesses around printing on available base cloth in order to personalise and differentiate their textiles, as evidenced in local media (Figure 4).

Figure 4 – Local newspaper article documenting the raise of fashion artisanal businesses.

The context immersion identified deep social inequalities, rooted in the Apartheid, between the minority of white women (who are in a privileged position to start up artisanal businesses) against the majority of black artisans (living and working in 'townships', i.e. South African slums, at the 'bottom of the pyramid' of an unfair socioeconomic system). The scoping activity contributed to unpacking a series of social wicked problems, faced from the perspective of the unemployed (to enter the job market), black people (to overcome social inequalities), white business owners (to grow their businesses), social enterprises (to enhance their social impact) and the government (to improve its service provision). The participants discussed that co-designing a situated service would imply tackling cultural issues (e.g. racial segregation, competitive business mind-sets, consumers' appreciation of the handmade over the digital), a widespread sense of 'lack' (of supplies, manufacturers, customers, information, trust, employment), access (to capital, resources, training, infrastructures) and inefficiencies within the formal sector.

Francesco Mazzarella, Val Mitchell, Andrew May, Carolina Escobar-Tello
Weaving the threads: Service innovation with textile artisan communities
Linköping University Electronic Press

685

3.2. Potential Narratives of Collaboration Across Artisans

The following paragraphs give a brief snapshot of some of the eight artisans participating in the storytelling stage of the study (Figure 5).

Figure 5 – Textile artisans participating in the storytelling study in Cape Town.

Jane Solomon started her enterprise Fabricnation as a textile activist with the vision to shape a better fabric of the nation. Jane enjoys managing her business on her own, but she balances her isolated condition through building closer relationships with her customers, collaborating with graphic designer Jann Cheifitz, and shaping a network of suppliers and other members of the Craft & Design Institute (CDI).

> *It is nice to be an independent entrepreneur, but you can feel quite isolated if staying on your own. For me, relationships are important, and collaborations are drawn out of necessity, shaped by myself. […] Over a period of time, paying on time, being reliable and professional made a huge difference (Artisan).*

Natalie du Toit, designer and manager of Indigi Design, has always been committed to shape a relaxed environment to work in, with regular meetings to openly discuss any issues. Natalie highlighted the importance of surrounding herself with a network of trustworthy people, such as her business mentor and coach, but also other businesses and members of organisations.

> *It has taken some time to build relationships within my team, but now I feel that everything is well put together. […] It is important to have a support system and be in an always-learning place (Artisan).*

Tracy Rushmere manages on her own the business Shine Shine. The designs are developed in collaboration with Heidi Chisholm based in New York, and are produced by one trustworthy seamstress, who does the CMT (i.e. cut make trim) from her home in Cape Town. Tracy used to be a member of the Threadcount collective, a loosely-knit group of local businesses sharing supplies, production management and exhibition costs at the Design Indaba festival.

> *The Threadcount collective was a good support system; if I needed information, she [Heather] would have given it to me, and vice versa. We shared whatever we needed (Artisan).*

Skinny LaMinx was funded by Heather Moore who, together with Pearl Thompson, created an in-house team of seamstresses and provided them with a pleasant space to work in. Skinny LaMinx is built upon long-lasting work relationships and a horizontal community, where everybody has ownership and responsibility over her own role and is given space to grow professionally.

Francesco Mazzarella, Val Mitchell, Andrew May, Carolina Escobar-Tello
Weaving the threads: Service innovation with textile artisan communities
Linköping University Electronic Press

686

The important side of the business lies in designing and making, but also in being responsible for a lot of other people's livelihoods and having created a space where everybody enjoys working and feels invested in its story, with pride (Artisan).

Overall, it emerged that the Cape Town's artisanal fabric is interwoven by a variety of independent and social enterprises working with larger communities. Their main challenge is finding local fabric manufacturers, as well as skilled CMTs, because the information is held by individualistic business mind-sets. On the other hand, the artisans identified an opportunity to share their knowledge and collaborate towards open innovation, contributing to making Cape Town become a reference hub for textile-making.

The biggest challenge is finding people, because it requires a lot of training and mentorship. There are many organisations, non-for-profit and commercial ones, but they need systems and service design. Sharing information, online and for free, would make much sense (Artisan).

3.3. A Collective Vision for Socioeconomic Flourishing

Throughout the sensemaking sessions, the artisans unpacked the concept of sustainability within their context. They expanded the sustainability discourse from conventional economic or environmental concerns to include also social and cultural meaning (Figure 6), in line with the latest understanding of the four pillars of sustainability. The artisans envisaged an opportunity for enhancing collaboration among individuals within their communities, and became motivated to take action towards community wellbeing, without feeling overwhelmed by wider environmental issues.

For me, sustainability does not refer to cash necessarily, but to a future that keeps me stimulated as an artisan. It means stimulating myself to be happy, but also empowering other people, especially craftswomen, to sustain themselves economically (Artisan).

The artisans framed their vision for making the local economy flourish in order to contribute to job creation and perpetuate heritage textiles into future generations, through a network of like-minded businesses and a wider support system.

Figure 6 – 'Sustainable futures' unpacked by the artisans through sensemaking.

3.4. The Co-design of a Community Service Platform

Providing a platform for the artisans to collectively discuss their visions for the future helped diverse businesses acknowledge that they all faced similar challenges. As a consequence, the usual resistance to collaborate and innovate was challenged, and trust relationships among the artisans were nurtured.

Building on the past experience of Threadcount and existing relationships, the artisans proposed reactivating the collective as a support system, in a more inclusive way. Instead of waiting for governmental aid and being reliant on external funding, the artisans recommended encouraging a synergy of 'bottom-up' initiatives among like-minded businesses and 'top-down' support into a 'middle-up-down' approach aimed at community resilience. Grounded on trust relationships, and using accessible digital technologies to enable communication, the collective was meant to grow organically. Therefore, a future strategy was framed around the development of a hybrid (i.e. physical and digital) platform to help textile artisanal businesses organically flourish, locally and internationally. The artisans, joined together as a collective and supported by an administrator, were placed at the core of the system. Other stakeholders (e.g. suppliers, educators, retailers, support organisations, consumers) were also mapped as service providers or users.

> *If we get together, we make a force, an agency of textile artisans, to change other businesses that are not practicing in a sustainable way. […] It is better to invest on long-lasting relationships grounded on good values, with everybody behind us, from top to bottom. […] This requires a conscious effort, and then we let it grow organically through a ripple effect (Artisan).*

As an output, a collaborative service storyboard (Figure 7) was co-designed with the artisans, identifying their main needs and outlining service features to fulfil them. The proposed service was called 'Weaving the Threads', to denote that the platform was based on relationships and cooperation within a community of textile artisans.

| informed consent (creative commons) | contact list (google+) | open database (website, print-outs) | admin support (CPUT apprentice) | collective blog (photos, web links) |
| quarterly meeting (open studios) | collective show (talks, sales) | shared REP (trade shows) | activism campaign (social media) | annual review (action plan) |

Figure 7 – Storyboard of the 'Weaving the Threads' community service platform.

As a support process prior to setting up the service, the participants highlighted the need for gathering informed consents (e.g. under the Creative Commons open licence) contributing to establishing trust across the artisan community. As a backstage interaction, all the artisans were encouraged to open up their individual business knowledge and share their networks of contacts within the community. This was meant to constitute the basis for setting up, as a touchpoint, an open source database of information throughout the value chain to be accessible via a website and an application. The need for hiring an administrator was discussed to ensure a smooth collaboration across artisans through a middle manager of the community. The artisans suggested also the idea of setting up a blog to collectively showcase the makers behind the products, as a potential solution to the identified lack of consumers' awareness. The offline dimension of the service proposition entailed quarterly meetings in the artisans' studios for sharing experiences, as well as thematic events, such as collective exhibitions. They also identified the need for interactions through a shared salesperson at international trade shows in order to establish a 'glocal' market. While an activism campaign was proposed to be launched on social media to engage a wider community, annual

committee meetings were recommended as a strategy to discuss any conflicting agendas and ensure that the service innovation followed values shared among the artisans.

The proposed model was that of a non-for-profit organisation – supported by crowdfunding and grants – co-creating value in terms of collective knowledge, local job creation, enhanced environmental stewardship, revitalised artisanal heritage and place-making. Although it is arguable that the outlined service proposition is not particularly innovative, the participants acknowledged that this was the solution that made the most sense within their context. In fact, it addressed the pressing need for knowledge sharing and contributed to overcoming the limited provision of services to support artisans, currently receiving only governmental aid. Finally, the artisans co-designed a manifesto as a call for acting responsibly and transparently, building trustworthy relationships and horizontal collaborations. They argued for diversity and individuals' freedom of expression within a resilient support network, making community assets flourish towards a shared agenda.

3.5. Legacies Activated Within the Local Community

Through the roundtable discussion, the service proposition outlined by the artisans was presented to diverse stakeholders; therefore, other issues emerged around its potential implementation. The participants discussed the need for reframing the scope of the community around a core team of artisans bound together by both a 'glocal' aesthetic and on a shared business model.

> *We have to find an aesthetic and a way of working, which makes us a collective. We can start with the people we want to work with, and then we let it organically grow. It would be a business collective rather than an aesthetic collective, since what would bind us together are business issues (Artisan).*

Through the field research, the key legacies activated within the local community are summarised below:

- Collaborations across businesses were shaped to optimise the use of resources (e.g. updating the platform www.peek.org.za by including not only artisans but also suppliers and retailers).
- A potential enabler of the implementation of the service platform after the researcher physically exited the community was identified in a lecturer at Cape Peninsula University of Technology (CPUT).
- Online communication is on-going, to explore further collaborations (e.g. organising a hackathon to develop the digital platform).
- Building potential partnerships with British designers was investigated at the London Fashion Week 2016, in collaboration with MERGE ZA, i.e. a travelling showcase of contemporary South African fashion designers (Figure 8).

Figure 8 – Panel debate at MERGE ZA.

4. The Roles of the Service Designer

Beyond the contextual findings about Cape Town textile artisanship, the research highlighted the diverse roles the service designer can play in order to activate textile artisan communities to transition towards a sustainable future.

4.1. Cultural Insider: Situating Meaningful Interventions Within a Context

The project corroborated the need for the designer to be culturally sensitive to the local context when approaching a community, moving away from 'parachuting' into projects that do not grow or develop (Akama & Prendiville, 2013). Adopting a design anthropological approach (Gunn & Donovan, 2012) allowed capturing of contextual sociocultural factors mostly overlooked by 'top-down' organisations when designing services and strategies to aid diverse artisans. Going beyond the use of ethnographic methods to serve a merely documentary purpose in initial research stages, the project highlighted the diverse grades of participation of the socially responsible designer, who is summoned to go beyond 'empathy' (Cipolla & Bartholo, 2014) and become a 'cultural insider' by establishing a dialogical relationship with a community. To get access to participants the researcher sought a 'gatekeeper' – also framed by Morelli, 2015 as 'community provider' – and activated a human chain of contacts to recruit artisans motivated to take part in the study, making the community organically evolve.

4.2. Storyteller: Interweaving Fragments of Past and Present into New Narratives

The design researcher played both the role of a story-listener (Valsecchi et al., 2016) – here with an emphasis on eliciting the artisans' tacit knowledge – and that of a storyteller (Tassinari et al., 2015), interweaving fragments of past and present practices into new and compelling narratives. Storytelling required establishing a researcher-participant relationship based on trustworthiness, openness and sharing. Four cards were developed to aid the designer in conducting contextual interviews, complemented by observations and photography in order to capture contextual insights, which would be otherwise overlooked in non-contextual interview settings. As an outcome, the intangible stories of the artisans were made tangible, by means of photographs and a diary-like text, in the form of a photo-story (Figure 9). Furthermore, the act of binding the artisans' narratives together as one whole photo-story contributed to manifesting a shift from individual businesses towards a collective. Finally, in order to overcome the marginalised condition of the artisans, the photo-story was also used as an 'engagement tool' (Thorpe et al., 2016) to make the businesses known by a wider audience of stakeholders.

Figure 9 – Photo-story: cover and inner spread.

4.3. Sensemaker: Situating Visions for the Future into Local Realities

The project contributed to making a significant introduction of the concept of sensemaking – initially developed in organisational sociology (Weick, 1985) – into the field of service design for social innovation. Instead of adopting a disruptive or speculative approach, 'designing anthropological futures' (Smith et al., 2016) allowed overcoming the artisans'

Francesco Mazzarella, Val Mitchell, Andrew May, Carolina Escobar-Tello
Weaving the threads: Service innovation with textile artisan communities
Linköping University Electronic Press

690

resistance to innovate and building resilience within their heritage practices. The 'what if…' and 'ideas generation' tools designed for this purpose aided the artisans in mapping potential innovations, shifting from context-free and technical future trends towards situated and human-scale visions for the future. Challenging the passive attitude of the artisans waiting for 'top-down' aid, the researcher empowered them to become 'agents of alternatives' (Fuad-Luke et al., 2015) with increased awareness of the impact of their collective actions upon the shaping of social innovations. This is manifested in the photos of the participants holding posters framing their own visions for a sustainable future and shared on social media as an activism campaign (Figure 10).

Figure 10 – Artisans holding their own visions for a sustainable future.

4.4. Facilitator: Crafting Situated Services

The fact that the designer was an 'insider-outsider' (Calvo, 2017) positively contributed to being perceived not as a competitor but as a facilitator, providing the artisans with a neutral space for addressing common challenges. Gathering people with different agendas together emphasised the political role of the designer (Mazé, 2014), here having to zoom out from specific short-term challenges and elicit opportunity areas across artisans for a long-term vision towards place-making. As a result, the artisans – previously working in an isolated and precarious condition – joined together as a 'community of practice' (Wenger, 1998) and outlined a situated service proposition. Figure 11 evidences the empowerment of the artisans, with the designer among them as a member of the collective that he facilitated to bring to life.

Building on Prendiville's (2015) anthropological perspective on the concept of 'place', 'situated services' are defined here as services that are rooted in a locale and grounded in personal notions of time, that are tailored to the people using and producing them, embedding their local tacit knowledge and everyday practices within them. Furthermore, a process for 'crafting' situated services was developed. This requires the designer to be open to grasp cultural sensibilities, flexible to navigate uncertainties, and inclusive to engage local stakeholders both in the design of service outputs and in the process of co-designing them.

Figure 11 – The designer facilitator within the artisans' collective.

4.5. Activist: Outlining Actionable Routes Towards Sustainable Futures

Going beyond the much-discussed role of facilitator, the role of the researcher in this project can be framed as that of a design activist (Fuad-Luke, 2009). This is not a new role for designers, but here the concept of 'slow activism' was borrowed from Pink (2015) and applied to a design process aimed at enacting cultural sensibility when entering a community and activating a slow process of meaningful and continuous transformation. Moreover, beyond the emphasis on the 'exit strategy' (Meroni et al., 2013) which is crucial in any social innovation projects, here the researcher aimed at activating 'legacies' within the local community. The researcher's focus in this project was not on delivering service outputs that bring closure to the designer's engagement, but on outlining actionable routes towards a sustainable future. Therefore, the outcomes of this process were less formal than commonly fixed service blueprints and more 'work-in-progress' such as the proposition of a service storyboard and a manifesto of values to be embedded into the service innovation process. Furthermore, building on Sangiorgi's (2011) theory of 'transformation design', this project confirmed the need for nourishing an enabling ecosystem based on both external 'mechanisms of involvement' of diverse stakeholders and on internal 'mechanisms of change' around shared values. With this in mind, the roundtable discussion facilitated towards the end of the case study was conceived as an engaging event for activating a 'middle-up-down' (Staszowski, 2010) form of collective management across diverse stakeholders.

5. Conclusions

This paper has outlined the diverse roles the service designer can play in order to activate artisans to join together as a community and transition towards a sustainable future. It has presented multiple service design and co-design methods (design ethnography, storytelling, sensemaking, co-creation workshops, and roundtable discussions) that can be adopted and adapted throughout a social innovation process and hopefully applied in other contexts. The paper has highlighted the need for the designer to be sensitive to local cultures and tailor his/her approach to specific contexts in order to craft situated services for sustainable futures. Using a design anthropological approach to entering a textile community in Cape Town allowed giving voice to artisans (who often find themselves in an isolated and precarious condition) and to interweave the fragments of their tacit knowledge into compelling narratives. Such an approach also contributed to empowering the artisans to start thinking about sustainable futures and framing visions meaningful to them. By turning their common challenges into opportunities for the future, the artisans felt driven to take a collective action grounded on values shared among the community. Adopting a 'middle-up-

Francesco Mazzarella, Val Mitchell, Andrew May, Carolina Escobar-Tello
Weaving the threads: Service innovation with textile artisan communities
Linköping University Electronic Press

692

down' approach (based on synergies between the 'bottom-up' initiatives of artisans and the 'top-down' support of organisations) also emerged as a way to make social innovations sustainable over time. Finally, the case study emphasised the importance for the designer to activate legacies with the local community for the artisans to progressively take ownership over the process of service innovation.

5.1. Limitations and Next Steps

In conclusion, there is scope for the design ethnographic activity to be refined with the support of a diagnostic tool aiding the designer's immersion in the context to gather key insights for scoping a meaningful intervention. In view of future work, the 'future trends cards' need to be refined by using simplified keywords and visuals. Iterative stages of prototyping are needed to co-design all the elements of the outlined service proposition. The issue of a 'middle-up-down' ecosystem to sustain social innovations requires further investigation. Finally, the implementation of the service implies time, resources and contextual factors that go beyond the scope of this case study, therefore assessing the impact of the social innovation is left open for future work.

6. References

Akama, Y. & Prendiville, A. (2013). Embodying, Enacting and Entangling Design: A Phenomenological View to Co-Designing Services. *Swedish Design Research Journal*, Vol. 1 (13), pp. 29-40.

Bertolotti, E. et al. (2016). *The Pearl Diver. The Designer as Storyteller. DESIS Philosophy Talks: storytelling and design for social innovation*. DESIS Network publication. Retrieved from www.desis-network.org (Accessed: 4 March 2018).

Blomberg, J., & Darrah, C. (2015). Towards and Anthropology of Services. *The Design Journal*, 18 (2), pp. 171-192.

Blomkvist, J. et al. (2010). Service Design Research: Yesterday, Today and Tomorrow. In: Stickdorn, M. & Schneider, J. (eds.). *This is Service Design Thinking*, Amsterdam: BIS Publishers, pp. 308-15.

Calvo, M. (2017). Reflective Drawing as a Tool for Reflection in Design Research. In: *iJADE Conference 2016: Drawing*, 18-19 November 2016, University of Chester, UK.

Cicero, S. (2016). *Platform Design Toolkit 2.0*. Retrieved from http://platformdesigntoolkit.com/toolkit/#download (Accessed: 4 March 2018).

Cipolla, C. & Bartholo, R. (2014). Empathy or Inclusion: A Dialogical Approach to Socially Resoonsible Design. *International Journal of Design*, 8 (20), pp. 87-100.

Corubolo, M. et al. (2016). *The Social Innovation Journey Toolbox*. Milan, Italy: POLI.design.

Fuad-Luke, A. (2009). *Design Activism – Beautiful Strangeness for a Sustainable World*. London, UK: Earthscan.

Fuad-Luke, A. et al. (2015). *Agents of Alternatives. Re-designing Our Realities*. Berlin, Germany: Agents of Alternatives.

Gunn, W. & Donovan, J. (eds.) (2012). *Design and Anthropology*. Farnham, UK: Ashgate.

IDEO (2015). *The Field Guide to Human-Centered-Design*. Retrieved from www.designkit.org/resources/1 (Accessed: 4 March 2018).

Jégou, F. & Manzini, E. (2008). *Collaborative services. Social innovation and design for sustainability*. Milan, Italy: Edizioni Polidesign.

Francesco Mazzarella, Val Mitchell, Andrew May, Carolina Escobar-Tello
Weaving the threads: Service innovation with textile artisan communities
Linköping University Electronic Press

693

Kimbell, L. & Blomberg, J. (2017). The Object of Service Design. In: Sangiorgi, D. & Prendiville, A. (eds.) *Designing for Service*. London, UK: Bloomsbury.

Klein, G., et al. (2006). Making Sense of Sensemaking 1: Alternative Perspectives. *Intelligent Systems*, 21 (4), pp. 70-73.

Manzini, E. & Meroni, A. (2012). Catalyzing Social Resources for Sustainable Changes. Social Innovation and Community Centred Design. In: Vezzoli, C, et al. (2014). *Product-Service System Design for Sustainability*. Sheffield, UK: Greenleaf Publishing.

Mazé, R. (2014). Our Common Future? Political Questions for Designing Social Innovation. In: *Design Research Society 2014 Conference Proceedings*, 16-19 June 2014, Umeå University, Sweden.

Mazzarella, F. et al. (2016). Moving Textile Artisans' Communities Towards a Sustainable Future – A Theoretical Framework. In: Lloyd, P. and Bohemia, E. (eds.). *Proceedings of DRS2016: Design + Research + Society – Future-Focused Thinking,* 27-30 June 2016, University of Brighton, UK, pp. 3961-3982.

Meroni, A., et al. (2013). Design for Social Innovation as a Form of Designing Activism. An Action Format. In: NESTA (ed.) *Social Frontiers, The Next Edge of Social Innovation Research*, 14-15 November 2013, Glasgow Caledonian University, UK.

Meroni, A. et al. (2017). The Social Innovation Journey: Emerging Challenges in Service Design for the Incubation of Social Innovation. In: Sangiorgi, D. & Prendiville, A. (eds.). *Designing for Service*. London, UK: Bloomsbury.

Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage.

Morelli, N. (2015). Challenges in Designing and Scaling-up Community Services. *The Design Journal*, 18 (2), pp. 269-290.

Morris, M., & Reed, L. (2008). A Sectoral Analysis of Skills Gaps and Shortages in the Clothing and Textile Industry in South Africa. *Report for the Human Sciences Research Council*. Pretoria, South Africa: Development Policy Research Unit (DPRU), University of Cape Town, Sociology of Work Unit, Research Consortium. Retrieved from http://www.labour.gov.za/DOL/downloads/documents/research-documents/Clothing%20and%20textile%20industry_DoL_Report.pdf (Accessed: 4 March 2018).

M'Rithaa, M. (2008). Engaging Change: An African Perspective on Designing for Sustainability. In: Cipolla, C., & Peruccio, P. P. (eds.). (2008). *Changing the Change Conference Proceedings*, 10-12 July 2008, Politecnico di Torino, Turin, Italy.

Murray R., et al. (2010). *The open book of Social Innovation*. London, UK: Nesta. Retrieved from http://www.nesta.org.uk/sites/default/files/the_open_book_of_social_innovation.pdf (Accessed: 4 March 2018).

Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, UK: Cambridge University Press.

Paul Duncan Media (2015). *World Design Capital Cape Town 2014: The Story of an African City*. Cape Town, South Africa: Cape Town Design NPC.

Penin, L., et al. (2009). Design and Social Innovation in the US. Amplifying Creative Communities in Design for Social Innovation in the United States. In: *Proceedings of the 2nd International Symposium on Sustainable Design (II ISSD)*, Brazil Network on sustainable Design-RBDS, São Paulo, Brazil.

Pink, S. (2015). Ethnography, Codesign and Emergence: Slow Activism for Sustainable Design. *Global Media Journal: Australian Edition*, 9 (2), pp. 16-25.

Prendiville, A. (2015). A Design Anthropology of Place in Service Design: A Methodological Reflection. *The Design Journal*, 18 (2), pp. 193-208.

Rhodes, S. (2011). Beyond 'Nourishing the Soul of a Nation': Craft in the Context of South Africa. *Making Futures: The Crafts as Change Maker in Sustainably Aware Cultures*, 2.

Salvador, T. et al. (1999). Design ethnography. *Design Management*, 10 (4), pp. 35–41.

Sanders, E. B. N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *CoDesign*, 4 (1), pp. 5-18.

Sangiorgi, D. (2011). Transformative Services and Transformation Design, *International Journal of Design*, 5 (1), pp. 29-40.

Sangiorgi, D. & Junginger, S. (2015) Emerging Issues in Service Design, *The Design Journal*, 18 (2), pp. 165-170.

Sangiorgi, D. & Prendiville, A. (2017). *Designing for Service*. London, UK: Bloomsbury.

Scrase, T. J. (2003). Precarious Production: Globalisation and Artisan Labour in the Third World. *Third World Quarterly*, 24 (3), pp. 449–461.

Smith, R. C. et al. (2016). *Design Anthropological Futures*. London, Uk: Bloomsbury.

Staszowski, E. (2010. Amplifying Creative Communities in NYC: A Middle-Up-Down Approach to Social Innovation. In: *SEE Workshop Proceedings*, Florence, Italy.

Stickdorn, M. & Schneider, J. (2011). *This is Service Design Thinking: Basics - Tools - Cases*. Amsterdam: BIS Publishers.

Tassinari, V. et al. (2015). Telling the Stories of Design for Social Innovation: Towards an Ecology of Times. In: *Cumulus Conference – The Virtuous Cycle*, 3-7 June 2015, Politecnico di Milano, Milan, Italy.

The Young Foundation (2012) *Social Business Model Canvas*. Retrieved from http://growingsocialventures.org/course-content/social-business-model-canvas (Accessed: 4 March 2018).

Thorpe, A. et al. (2016). Public Collaboration Lab. In: *Proceedings of the 14th Participatory Design Conference*, 15-19 August 2016, Aarhus, Denmark, pp. 80-81.

Valsecchi, F. et al. (2016). Resonances: Listening as a Tool for Trans-Cultural Storytelling. In: Lloyd, P. & Bohemia, E. (eds.). *Proceedings of DRS2016: Design + Research + Society – Future-Focused Thinking*, 27-30 June 2016, University of Brighton, UK, pp. 3691-3982.

Walker, S. (2011). *The Spirit of Design: Objects, Environment and Meaning*. London, UK: Earthscan.

Weick, K. E. (1985). Cosmos vs. Chaos: Sense and Nonsense in Electronic Contexts. *Organizational Dynamics*, 14 (2), pp. 50-64.

Wenger, E. (1998) *Communities of Practice*. Cambridge, UK: Cambridge University Press.