esign-dri	ven Approaches to Enable Sustainable Entrepreneurship – Two Case Studies of
	Regional Textile Communities from the Philippines and the UK
	The Design Journal

Special Issue on 'The Value of Design-Driven Entrepreneurship'

Jessica Ouano, London College of Fashion, University of the Arts London, London, United Kingdom

Francesco Mazzarella, Centre for Sustainable Fashion, University of the Arts London, London,
United Kingdom

### Abstract

This paper reports on a research project aimed at exploring how designers can activate and sustain entrepreneurial ventures within regional textile communities in the Philippines and the UK. The mindset of consumers, who believe that textiles and fashion should be cheap, has made it difficult to successfully enable regional textile communities. With this in mind, two case studies were undertaken through semi-structured interviews with stakeholders involved in creative enterprises within regional textile communities in the Philippines and the UK. Findings from the research demonstrate how design-driven approaches to entrepreneurship can lead to reaching an untapped market and securing consumer demand for products and services that are better for people and the planet. The original contribution of the paper lies in the development of a business model meta-canvas, informed by an original conceptual framework that, once successfully adopted, could activate and sustain enterprises in regional textile communities.

**Keywords:** Design-driven entrepreneurship, creative problem solving, innovation of meaning, textiles, sustainable entrepreneurship.

### Introduction

The mainstream textile and fashion industry today is based on a globalised and centralised system, in which large amounts of products are manufactured in a few countries. This system has resulted in an influx of low-cost products that contribute to the degradation of regional textile cultures. This has also reduced the demand for more expensive, locally made textiles in some countries like the Philippines. With this in mind, this paper focuses on regional textile communities, here defined as groups of stakeholders within a Fibershed, that is a specific geographical area that provides the resources and infrastructure to produce locally made and climate beneficial textiles (Yen 2020).

The non-profit organisation Fibershed has developed a process for producing climate beneficial textiles (Figure 1); this has proven that responsible farming for textile fibres and understanding carbon practices can help sequester atmospheric carbon (Burgess 2019). Besides adopting the climate beneficial process to reduce the amount of carbon dioxide in the atmosphere, regional textile communities with local fibre processing and textile manufacturing can support sustainable livelihoods in rural areas. Activating and sustaining enterprises in regional textile communities that pursue the creation of climate beneficial products and provide sustainable livelihood opportunities have been identified as a potential direction to take in terms of transitioning to a more sustainable textile and fashion industry.

#### **CARBON FARM PLANNING** & IMPLEMENTATION Sequester carbon on farms and Provide seed money rangeland and increase fertility for carbon farming and water-holding capacity in soils **NON-PROFIT** FIBER is one of numerous beneficial Carbon Farming practices PLANTS & **CARBON FARM FUND** ANIMALS Climate Generate donations of Contribute to carbon Beneficial 3% for regenerative sequestration via fiber systems managed grazing RETAIL **FIBER SALES PROCESSING** Create Climate Beneficial Climate Beneficial textiles and garments varns and fabrics (These 100% natural fiber clothes can also be composted and returned to the land to regenerate soils.) **BRANDS, DESIGNERS** & MAKERS

Figure 1. The elements of the Climate Beneficial Process. Illustrated by Andrew Plotsky, courtesy of Fibershed
(Burgess 2019, p. 93).

Ultimately, the goal is to support regional textile communities in pursuing sustainable entrepreneurship, which is described by Dean and McMullen (2005) as a specific type of entrepreneurship that addresses environmentally and socially relevant market failures to meet the needs of the present without compromising the ability of future generations to meet their own needs.

Climate beneficial goods are expensive to produce and generally consumers today are more averse to higher prices; therefore, it is difficult for businesses to manufacture such products (Burgess 2019). Convincing consumers to reduce their consumption and invest in more ethical

and environmentally friendly products is crucial and challenging, as consumer behaviour has been heavily influenced by the availability of large amounts of low cost, yet unsustainable, products. To convince people to consume more sustainably and invest in products that are better for society and the planet, businesses must truly understand the consumer (Dillon 2018). Businesses need to create products that first and foremost address the consumer's needs and desires better than unsustainable alternatives. Design-driven approaches (which have been valuable to entrepreneurship and innovation) can be used to influence consumer behaviour and sustain regional textile communities. The specific design-driven approaches that this paper focuses on are design thinking, co-creation, and design-driven innovation.

The research project discussed in this paper aimed at exploring how designers can activate and sustain entrepreneurial ventures within regional textile communities in the Philippines and the UK. This aim was met through the following objectives:

- To critically review literature on regional textile communities, design-driven approaches to entrepreneurship, and sustainable entrepreneurship;
- To undertake case studies on regional textile communities in Western Visayas

  (Philippines), and South West England (UK) to understand how the communities were
  activated and sustained through design-driven approaches to entrepreneurship;
- To evaluate the originality, relevance, transferability, and limitations of the business model developed as an outcome of this research project.

Literature Review: Creating Value Through Design-driven Approaches to

Entrepreneurship

In the 21st century, we are on the cusp of a design revolution in business, which is caused by increased demand for speed in product development, design cycles, and competitive response (Martin and Christensen 2013). This has made it more challenging for businesses to create new value. Nowadays, value creation is important for businesses as it can set them apart and make them more relevant to consumers in a rapidly changing world (Mootee 2013).

Design-driven approaches have been used by businesses to create new value and increasingly also in social innovation processes (Fleischmann 2013). Design for social innovation is described by Manzini (2014) as an approach used by designers to simultaneously meet social needs, generate new or improved social relationships and ultimately produce innovations that are capable of reducing environmental impact, regenerating common goods, and reinforcing the social fabric. Here, we will explore three main design-driven approaches: Design Thinking; Cocreation; and Innovation of Meaning. One design approach that creates value for the consumer and leads to social innovation is design thinking. This is a creative problem-solving process to understand the needs of stakeholders, visualise new solutions, and turn cutting-edge ideas into effective strategies to create economic and social value (Serrat 2017). Another approach is cocreation, which involves developing new products or services together with their potential users (Fleischmann 2013). Unlike design-thinking, in co-creation processes, users become active codesigners as opposed to just being observed (Sanders and Simons 2009). A design approach that contradicts the focus on the user is design-driven innovation or innovation of meaning (Lambert and Flood 2018). Instead of focusing on the user, the process of design-driven innovation begins with the designer or entrepreneur and involves changing the perceptions and habits of consumers

(Verganti 2016). Kim and Mauborgne's (2015) Blue Ocean Strategy has been identified by Verganti (2016) as a suitable strategy to pursue design-driven innovation. This strategy is relevant to create new meaning by pursuing differentiation and reaching a currently untapped market space (Kim and Mauborgne 2015). It involves frameworks that help entrepreneurs rethink the value they are offering and avoid competition with other players in the market. New meaning can also be created through value proposition design (Osterwalder *et al.* 2014; Verganti 2016) that allows an entrepreneur to develop products or services by identifying pains that consumers are facing and benefits they desire while addressing a job that needs to be done (Strategyzer 2021). Novel design-based innovation is more symbolic than functional and a specific design language is used to deliver the meaning (Lambert and Flood 2018). For businesses to create new meaning, knowing and communicating their 'why' is crucial; in fact, consumers are attracted to brands with a strong sense of 'why' or purpose and they choose products or services that represent their identity or beliefs (Sinek 2011).

Just as design thinking and co-creation are participatory processes, Jing (2019) argues that new meanings as a result of design-driven innovation are created through the joint efforts of different stakeholders and this involves understanding the evolution of social and cultural patterns to propose new perspectives. Gibson-Graham, Cameron, and Healy (2013) highlight that a participatory process leads to meaningful ideas and can result in stakeholders coming together to take action and create a lasting positive impact in their local communities. The design-driven approaches introduced here can be a way to involve the consumer and all other stakeholders in creating products or services that address their individual needs while building a more sustainable community.

The literature reviewed contributed to identifying the difficulty of enabling regional textiles communities because cheap unsustainable fashion has influenced consumer behaviour. This resulted in identifying a gap in the knowledge of how design-driven approaches to entrepreneurship can be used to create sustainable business models within regional textile communities. To support the creation of sustainable business models, a conceptual framework was developed by the authors of this paper as a design-driven approach to entrepreneurship for localisation and sustainability (Figure 2). This framework builds on the 'Portfolio of Innovation Process' developed by Verganti (2016) arguing that there is a need for the creation of new meaning and solutions in successful value creation. This conceptual framework suggests that, for a sustainable regional textile community to exist, reaching an untapped market to secure consumer demand for products made by enterprises in these communities is crucial. Moreover, a design-driven approach to developing business models that create social innovation and value for consumers can potentially lead to reaching this untapped market.

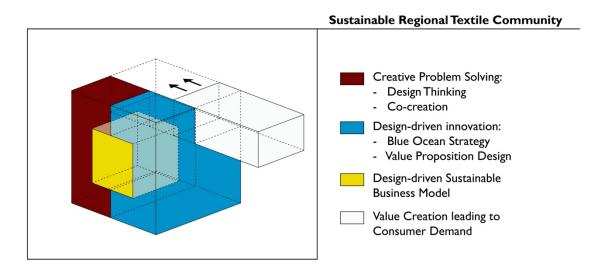


Figure 2. Conceptual framework: a design-driven approach to entrepreneurship for localisation and sustainability.

# Methodology

To address the previously outlined objectives, the research project described in this paper followed the design presented in Table 1.

Table 1. Research design of the project discussed in this paper.

Phases	Objective	Method	Outcome
1.Contextualisation	To critically review literature on	Literature	Conceptual
	regional textile communities,	Review	Framework
	design-driven approaches to		
	entrepreneurship, and sustainable		
	entrepreneurship;		
2.Case Studies	To undertake case studies on	Semi-	A sustainable
	regional textile communities in	structured	business model
	Western Visayas (Philippines)	interviews	informed by the
	and South West England (UK) to		findings from the
	understand how the communities		case study and the
	were activated and sustained		conceptual
	through design-driven		framework
	approaches to entrepreneurship;		
3.Evaluation	To evaluate the originality,	Semi-	Insights on the
	relevance, transferability, and	structured	contribution,
	limitations of the business model	interviews	relevance,
			transferability, and

developed as an outcome of this	limitations of the
research project;	research outcome

Since the research presented in this paper aimed at gathering rich insights into the subjective meanings of design-driven approaches to sustainable entrepreneurship, the project was conducted under an interpretivist philosophy, which established an inclusive relationship with the participants to understand their 'multiple realities' (Thomas 2009). Moreover, since the research project aimed at investigating regional textile communities in specific contexts, an inductive approach was deemed appropriate to develop conclusions based on the analysis of the data collected. To meet the above-mentioned research aim, two case studies were undertaken to gather in-depth data and insights leading to build rich narratives that help develop theory (Yin 2004). The two case studies aimed to identify similarities and differences in the design-driven approaches to entrepreneurship adopted by stakeholders involved in creative enterprises or organisations within each regional textile community in the Philippines and the UK. The Philippine case study was chosen based on the ability of its local stakeholders to create textiles from the raw fibre to the end-product within their region. Instead, the regional textile community in the UK was chosen based on the presence of a successful Fibershed affiliate that has already created climate beneficial textiles.

Adopting a purposive sampling strategy, the researchers used their judgement to select cases that could effectively meet the objectives of the project (Saunders, Lewis, and Thornhill 2019). Three stakeholders participated in each case study; they were selected for having different roles (*i.e.* a dyeing studio and textile manufacturer) whilst all the others met the criteria outlined in Table 2.

In both the case studies, the interviewed stakeholders manage businesses in manufacturing textiles mainly for other businesses that create the end-product. They have great knowledge of the supply chain, support the creation of local textiles by using local raw materials and human resources, and consider social, environmental, and economic sustainability in the products or services they deliver. For the quotes included in this paper, generic terms were used instead of the interviewees' real names to preserve their anonymity.

Table 2. Participant selection criteria.

Participant Selection	Description
Criteria	
1. Professionalism	Individuals managing organisations that are a part of the
	manufacturing of local textiles for commercial use.
2. Expertise	High level of skills and knowledge in the area of the supply chain
	that their organisation is involved in.
3. Local Advocacy	Supports the creation of local textiles by using local raw materials
	and human resources.
4. Sustainability	Considers social, environmental, and economic sustainability in the
	services or products they offer.

Adopting a purposive sampling strategy also for the Evaluation Study, the interviewees were entrepreneurs in regional textile communities in the Philippines, who could adopt or be involved in the execution of the business model, and entrepreneurs in the UK, who already have experience in managing a similar business, as outlined in Table 3.

Table 3. Participants in the Evaluation Study.

Name	Role &	Expertise
	Affiliation	
Jelyn	Manager of	Manager of a well-established handloom textile business
Olaguir	Hablonan ni	that is able to work with Philippine natural fibres.
	Lauriana	
Jean Dee	Founder of	Fashion designer who creates handloom textiles using
	JADD Studio	Philippine natural fibres and has many years of experience
		working with Philippine handloom weaving communities.
Jane	Founder of Blue	Founder of a social enterprise that connects local businesses
Langley	Patch	to a wider market through an online business directory. The
		enterprise also reinvests surplus profits in renewable energy.
Katie	Founder of	Shepherd, maker and designer who owns a business that
Allen	Loopy Ewes	sells contemporary knits that are completely transparent and
		traceable in production.

Semi-structured interviews were conducted to allow flexibility to ask follow-up questions and discuss new themes emerging through the discussion (Saunders, Lewis and Thornhill 2019). The interviews were conducted via Google meet or e-mail; they were audio-recorded, transcribed, and thematically analysed, following a manual, iterative process that encompassed data reduction, display, and conclusion drawing, as per Miles and Huberman (1994).

### **Results of the Case Studies**

The following sections present the findings from the analysis of the data collected in the two case studies, concerning the design-driven approaches to entrepreneurship highlighted in the conceptual framework (Figure 2).

### Regional Textile Community in Western Visayas, Philippines

The Western Visayas region of the Philippines is very well known for its traditional textiles. The textile sector in this region consists mainly of handloom weaving communities that produce piña fabric, which is a traditional Philippine textile made of pineapple fibres. The Regional Yarn Production and Innovation Centre (RYPIC) was established in 2019, in Iloilo, a province in Western Visayas, by the Philippine Textile Research Institute (PTRI) to support local textile manufacturing in the region by providing access to locally made yarn (ISATU 2019).

The textile and fashion designers who engaged with the stakeholders in the Western Visayas Regional Textile community acted mainly as collaborators, buyers, and marketers of locally made textiles. It was observed that the majority of these designers were from outside of the region. They are Philippine and international fashion designers with extensive industry knowledge and established businesses. The manager of one weaving community shared that they learn a lot from designers, especially about exploring new materials, colour combinations, and

understanding the end product. To some extent, the designers have adopted design-driven approaches in their engagement with the community. They came into the community with their observations and understanding of the needs of their consumers. One of the managers of a handloom weaving community highlighted that engagement with fashion designers led their weaving community to eventually move from making only handwoven shawls to textiles suitable for formal wear.

'We used to make shawls, but we can't just keep making that alone. Now we are trying to work on fabrics that can be used for gowns, dresses and barong' (Manager 1).

The fashion designers who collaborated with the handloom weaving community produce mainly custom apparel. They have an in-depth understanding of their consumers' needs through their continuous engagement with them. This case presents an example of how design thinking was adopted within certain design enterprises, in which they are in a unique position to interact, empathise, ideate, prototype, and test products. One stakeholder highlighted how much she valued the designers' role in their community.

'Designers are a huge help to us. [...] If it was up to me, it is best to tap into designers because with colour combinations and designs, they know what is best in terms of the final products they want to create' (Manager 1).

Apart from design support, Manager 1 shared that designers were still purchasing textiles from their handloom weaving community amidst the COVID-19 pandemic and contributed greatly to providing a sustainable livelihood for the artisans. The engagement with designers also evidences how co-creation can be done. In this case study, the designer is not just a collaborator

but also a consumer. Designers informing artisans about the needs of their consumers, as well as their design direction has triggered the artisans' creativity and led to the co-creation of new textiles, which are innovative compared to those traditionally made by handloom weaving communities in the Philippines. By pursuing differentiation and creating textiles for this purpose, unlike other handloom weaving communities, they can reach a currently untapped market space, as described in the Blue Ocean Strategy.

One stakeholder interviewed for this project is a skilled natural dyer and has had the opportunity to be trained by textile and fashion designers from outside of his region. He now considers himself a designer and his work has gained quite a lot of attention from local organisations seeking to promote local crafts and traditions.

'We organise a lot of workshops, meetings, and discussions on how to develop our products. Government agencies are sending us designers to guide us on how we can improve our products' (Manager 2).

This stakeholder also highlighted the need to make locally produced textiles using sustainable natural fibres and plant dyes more appealing to the younger generation. He actively works towards developing more modern designs and finding ways to showcase them through celebrities or exhibitions. In this case, value proposition design has been adopted as the designer considers how his product can ultimately address the pains and gains a young consumer might experience when purchasing products made using locally-made sustainable textiles.

'I believe my products need to be aesthetically pleasing. [...] Some of my work has been worn by celebrities, while some were featured during the SEA games in 2019. [...] But

above all, I want to emphasise the story behind our artworks. [...] The beautiful story of how we work creatively, spiritually, and patiently to create fabrics from fibre to the end-product with patterns that reflect the beauty of our environment' (Manager 2).

This example shows how a designer can make products aspirational, not only making them aesthetically pleasing and culturally meaningful but also by promoting them through celebrities and by sharing the stories behind the creation of the textiles.

### Regional Textile Community in South West England, UK

The regional textile community in South West England has a Fibershed affiliate that works to support the creation of locally made climate beneficial textiles from fibre to the finished product. This Fibershed affiliate is managed by Emma Jane Hague of the Bristol Textile Quarter.

Together with Babs Behan of the natural dyeing studio Botanical Inks, Emma co-founded the Bristol Cloth Project (Bristol Textile Quarter 2021). Through this project, they were able to create a textile made of regeneratively farmed wool and dyed with organic plant dyes, within a 15-mile radius of Bristol and proved that the Fibershed concept is feasible in South West England (Bristol Cloth 2021).

Similar to the regional textile community in the Philippines, in this case, designers also acted as collaborators, buyers, and marketers of locally made textiles. However, unlike in the Philippines where the artisans engaged mainly with designers outside of their community, in the UK case study the local stakeholders themselves were professional designers. The majority of them had a design degree and highlighted how integral their design education was to them.

One of the successful textile businesses within this regional textile community works with trend agencies, fashion houses, fabric manufacturers, and lifestyle brands. They also opened their own textile mill in Bristol. The director of the textile business, a designer-maker, argued that the presence of her team of designers has contributed greatly to the success of her business. Even if they are a small team and might not have the most advanced equipment in the industry, they remain competitive because of their ability to use their creativity to develop designs that are unique and meet the needs of the market.

'We need people who are really creative. I think we're quite unique as a textile mill because all of our employees are design-led. We are basically a team of designers running a mill instead of a mill with a design team' (Manager 3).

This case study provides a unique combination of design and manufacturing expertise that has led to being an internationally recognised woven fabric design studio and mill. This exemplifies how the blue ocean strategy can be adopted through the creation of a one-stop-shop for woven fabric design and manufacturing, leading to an untapped market space.

'Customers want to go straight into production and do both design and production in one package' (Manager 3).

Having already worked as a textile design consultant for many years has given this stakeholder a much better understanding of the consumers' needs. Design thinking has been applied by this stakeholder by developing, prototyping, and testing textiles unique to a variety of clients. The interviewee also highlighted how opening their textile mill was a reaction to consumer feedback.

'A lot of our clients asked for production on our handloom samples and eventually, we just thought maybe we should look into this' (Manager 3).

Several stakeholders interviewed for this case study argued that, beyond meeting consumer needs, there must also be an effort to educate and inspire consumers to build a desire for climate beneficial products. They adopted a value proposition design by considering the pains and gains a consumer may face when purchasing climate beneficial products. One stakeholder discussed how a lot of consumers still do not understand how textiles are made and the impact they have on people and the planet. She highlighted the importance of developing marketing strategies that involve creatively communicating the long-term value of purchasing climate beneficial textiles or sharing the story behind the process of making textiles. For example, they managed to do this by releasing a short film showing the process of creating their climate beneficial textiles from the farm to the end-product and using the film for promoting their business. One stakeholder shared that she has observed that people are now slowly realising how climate change is affecting them personally, and also brands are starting to appreciate the story behind creating local, ethical, and environmentally friendly textiles.

'A lot of big brands have been calling me these days to collaborate, while in the past they would say that natural dyeing is too expensive. Some of them now say this has such a good story' (Manager 4).

Co-creation has also played an important role in this community, with different stakeholders coming together to address the same challenge of creating climate beneficial textiles within their region. The Bristol Cloth project is a great example of how each stakeholder (farmer, natural

dyer, weaver) contributed to reaching this goal. This case study shows how adopting a variety of design-driven approaches can lead to a flourishing regional textile community. It also demonstrates how valuable professional designers with extensive industry knowledge are to create and promote climate beneficial textiles that consumers actually want to buy.

## Comparison of Case Studies

Table 4 presents a comparison of the case studies and how design-driven approaches were adopted in both these contexts.

Table 4. Comparison of the case studies.

Design-	Western Visayas	South West England
driven		
approach		
1. Design	Professional fashion designers	Professional textile designers from
Thinking	outside of the community shared	within the regional textile community
	their industry knowledge and	leveraged their years of experience
	insights on their consumers, and	working with local and international
	maker-entrepreneurs in the regional	brands to effectively create unique
	textile communities used this	textiles for more brands.
	information to develop new types of	
	textiles.	

2. Co-	Professional fashion designers gave	Thanks to the presence of a Fibershed
creation	feedback and informed the maker-	affiliate, the different stakeholders in
	entrepreneurs in the regional textile	the regional textile community
	community about the types of	worked together to create the Bristol
	textiles they are looking for to create	Cloth, a climate beneficial textile
	their products.	using the resources they had in their
		region.
3. Blue	A weaving community pursued	To pursue differentiation, a textile
Ocean	differentiation and reached an	business combined its design
Strategy	untapped market space by choosing	expertise and ability to manufacture
	to create textiles that handloom	textiles through its own textile mill to
	weaving communities in the	address the needs of businesses
	Philippines do not normally make,	looking to get access to original
	and this allowed them to cater to the	woven textiles.
	needs of fashion designers that focus	
	mainly on formal wear.	
4. Value	A designer-maker who wanted to get	The stakeholders in the regional
Proposition	more young people to purchase	textile community produced a short
Design	locally made textiles focused on	film showing how they created the
	addressing their pains and gains	Bristol Cloth from beginning to end
	when purchasing these textiles. He	and why these textiles have a positive
	focused on making textiles modern	impact on people and the planet. This

or more relatable, shared stories about the creation of the textiles on social media and made the textiles become aspirational by promoting them through celebrities.

addressed the need for creative ways to help consumers understand the value of climate beneficial textiles and how these are made.

### Recommended Business Model

To demonstrate how the above-mentioned design-driven approaches can be adopted to create a sustainable business model, the authors of this paper outlined a list of prompt questions to help entrepreneurs reflect on what their business model could be like. The business model metacanvas was created in consideration of the context of Philippine regional textile communities and was conceived for an enterprise that already has the resources to create climate-beneficial natural fibre textiles from fibre to the end-product within their region.

Adopting value proposition design and design thinking, the researchers developed a set of prompt questions and business model meta-canvas as shown in Figure 3. This was informed by the principles of these design-driven approaches and the learnings from the case studies in relation to ways in which entrepreneurs in regional textile communities are currently working and their relationship with their consumers. Similarly, other researchers can use this meta-canvas and prompt questions to develop their own business models based on their observations of their unique context and in collaboration with other stakeholders involved in regional textile communities.

#### Design-driven Approaches to use:

- Value Proposition Design
- Design Thinking

### **Business Model Canvas**

#### Problem: Unique Value Proposition: Unfair Advantage: **Customer Segments:** Offering customisation of Designers/brands have a Environment friendly An existing and developed - Fashion brands relationship with ethically made and fully difficult time getting access woven textiles by working - Interior design companies to woven textiles that can be with small regional textile traceable woven textiles stakeholders in the Clothing manufacturers customised and purchased businesses that have the supply chain of regional and purchased on an with low minimum order equipment needed to textile communities **Economic Buyer:** quantities produce woven textiles online marketplace - Fashion designers with lower minimum order Design expertise and Designers/brands have a quantities understanding of the needs - Interior designers difficult time getting access of the market Textile buyers to textile suppliers that can Readily available information **Key Metrics:** readily provide information Creative directors on the environmental and Sustainable profitability of on the social and social impact of the textiles businesses selling on the Channel: environmental impact of their by working closely with local End User: online marketplace textiles producers and manufacturers Website Customers of businesses Working with artisan Environmental and social purchasing the textiles for Providing support to small - Social Media communities in rural areas to impact of textiles their final product regional textile businesses create textiles is challenging Pop-up stores and acting as a bridge Speed of delivery of textiles because of the distance and - Textile trade shows between them and designers/ the relationships that brands have to be built with these communities Revenue Price range of ready to purchase woven textiles on the online marketplace per Cost Structure: Break Even: metre: £9 - 30 / metre (with 27-30% gross profit) Target to break even in Year 3, Year I fixed costs: £16,409 Price range of custom woven textiles: £30 - 50 / metre (with 62-68% gross profit) selling approximately 4,240 metre Year I variable costs: £10,003 of fabric

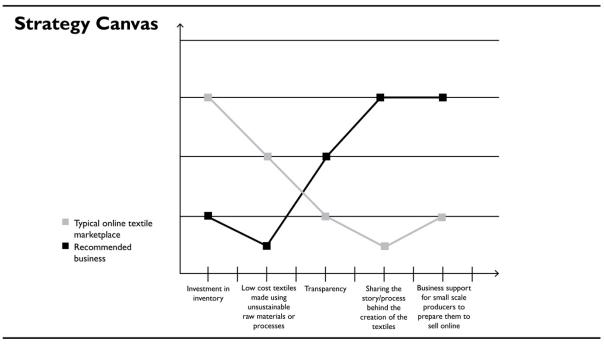
#### Prompt questions for this

- 1. Who are your consumers? Are they the end-user or are they just a buyer that will eventually sell to an end-user?
- 2. Where can you find your consumers and how will you reach out to them?
- 3. What jobs are your consumers trying to get done?
- 4. What pains or challenges do your consumers face when trying to get the job done?
- 5. What gains do your consumers expect or would like to receive while trying to get the job done?
- 6. What product or service do you want to offer?
- 7. Do you have the human, physical, financial and organisational resources to deliver this product or service?
- 8. How will this product or service create value for your consumers?
- 9. How will you make a low cost prototype of your product or service?
- 10. How will you test your prototype?
- 11. How will you measure the success of your product or service?
- 12. How will you make profit from your product or service?

Figure 3. Recommended business model. Adapted from Maurya's (2012) lean canvas.

Adopting the Blue Ocean Strategy, the researchers looked at how similar online textile platforms performed and identified ways in which the recommended business could pursue differentiation. To create a Blue Ocean idea, the researchers adopted Kim and Mauborgne's (2015) four actions framework, which informed the prompt questions in Figure 4.

- Blue Ocean Strategy



#### Prompt questions for this stage:

- 1. What businesses offer a product or service similar to yours?
- 2. What pain points are consumers experiencing while using the products or services of these businesses?
- 3. What factors about their product or service do consumers take for granted that needs to be eliminated?
- 4. What factors about their product or service should be reduced below the industry's standard?
- 5. What factors about their product or service should be raised above the industry's standard?
- 6. What factors about your product or service should you create that other businesses do not offer?

Figure 4. Strategy canvas of recommended business model. Adapted from Kim and Mauborgne (2015).

The researchers identified the need to eliminate the creation of low-cost textiles using unsustainable materials, and to reduce the inventory while focusing on promoting the creation of customisable textiles. Moreover, findings from the research showed that this business can offer transparency in relation to how textiles are created and the impact they have on the stakeholders involved. This is the benefit of choosing to work with fully traceable local producers from the fibre to the end-product.

The online platform proposed in this paper can be used as a way to support small regional businesses in marketing their products. This can be done by adopting storytelling marketing

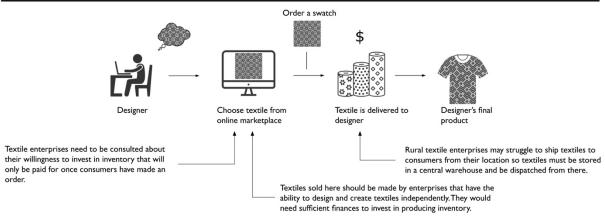
strategies to present videos, photos and information about where and how textiles are made. The platform presented in Figure 5 focuses on textile producers sharing their stories, unlike other existing online textile platforms which are merely conceived to sell fabrics to consumers.

Design-driven Approach to use: Co-creation

#### Prompt questions for this stage:

- 1. What problems do you intend to solve with your product or service and what are your intended solutions?
- Which stakeholders are impacted by those problems and how can you involve them to improve the solutions?
   How will you reach out to those stakeholders and work together with them?

## **Online Textile Marketplace:**



### Woven Textile Customisation:

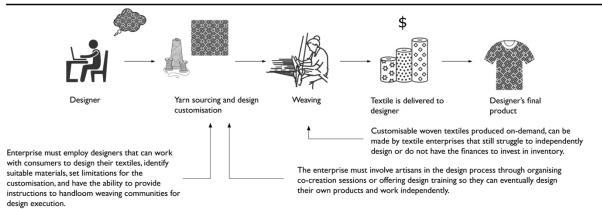


Figure 5. Online textile marketplace business model (top); textile customisation business model (bottom).

Lastly, in order to test how co-creation could be adopted in the development of the business model, an Evaluation Study was conducted with entrepreneurs in regional textile communities in the Philippines and the UK, which also led to identifying relevant adaptations to be made to the recommended business model.

### **Results of the Evaluation Study**

This section summarises the key findings from the Evaluation Study. In particular, the founder of JADD Studio stated that the contribution of this research lies mainly in producing an evidence-base on regional textile communities, especially in the Philippine context.

'We're always working on an assumption. [...] Entrepreneurs experience similar challenges. But because there's no record of the experiences of different entrepreneurs in regional textile communities, if you want to enter this kind of business, then you'd have to figure it out on your own' (Interviewee 1).

All the experts from the UK and the Philippines agreed that the research presented in this paper is relevant and aligned with the current trends in the textile and fashion industry, in which there is more demand for localisation, transparency and sustainability. The manager of Hablonan ni Lauriana stated that adopting these design-driven approaches to her business could be beneficial; she also showed her eagerness to explore an online business model, especially given the challenges currently posed by COVID-19. The founder of Loopy Ewes emphasised that, if successfully adopted, this business could potentially address the marketing challenges of small businesses which generally do not set aside a budget for marketing. She also highlighted that the conceptual framework proposed here is relevant because of how important designers are to creating aspirational products.

'Farmers looking to maximise their fibre production can work with regional processors and even finishers successfully but, without design input, the end-product will struggle to

really offer the aspirational quality that is needed to achieve the right price to support this type of production' (Interviewee 3).

In terms of transferability, the interviewed experts believed that in theory, the business model and conceptual framework proposed here are transferable as there are already similar businesses adopting these concepts in the market. However, the founder of Blue Patch shared that, based on her experience developing a similar business model, there is a need to test it in order to identify how well it can work.

'We are currently testing our business model "in action". It's essential that we protect it from being used in unethical ways [...]. The model will only be transferable once we ensure that we can effectively provide transparency and a fair voting system for stakeholders' (Interviewee 4).

A major limitation of the business model that was pointed out by the experts is funding to support enterprises in regional textile communities to actually adopt it. The manager of Hablonan ni Lauriana shared her concerns about having to invest money in inventory or in marketing to stand out online.

'I am concerned about not being able to secure a market for our products even in an online marketplace. If our business would have to invest in inventory, we might not be able to get the return on the investment right away [...]. I prefer the business model you introduced, where we produce only once there is an order and we customise the textiles to the needs of the customer' (Interviewee 2).

In terms of recommendations for future work, the founder of JADD Studio suggested developing the business model further to include guidelines or a basic plan that can be personalised depending on the context in which the entrepreneur works.

'If you can come up with a basic plan that entrepreneurs could just follow or personalise according to the context they are coming from, that would be really helpful' (Interviewee 1).

### **Discussion and Conclusions**

In line with Verganti (2016), the authors of this paper argue that a combination of design-driven approaches under creative problem solving and innovation of meaning are needed to truly create value for consumers. Fleischmann (2013) discussed that design-driven approaches have been successfully adopted by entrepreneurs all over the world, and this paper discussed case studies exemplifying how such design-driven approaches have been adopted to some extent by entrepreneurs in regional textile communities. However, the authors of this paper have discovered that it can be challenging for some entrepreneurs in regional textile communities to understand and adopt such approaches. For instance, access to design education or resources is needed for local entrepreneurs to learn more about design-driven approaches. In developing countries like the Philippines, it can be difficult to access educational resources or high-quality training. Therefore, a professional designer who understands how such approaches work would be in the best position to introduce them to these entrepreneurs. In line with Gibson-Graham, Cameron, and Healy (2013), the research presented in this paper highlighted the value of a participatory approach to designing social innovations. From this perspective, designers are not just meant to transfer knowledge to such communities but they must play a crucial role in facilitating co-creation between diverse stakeholders. Designers with industry knowledge can

also provide insights to entrepreneurs, support them in developing new meaning, and ultimately blue ocean ideas as described by Kim and Mauborgne (2015).

This paper illustrated the value of design-driven approaches to enabling sustainable entrepreneurship and tackling challenges faced by regional textile communities; it also discussed the need for designers to be sensitive to the cultural difference of specific communities, especially with consumer mindsets. In particular, the main contribution of the research presented in this paper lies in the proposition of a business model meta-canvas (Figures 3, 4 and 5) that was informed by a suitably developed conceptual framework (Figure 2). This is meant to guide textile and fashion entrepreneurs in thinking about how they can adopt these design-driven approaches.

Although the research presented in this paper led to the development of an original contribution to knowledge, the findings were limited to two regional textile communities within specific contexts and the business model was created specifically for the Philippine context.

In view of future work, the authors of this paper intend to collaborate with textile enterprises to further develop the business model and implement it. Furthermore, the Evaluation Study highlighted the need to identify ways in which these design-driven approaches can be understood and implemented by entrepreneurs. With this in mind, there is an opportunity to develop a start-up toolkit aimed at supporting entrepreneurs in regional textile communities on their journey towards creating their own sustainable business models. This is expected to be initially made available through a Philippine social enterprise that provides training for craft businesses in regional textile communities, and in which the first author of this paper works. Feedback from

the users of this start-up toolkit will also be gathered and used to improve it further and make it something that can be adopted by entrepreneurs in other contexts in the future.

## Acknowledgements

We would like to thank Raquel's Piña cloth, Cris Hablon Loom Woven Products, Botanical Inks, the Bristol Weaving Mill, Hablonan ni Lauriana, JADD Studio, Blue Patch, and Loopy Ewes for participating and contributing to the development of this study. We are also grateful to the London College of Fashion and the University of the Arts London for providing the resources and support needed to pursue this research, as well as Chevening for financially supporting the studies within which this project was undertaken.

### **Declaration of interest statement**

No potential conflict of interest was reported by the authors.

### **Disclosure Statement**

There are no relevant financial or non-financial competing interests to report.

#### References

Bristol Cloth. 2021. "Pioneering Ecology." Bristol Cloth. Accessed April 25 2021.

http://www.bristolcloth.co.uk/

Bristol Textile Quarter. 2021. "South West England Fibershed." Bristol Textile Quarter.

Accessed April 25 2021.

http://bristoltextilequarter.co.uk/projects/southwestenglandfibreshed/

Burgess, Rebecca. 2019. Fibershed: Growing a Movement of Farmers, Fashion Activists, and Makers for a New Textile Economy. Vermont: Chelsea Green.

Dean, Thomas and Jeffery McMullen. 2005. "Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action." *Journal of Business Venturing* 22 (2007): 50-76. doi: 10.1016/j.jbusvent.2005.09.003

Dillon, Susan. 2018. *The Fundamentals of Fashion Management. 2nd ed.* London: Bloomsbury Visual Arts.

Fleischmann, Katja. 2013. "Social Entrepreneurs and Social Designers: Change Makers with a New Mindset?" *International Journal of Business and Social Science* 4 (16): 9 - 17. <a href="https://core.ac.uk/download/pdf/303762627.pdf">https://core.ac.uk/download/pdf/303762627.pdf</a>

Gibson-Graham, J.K., Jenny Cameron, and Stephen Healy. 2013. *Take Back the Economy: An Ethical Guide for Transforming Our Communities*. Minneapolis: University of Minnesota Press.

ISATU (Iloilo Science and Technology University). 2019. "ISAT U, DOST-PTRI Inaugurate RYPIC to revive weaving industry." *ISATU*, November 22. <a href="https://www.isatu.edu.ph/latest-events/isat-u-dost-ptri-inaugurate-rypic-revive-weaving-industry/">https://www.isatu.edu.ph/latest-events/isat-u-dost-ptri-inaugurate-rypic-revive-weaving-industry/</a>

Jing, Wang. 2019. "Design-Driven Innovation for Sustainability: An Analysis of 7 Cases," In HCI International 2019 – Late-Breaking Posters, edited by Constantine Stephanidis and Margherita Antona, 2-13. Cham: Springer Nature Switzerland.

Kim, W. Chan and Renée Mauborgne. 2015. *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant. Expanded Ed.* Boston, Massachusetts: Harvard Business Review Press.

Lambert, Ray and Ruth Flood. 2018. *Understanding design-intensive innovation: a literature review*. London: Design Council.

Manzini, Ezio. 2014. "Design for social innovation vs. social design." *DESIS Network*, July 25. https://www.desisnetwork.org/2014/07/25/design-for-social-innovation-vs-social-design/

Martin, Roger and Karen Christensen, eds. 2013. *Rotman on Design: The Best on Design Thinking from Rotman Magazine*. Toronto: University of Toronto Press.

Maurya, Ash. 2012. "Why Lean Canvas vs Business Model Canvas?" *Leanstack*, February 27. https://blog.leanstack.com/why-lean-canvas-vs-business-model-canvas-af62c0f250f0

Miles, Matthew and Michael Huberman. 1994. *Qualitative Data Analysis*. Second Edition. Thousand Oaks: SAGE Publications.

Mootee, Idris. 2013. Design Thinking for Strategic Innovation: What They Can't Teach You at Business or Design School. Hoboken N.J.: John Wiley & Sons.

Osterwalder, Alex, Yves Pigneur, Greg Bernarda, and Alan Smith. 2014. *Value Proposition Design: How to Create Products and Services Customers Want*. Hoboken, N.J.: John Wiley & Sons.

Sanders, Liz and George Simons. 2009. "A Social Vision for Value Co-creation in Design." *TIM*, December. https://timreview.ca/article/310#sthash.gZI3S9Wn.dpuf

Saunders, Mark, Philip Lewis, and Adrian Thornhill. 2019. *Research Methods for Business Students Eighth Edition*. Harlow: Pearson Education.

Serrat, Olivier. 2017. Knowledge Solutions: Tools, Methods, and Approaches to Drive Organizational Performance. Singapore: Springer Singapore.

Sinek, Simon. 2011. *Start with why: how great leaders inspire everyone to take action*. London: Portfolio Penguin.

Strategyzer. 2021. "The Value Proposition Canvas: Instruction Manual." Strategyzer AG. Accessed 12 April 2021. https://www.strategyzer.com/canvas/value-proposition-canvas

Thomas, Gary. 2009. How to do Your Research Project. London: Sage Publications.

Verganti, Roberto. 2016. Overcrowded: Designing Meaningful Products in a World Awash with Ideas. Cambridge, Massachusetts: MIT Press.

Yen, Jessica. 2020. "Building a Regional Fibershed." Seamwork. Accessed November 17 2020. https://www.seamwork.com/magazine/2016/04/building-a-regional-fibershed.

Yin, Robert. 2004. Case Study Research: Design and Methods. London: Sage Publications.

### **List of Tables**

Table 1 – Research design of the project discussed in this paper.

Table 2 – Participant selection criteria.

Table 3 – Participants in the Evaluation Study.

Table 4 – Comparison of the case studies.

### **List of Figures**

Figure 1 – The elements of the Climate Beneficial Process. Illustrated by Andrew Plotsky, courtesy of Fibershed (Burgess 2019, p. 93).

Figure 2 – Conceptual framework: a design-driven approach to entrepreneurship for localisation and sustainability.

Figure 3 – Recommended business model, Adapted from Maurya's (2012) lean canvas.

Figure 4 – Strategy canvas of recommended business model, Adapted from Kim and Mauborgne (2015).

Figure 5 – Online textile marketplace business model (top); textile customisation business model

(bottom).

**Biographical Note** 

Jessica Ouano

Jessica Ouano is the Chief Sustainability and Innovation Officer of ANTHILL Fabric Gallery, a

Philippine social enterprise working to preserve local handwoven textiles and support sustainable

livelihood through contemporary and circular design. In 2020, Jessica completed her Masters in

Fashion Entrepreneurship and Innovation at London College of Fashion, UAL.

Dr Francesco Mazzarella

Dr Francesco Mazzarella is a Research Fellow in Fashion and Design for Social Change at

Centre for Sustainable Fashion, UAL. He also teaches several courses across the London College

of Fashion. Francesco's research spans the fields of fashion activism, craftsmanship, social

innovation, sustainability, service design, and place-making.

**ORCID** 

*Jessica Ouano:* https://orcid.org/0000-0001-8365-7718

Dr Francesco Mazzarella: https://orcid.org/0000-0001-8993-0308

Email address for correspondence: <a href="mailto:damgofabric@gmail.com">damgofabric@gmail.com</a>

Telephone number: +63 9173046908