Impact of Brexit and **COVID-19** on the UK Fashion & Textiles Technology Ecosystem

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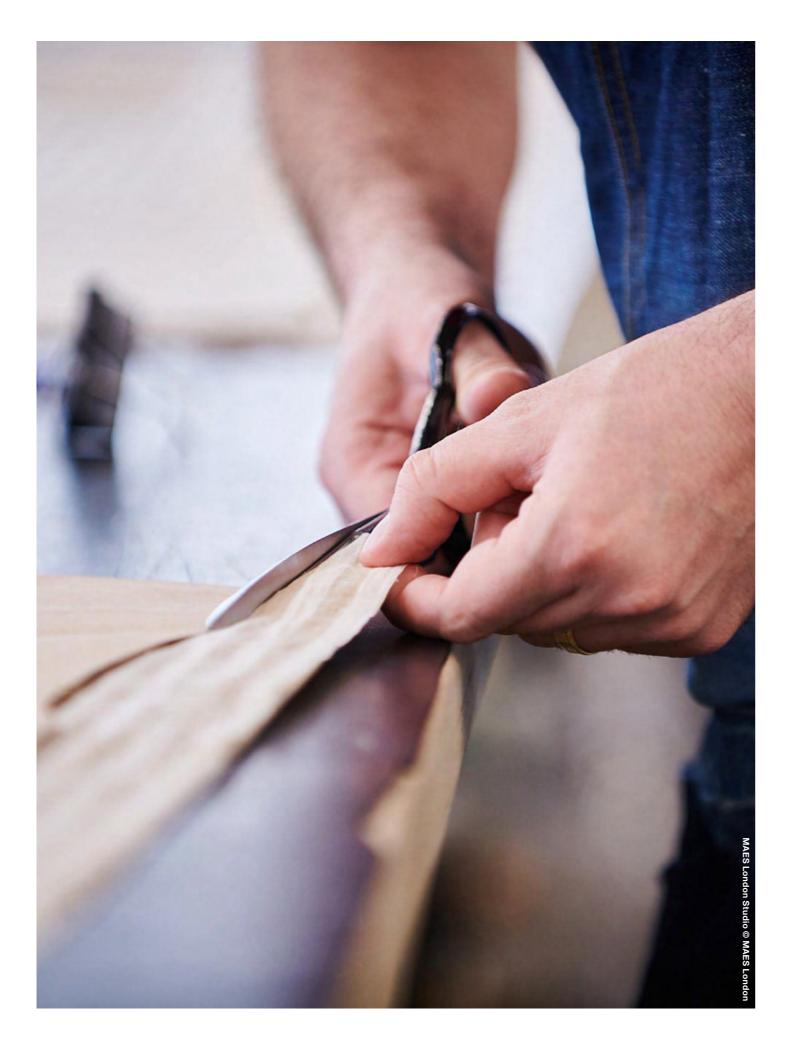
Impact of Brexit and COVID-19 on the UK Fashion and Textiles Technology Ecosystem

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The authors would like to acknowledge the support provided by the fashion & textile creative industries cluster programmes BFTT and FFF. Special thanks to the cluster directors Professor Jane Harris and Professor Stephen Russell.

Published: June 2023

How to cite: Hemingray, C.S., Vecchi, A., Bonetti, F., Toms, S., Bulman, S.E.L., Connor-Crabb, A., Guo, Y., Silva, E.S. and Solomon, L. (2023). *Impact of Brexit and COVID-19 on the UK Fashion, Textiles and Technology Ecosystem.* University of the Arts London and the University of Leeds.



This is a joint report from the Business of Fashion, Textiles and Technology (BFTT), University of the Arts London and the Future Fashion Factory (FFF), University of Leeds.

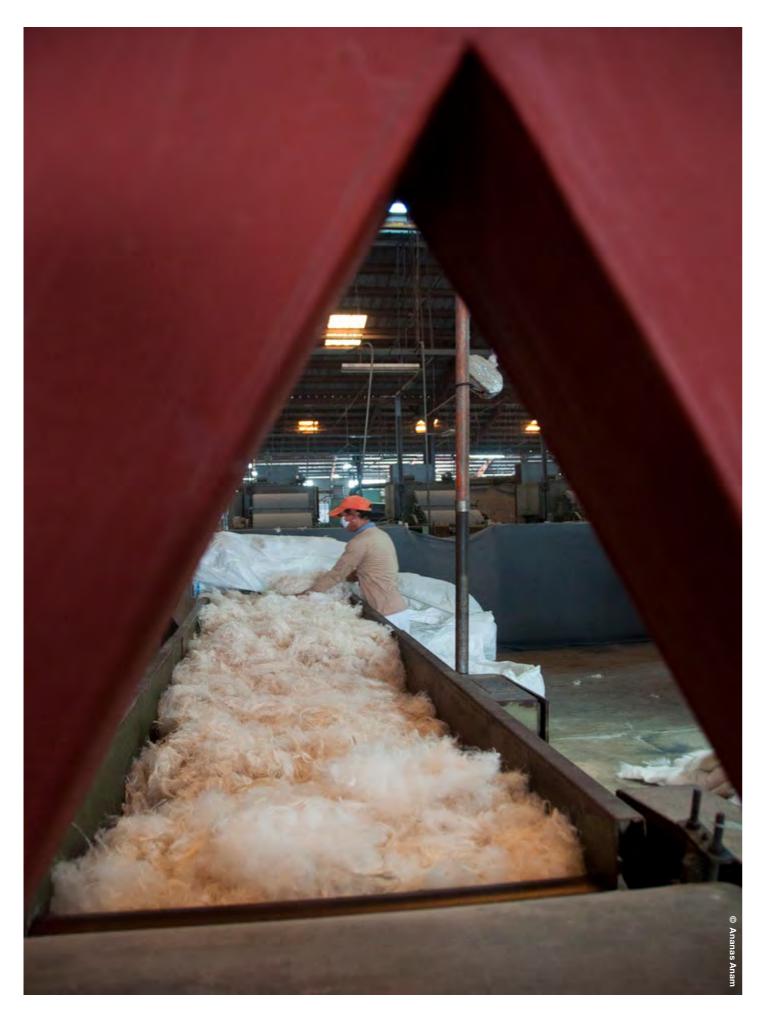
Both are part of the Creative Industries Clusters Programme (CICP), an \pounds 80million initiative funded by the Industrial Strategy Challenge Fund, delivered by the Arts and Humanities Research Council (AHRC) on behalf of UK Research and Innovation (UKRI).

The Business of Fashion, Textiles and Technology (BFTT) is a £5.8m research and development (R&D) programme, focusing on tackling the climate emergency through innovative R&D industry partnerships. Led by the University of the Arts London (UAL) in collaboration with Loughborough University, University College London, the University of Leeds, Queen Mary University of London, the University of Cambridge, and the Victoria and Albert Museum, the programme aims to change the shape of the fashion, textiles and technology industry. Key industry partners include leading Fashion, Textiles and Technology (FTT) brands, online retailers, emergent design companies, FTT business trade associations, including the UK Fashion & Textile Association, the British Fashion Council, and Local Enterprise Partnerships. BFTT is part of UAL's Fashion, Textiles and Technology Institute (FTTI), bringing together design, STEM, cultural anthropology and business practices to deliver sustainable innovation across the entire fashion, textiles and technology (FTT) value chain. Find out more about the Business of Fashion, Textiles and Technology at https://bftt.org.uk/ and FTTI at https:// www.arts.ac.uk/ual-fashion-textiles-and-technology-institute.

The Future Fashion Factory (FFF) is a £5.6M industry-led collaborative R&D programme. It brings together designers, manufacturers and retailers, to co-develop and implement new advanced textile and industrial digital technologies (IDTs) to create new products and enable shorter lead times, increased global competitiveness and sustainability. Led by the University of Leeds in partnership with the University of Huddersfield, the Royal College of Art and Manchester Metropolitan University, industry partners include the UK Fashion and Textile Association, the Textile Centre of Excellence, and over 500 businesses. Future Fashion Factory is part of the Leeds Institute of Textiles and Colour (LITAC), a collaborative, multi-disciplinary research institute addressing global challenges in textiles, fashion and colour through research and innovation, as well as teaching. Find out more about Future Fashion Factory at https://www.leeds.ac.uk/leeds-institute-textiles-colour.

This research was a collaborative project made possible with support and funding from AHRC, BFTT, FFF, ESRC Impact Acceleration Account (ESRC IAA), Leeds University Business School (LUBS), UAL LCF Fashion Business School, UKFT and UKRI.







Adam Mansell, CEO, UK Fashion and Textile Association (UKFT)

The UK's departure from the EU was the biggest change in the global trading environment in decades. With the EU accounting for 75% of the UK's fashion and textile exports and over 30% of the sectors imports, the implications of the change in relationship were always going to be hugely significant.

and product.

Confidence in the UK as a supply base has fallen sharply with many European companies declining to do business with UK brands due to the new trading difficulties. These difficulties are likely to increase with development of the EU's ambitious and comprehensive textile sustainability strategy. The strategy will see a dramatic increase in legislation requiring better monitoring and reporting for all fashion and textiles sold in the EU and will apply to UK suppliers.

This report highlights many of the on-going issues faced by the UK fashion and textile industry, particularly those SMEs and micro businesses who make up over 80% of the industry. However, the report also highlights the resilience and adaptability of UK fashion and textile companies when faced with challenges such as Brexit and COVID-19.

Innovation, a highly skilled workforce and a relentless focus on sustainability will be the key drivers for any successful industry and the UK fashion and textile sector has all of those. Through projects such as the BFTT and the FFF the industry also benefits from increased support and investment from UKRI. So, despite the considerable challenges the industry faces it is also a time of great optimism with significant opportunities for sustainable growth.

Adam Mansell

Despite the rhetoric, the UK EU Trade Continuity Agreement was not the simplest trade deal ever negotiated. The reality is (and was always going to be) a new trading relationship with significant administrative burdens, with a large increase in costs and with more limited movement of people

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Executive Summary

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This report has been formulated through a joint research collaboration between the Business of Fashion, Textiles and Technology (BFTT) at the University of the Arts London, the Future Fashion Factory (FFF) in the School of Design, University of Leeds, and Leeds University Business School (LUBS). The aim of this research is to explore the impacts of global challenges, such as Brexit and the COVID-19 pandemic, on the UK Fashion, Textiles and Technology ecosystem (FTT). The research builds upon a previous report published in July 2021 by the BFTT Creative Research & Development Partnership, led by the University of the Arts London. The report was entitled 'Mapping the UK Fashion Textiles Technology Ecosystem' [1] and was formulated from a survey where 621 small to medium sized enterprises (SME) responses were collected, plus a further 65 interviews with both SMEs and intermediaries¹. The findings of the previous study revealed the main challenges that the UK FTT would face in the next three to five years, including: changes in consumer spending; funding, tax and business rates; trade policies and Brexit; and a shortage of FTT skills. Based on these initial discoveries, it was deemed necessary to explore if these challenges, particularly Brexit, have become a reality for the UK FTT and how the unforeseen COVID-19 pandemic also impacted the industry. Furthermore, the previous report also identified the increasing awareness of environmental issues that designers and brands face, with an emphasis on more ethical, transparent and sustainable approaches within the FTT ecosystem. It was therefore important to consider how businesses are responding to the pressures from both consumers and global policies on tackling climate change. More recently, businesses have also experienced the political and economic disruption caused by the war in Ukraine and it was valuable to consider what effect, if any, this has also had on the businesses operating in the UK FTT.

Owing to an awareness of live and competing surveys within the industry, this research focused on a qualitative approach, where in-depth interviews with representatives in 36 SMEs within the UK FTT sector were carried out. The questions posed in the interviews were based on preliminary insights from a pilot survey, which was initiated to gain an understanding of trends and emerging themes within the sector, as well as exploring the previous findings in the BFTT report [1]. Where appropriate, reference is also made to previous reports or facts about the UK FTT sector in relation to the topics covered in this report. It is worth noting that due to the short period of time since the pandemic and Brexit occurring, there has been limited academic studies, with most references relating to news articles and trade reports. Therefore, it is believed that this report will be the first report written by academic institutions recounting the impacts of Brexit, the COVID-19 pandemic, the Climate Emergency and the war in Ukraine on the UK FTT ecosystem. Detailed below is a summary of the key findings from the research.

The BFTT survey and consultation determined that three types of intermediation were required to drive a sustainable fashion economy. Based on the three modalities, BFTT grouped intermediaries into three broad FTT categories: physical support – eg workspace providers, co-working spaces, housing associations; business support – eg accelerators, incubators, Local Enterprise Partnerships; and policy support – eg think tanks, trade and regulatory bodies

Financial Impacts

Brexit, the COVID-19 pandemic and the war in Ukraine have caused significant financial disruption for many UK FTT businesses. The increase in shipment costs, import and export duty tariffs and the sheer rise in energy and raw materials has made it increasingly difficult for businesses to operate. The COVID-19 pandemic has had lasting financial impacts owing to the closures of businesses on the high street and the initial closure of factories during the first lock downs. While some businesses have found ways to mitigate these impacts, others have remained more vulnerable, particularly smaller start-up businesses who are unable to incur these increased costs associated with import and export tariffs and energy prices, while maintaining a business that can endure the lasting impacts of the pandemic.

Skills Shortage

Brexit and the COVID-19 pandemic have contributed to the decline in skilled workers within the UK FTT ecosystem. The introduction of new visa requirements to work in the UK post Brexit, coupled with the migration of non-UK citizens back to their homeland during the pandemic as a result of redundancies or the furlough scheme, has meant that many UK FTT businesses are now struggling to find people with the necessary skill set. This has secondary impacts such as impeded business growth and difficulties in the retainment of current staff due to the ever-increasing competition within the industry.

Resilience

While businesses within the UK FTT ecosystem have faced unprecedented times over the past few years, the resilience and determination of companies has been remarkable. Many have made redundancies, closed factories, lost business to EU markets and suffered significant financial losses. Yet, there was an overwhelming sense in the industry to carry on regardless with numerous businesses diversifying into new market areas and making positive changes to their business.

Business Diversification, Innovation and Digital Acceleration

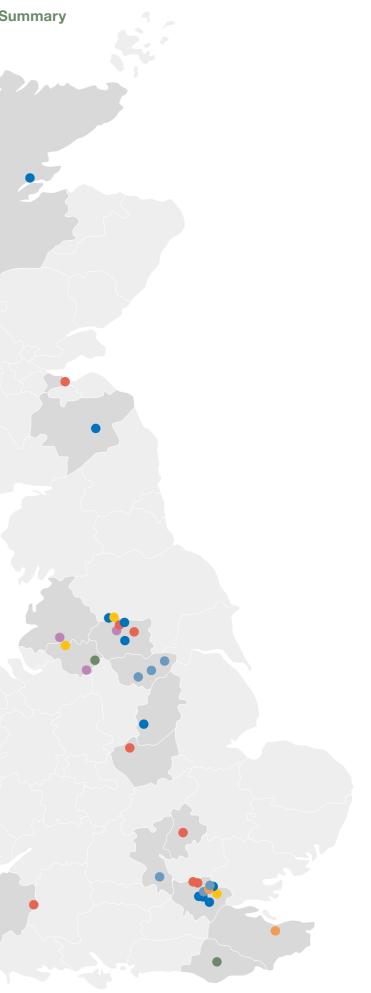
During the pandemic, many UK FTT businesses found time to reflect on the strategy and structure within the company, with many adopting new ways of working, such as flexible working practices or changes in the operational functions. Secondly, the pandemic also prompted businesses to diversify, with many manufacturing businesses producing essential items deemed necessary during the pandemic, while others have developed innovative new solutions or materials. Digitalisation has also been a key driver in varying areas of the supply chain, including marketing, design and manufacturing.

Environmentally Conscious

Attitudes towards more sustainable business models and impacts that companies have on the environment are certainly apparent within the UK FTT ecosystem. Businesses are mindful of their material choices, working practices, generation of waste and their carbon footprint. And while the recent global challenges may have been a time to reflect on business policies, this has not been a key driver in decision making, with most

Company Locations

- Raw Material Supplier
- Fabric Manufacturer
- Dyeing and Finishing Designer
- Designer
 Apparel Manufacturer
- Apparei Manufacturer
 Trade Firm
- Service Firm



businesses already working towards a more sustainable and environmentally conscious future including the UK net zero strategy.

1.1 Key Recommendations

The research highlights the opportunities and challenges currently evident within the sector, and as a result, 5 key recommendations are proposed to support the growth and prosperity of the UK Fashion, Textile and Technology industry in the UK: reducing the cost and complexity of trade; growing capacity and competency; building resilience; driving digital innovation and prioritising sustainable and ethical practices.

- Reduce cost and complexity of trade post-Brexit, to increase access to global markets and improve competitiveness, particularly for startups and SMEs, e.g. through tax breaks, transparency, and clear quidelines.
- Grow capacity and competency of the UK FTT sector, to reduce carbon footprint and create employment opportunities, e.g. through business development support, government subsidies, grants and incentives, training, and visa programmes for skilled workers.
- Build resilience post-COVID-19 through agility, flexibility and diversification to protect financial sustainability of FTT businesses, e.g. through business guidance, mentorship and training.
- Drive digital innovation in the FTT sector, to increase capacity, efficiency and sustainability e.g. through increased access to digital tools and training, particularly for start-ups and SMEs.
- Prioritise sustainable and ethical practices to address the climate crisis, improve health and equity for all, e.g. through legislation, government incentives and grants, investment in infrastructure, accreditation and business guidance.

1.2 Definitions

As defined in the previous report by BFTT [1], the following definitions apply:

The scope of Fashion, Textiles and Technology (FTT) is defined as the intersection between the designer fashion, retail and wider textile industries, ranging from automotive to smart textiles, sustainable materials innovation and technology, including, for example, digital systems and processes for advanced manufacturing to augmented reality.

The metaphor of an ecosystem is used to refer to both an established and embryonic network of a large number of interconnected fashion, textile and technology businesses and intermediaries that affect each other. Ecosystems comprise the competition, co-evolution and coexistence of various stakeholders and complementary services - including the natural environment (via cultural ecosystem services).

Executive Summary

The acronym SME refers to small, medium and micro-sized enterprises. Micro enterprises are also incorporated into the acronym to illustrate an accurate picture of the UK FTT ecosystem. SMEs and micro businesses dominate the industry, with 82% of companies employing fewer than 10 people, according to the previous BFTT survey. Business size definitions are taken from the widely used current description provided by the European Commission (Recommendation 2003/361/EC[13]), which defines SMEs based on their headcount and turnover as follows:

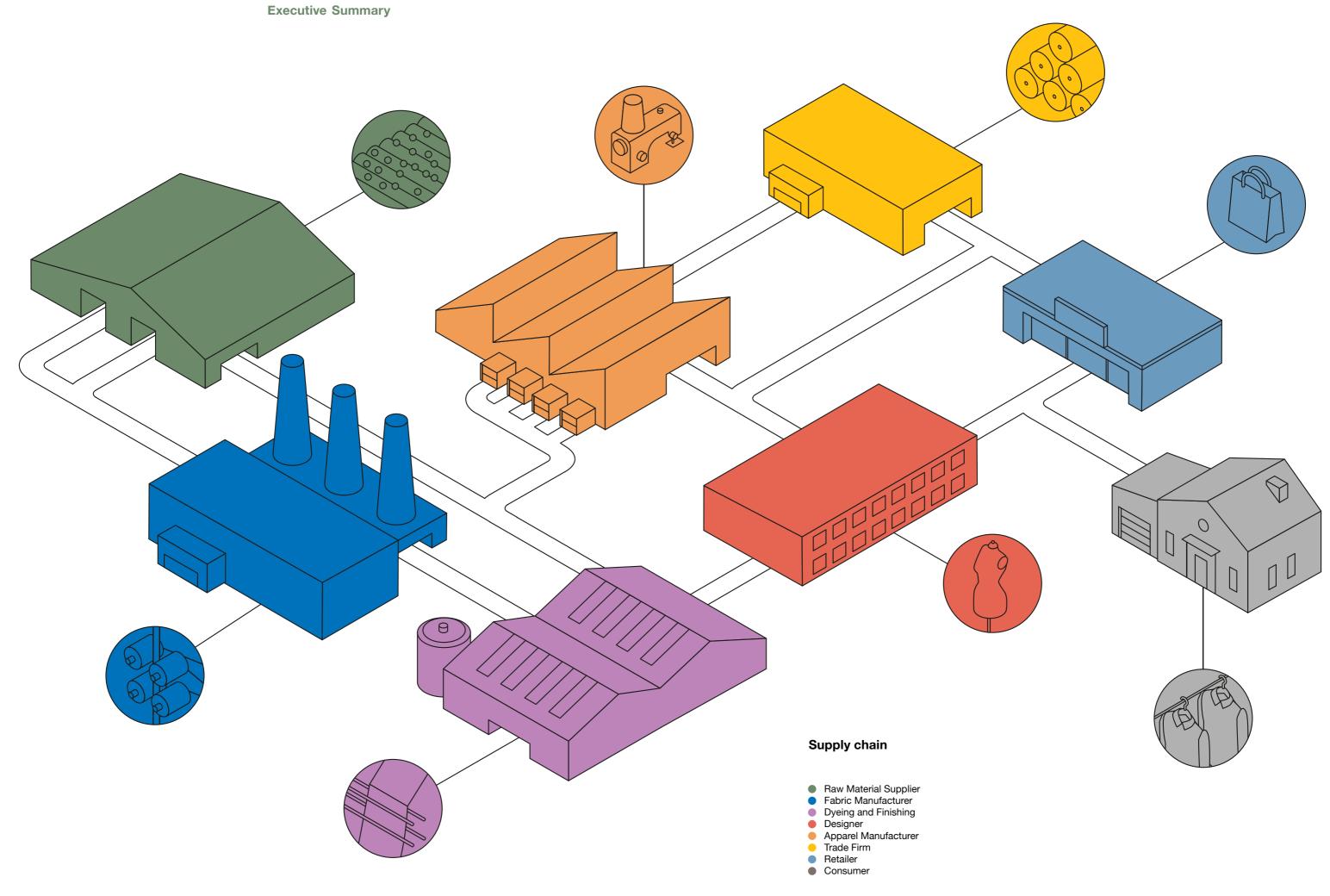
1.3 Methodology

Survey – A pilot study was launched to identify key emerging themes and trends within the industry. The survey was open to any SMEs operating in the FTT as well as larger firms with more than 250 employees. The BFTT's network, including the UKFT, the British Fashion Council (BFC), and the FFF's Creative Research & Development Partnership led by the University of Leeds supported dissemination of the survey and encouraged take-up. The survey attracted a total of 46 useable responses which helped to inform the direction of topics covered in the interviews.

Interviews - Interviews were conducted with 36 representatives from SMEs and larger scale businesses within the UK FTT sector in varying areas of the supply chain, including raw material suppliers, dyers and finishers, fabric and apparel manufacturers, designers, trade and service firms (including marketing agencies) and educational enterprises. The interviews aimed to retrieve qualitative data that would elaborate on the previous findings as well as offer further insight into the impacts of the global challenges such as Brexit, the COVID-19 pandemic and attitudes towards climate change and more recent events such as the war in Ukraine. Participants of the interviews were given the option of four forms of disclosure; 1). full disclosure, 2). full anonymity for the company and for yourself, 3). full anonymity just for the company, 4). full anonymity just for yourself. Where appropriate the name of the representative and name of the company will appear in this report, otherwise referral to a company will be defined by their place within the supply chain and geographical location.

Analysis - To identify common themes from the interviews, the data was coded using QSR NVivo software. The software facilitated the sharing of categorised data within the research team. The main categories relate to the impacts of COVID-19, Brexit and climate change, with additional themes and nuanced sub-categories emerging from the data. The findings provided in-depth insights on key developments within the UK FTT ecosystem.

• Micro business: fewer than 10 employees, turnover under €2 million Small business: fewer than 50 employees, turnover under €10 million Medium business: fewer than 250 employees, turnover under €50 million



Global Challenges

The UK FTT is just one industry sector that has faced a particularly challenging time over the past two to three years owing to the most recent global challenges, namely, Brexit, the COVID-19 pandemic, the climate emergency and more recently, the war in Ukraine. Each of these events have had a significant impact on the operational function of UK FTT businesses, with many experiencing major challenges as well as opportunities.

2.1 Brexit

The UK's departure from the European Union (EU), often referred to as Brexit, was one of the most extraordinary events to occur recently, driving huge changes in the socio-political and economic landscapes within UK and EU member countries. Creating nationwide uncertainty, whilst at the same time, providing hope and national pride to many. Brexit created the potential for the rules dictating how UK companies conduct their business both at home and internationally to be completely reworked. Previous research suggested that Brexit was going to have huge negative consequences on the UK economy, particularly within peripheral geographical regions [2].

1st February 2023 marked the three-year anniversary of Brexit. This, in combination with the COVID-19 pandemic as well as the war in Ukraine, has had serious impact on the UK's textile and clothing industry specifically. This industry, in its majority is formed from micro firms and SMEs [3] and represents an essential part of the UK economy, crucial for job creation, innovation and productivity growth [4]. However, Brexit has left these businesses with intricate complications and concern over ambiguity, due to the UK's exit from the European Single Market and the EU Customs Union causing extensive paperwork, extra charges, and delays. Additionally, what was before Brexit, a seamless supply of accessories and workforce from the EU member countries, is now absent, along with the duty-free access to the EU market for British products [5]. Brexit has impacted the UK's Fashion and textile sector in terms of financial impacts such as tariffs, changes in VAT, prices, and ease of buying as well as delivery of UK fashion goods to European consumers. There have also been impacts due to changes in import and export duty, tax and delays and the lack of skilled workers, as a result of both Brexit and the pandemic, which has caused significant challenges. Relocation of businesses, whether that be reshoring or offshoring and the triggers for these decisions, be that Brexit or not, will be discussed in the succeeding sections of the report.

2.2 The COVID-19 Pandemic

COVID-19 first emerged in China in December 2019, and the pandemic quickly spread worldwide, impacting people's well-being and health. Its effects were also felt across various industries and sectors globally, including the UK fashion and textile industry, one of the oldest and most globalised trade groups in the world which suffered significant interruptions with lasting impacts [6]. The closure of high street shops of fashion brands led many production factories to lose demand during the pandemic, causing problems such as excess stock, reduced sales, and disposal of non-used or out of season items. As a result, many British fashion brands collapsed after the first lockdown in the UK, leading to job losses and store closures. UK clothing sales initially tumbled 34% in March 2020 due to the restrictions imposed [7]. Well known British brands such as Marks and Spencer, Next, Topshop, Oasis, Warehouse and Burberry were among those negatively affected by the pandemic. Burberry reported major impacts on their business during the early stages of the pandemic when the virus was more localised to countries within the Far East. Generally, sales from Hong Kong and mainland China contribute about 25% of Burberry's sales, however, these two markets were severely impacted at the beginning of COVID-19, with 24 of 64 stores closed, and shopper numbers reduced by over 80% in mainland China in February 2020. In addition, Burberry's shares were down nearly 15% in the first two months of COVID-19 [8]. Similarly, in April 2020, Oasis and Warehouse were reported to have fallen into administration, causing the immediate loss of 200 jobs and putting over 1,800 jobs at risk [9]. However, two months after Oasis and Warehouse announced their collapse, their online business was bought by online fashion retailer Boohoo for £5.25m [10].

Like many brands, the pandemic also led to a rise in e-commerce platforms, saving many brands from becoming insolvent and being bought by successful online brands such as ASOS, an ultra-fast-fashion online retailer that sells its own brands with other fashion brands simultaneously. They achieved consistent rapid growth with documented average growth in sales of 20 to 25% per annum and there have been over 700,000 new UK customers registered on ASOS, with ASOS obtaining 39% sales growth from the UK market in 6 months [6].

Notably another challenge that was presented because of the pandemic was the decline in the demand for formal clothing, which was already reported to be declining since 2019 [11]. The lockdown and remote work accelerated this trend, as people had less demand for suits and formal wear during the lockdown. This impact was felt by businesses like Henry Poole & Co, a bespoke menswear brand that has been on 15 Savile Row Street in London for 200 years. Although customers had returned to stores, foot traffic was not comparable to pre-pandemic levels and didn't even reach the foot traffic before the 2008 financial crisis [12]. Suits were added to the Office for National Statistics (ONS) list for the first time since 1947, but in March 2022 they were removed from the goods basket used to calculate the annual inflation rate, as suits were not being purchased in sufficient quantities impacted by COVID-19 to be considered a suitable product for quantifying the UK's cost of living [13].

The succeeding sections of this report will address these topics faced by the UK FTT, enabling the reader and the industry to gain a deeper understanding of the challenging times endured by many, as well as the opportunities that have arisen and the ways in which companies have conducted their businesses during this uncertain period.

2.3 The Climate Emergency

In 2019 the UK became the first major economy to pass laws to end its contribution to global warming by achieving Net Zero by 2050. The UK government are encouraging businesses to play a central role in reaching this target, particularly those in the private sector, where it is believed this is the source of most of the carbon that is changing our climate [14]. The fashion and textile industry are one industry sector within the UK that is contributing to this negative impact and where public concern has gradually risenregarding these harmful impacts on the environment and our climate.

Garment production consumes high water usage, generates high carbon emissions and is responsible for 8-10% of global emissions and waste [15] [16] [17]. Fast fashion has accelerated the negative environmental impact of the fashion industry by prioritising cheap and speedy production, resulting in a lack of attention to social impacts and environmental regulations in supply chains. This has led to disasters like the Rana Plaza collapse in Bangladesh in 2013, which caused 1,134 deaths and severe toxic air and water pollution [18] [19]. In the late 1990s, Zara and many other Western companies discovered the opportunity to subcontract production to lowwage countries in Asia, such as Thailand, Bangladesh, and Vietnam to enable the fast-fashion model [20]. This fragmentation of the connection between the countries where consumers reside and where production takes place has made it challenging to identify the factors involved in the production process, often obfuscating the geographic locations where a garment has an environmental and social impact, even for the retailer [21]. As a result, there remain strong business and environmental connections between Asian and other low-wage countries and the UK, which have a direct impact on the UK and cooperating countries' environmental footprint and its corresponding effects on global warming.

This report aims to identify the initial thoughts of companies within the UK FTT sector on the climate emergency, how businesses are seeking to reduce their environmental impact and contribute towards achieving the net zero target set by the UK government. A further report will be produced within the year, concentrating on this topic in more detail.

2.4 Energy Crisis

On 24 February 2022, Russia invaded and occupied Ukrainian regions, extensively escalating the Russian-Ukrainian War that first began in 2014. The ongoing conflict in Ukraine and the resulting economic sanctions imposed on Russia from countries around the world, have had some impact on the fashion, textile and technology sectors within the United Kingdom.

Although the global economy had been steadily accelerating until 2021, the global economic recovery has since been predicted to slow down as a result of the tensions. With the largest impact being felt within the logistics and commodity industries, where costs have soared [22] [23].

Not only has this war first and foremost created a humanitarian crisis, but



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smore generally, the conflict triggered a string of events including the derailing of global markets, resulting in uncertainty within the businesses world, driven by the huge increase in the cost for gas amongst other influences. In fact, the price for gas rose by 129.4% in the 12 months leading up to March 2023, with the crude oil price surging to above \$130 per barrel in March 2022, the highest price experienced since 2014 [24, 25, 26]. This caused disruption to global commodity markets, squeezing the UK's energy supply and resulting in both developed and developing economies globally to struggle with significant increases in cost for basic food imports, with inflation influencing interest rate hikes and the culmination resulting in a cost-of-living crisis within the UK [27].

Findings from the BoF-McKinsey State of Fashion 2023 Survey have demonstrated that drivers which contribute more broadly to the state of global fragility, are at the top of the list for consideration for fashion executives. In fact, the survey discovered that 85% of fashion executives predict inflation will continue to challenge the market next year. Whilst geopolitical tensions, specifically around the ongoing war in Ukraine, have disrupted supply chains and created an energy crisis that 58% of executives also believe will weaken the fashion market [27] this report will aim to identify how the war in Ukraine has impacted the UK's FTT sector.

The Impact of Brexit

Loss of EU Customers - The introduction of tariffs to import and export items, coupled with the increases in VAT have made it less appealing for customers within the EU to purchase goods from the UK, leading to a decline in turnover and profits of UK FTT businesses.

Custom Delays - Many businesses have experienced a significant increase in the time taken for goods to arrive in the UK, and found delays in sending goods into the EU, due to an increase in the time taken to process new documentation causing delays in customs. As a result of this, some businesses have set up distribution and warehousing within the EU to ease the process, while others have decided to cease relationships with previous customers.

Loss of Skilled Labour - The new VISA requirements have made it increasingly difficult for skilled workers from outside of the UK to work with companies within the UK FTT sector. The lack of skilled labour is making it difficult for businesses to grow and increase capacity.

Increase in Localised Work - As a result of the increase in import tariffs and delays in customs, some businesses have seen a rise in the amount of work from UK businesses. It has also forced companies to look for raw material suppliers within the UK where this is feasible.

3.1 Importing and Exporting

It is clear from the case study interviews that many companies have experienced significant challenges in relation to the new import and export systems post Brexit. The additional fees, delays in receiving and sending goods and the time taken to process paperwork have been the key impacting factors. For start-ups and smaller businesses these new rules have had significant effects. 'Boy Wonder' is one such example of a startup, who, despite the popularity of design-led British goods in markets like Japan, decided it was not financially viable to export goods due to the high increase in tariffs in sending and receiving items. This impact, along with other contributing factors such as problems accessing additional Crowdfunding and alternatives including COVID-19 loans, has meant that Boy Wonder will close the company this year. Fazane Fox of The Production Lab, who imports garments from their production site in Portugal, explained that prior to Brexit it would have cost around £0.50 per garment, now they can expect to pay between £1.00 and £1.50 per garment. Interestingly, Bav Tailor explained that European retailers are now increasingly wary about placing orders that arrive from the UK due to the customs duties. Elvis and Kresse also experienced a similar situation stating that they used to have a strong European customer base, but this has diminished since individuals do not want to pay the extra cost for importing items. A survey by the UKFT [28] recently reported that 44% of UK business in the UK FTT saw more returned or rejected items as a result of customs costs and VAT issues. This was also reported on the Internet Retailing site, remarking how there can be financial impacts for EU consumers buying from the UK

The impacts of Brexit on the UK FTT are summarised in the key points below.

due to a rise in costs for paperwork for exports as well as longer lead times, reducing the appeal of buying fast fashion from UK companies and financially impacting the UK fashion industry [29]. Similarly, a survey by the UKFT [28] reported that 83% of businesses have experienced higher customers costs, with 53% of participants having had orders from EU customers cancelled.

"We used to have a strong EU customer base but since Brexit they have stopped ordering. Individuals no longer want to order from British sites as they don't want to pay the taxes or handling charges and deal with the unknowns of it all."

Elvis and Kresse.

"We've got thousands of pounds of VAT from three years ago that we're still trying to reclaim from Italy, Portugal and Germany."

The Production Lab

It has also been widely reported that Brexit has resulted in changes in VAT. EU consumers of UK products now pay their own local VAT, which is considered an advantage to the UK, as sellers do not have to register for VAT if they only sell goods that are outside the UK at the point of sale to UK VAT-registered businesses. However, products sold by the UK but made in a country such as China will experience tariffs added as they cross over the continent [29]. Likewise, UK businesses have to declare the origin of their exports to enable them for tariff free access to the EU. Additionally, for both imports and exports there are limits on the proportions of a product that can be assembled from parts made overseas when gualifying for tariff free access to the UK [30]. These complications were made clear during the interviews, with some companies maintaining they are able to claim VAT back in certain instances, yet this is unclear, and therefore costs valuable time to decipher what is and isn't refundable. The Production Lab stated that they are in the process of claiming VAT back incurred 3 years ago, which equates to a considerable amount. Not only this, but they must pay someone to make these enquiries, adding more financial strain to the business. It seems there are also rules that can negate the VAT in specific circumstances, yet many are unaware of these. The Production Lab gave an example during the interview that if they buy fabric from Italy, make the garment in Portugal and then import them to the UK, they are able to ask that supplier not to include the VAT.



© Elvis & Kresse

And it's not just the added cost of sending or receiving items that is affecting companies, many have found the time taken to process paperwork to be a frustrating and cumbersome task, taking up a considerable amount of time to learn new procedures. The British Fashion Council reported that since Brexit there are new checks and procedures in place at the borders, and declarations, that each come with added costs and potential disruption when the UK does business with the EU [30]. 'The Sustainable Sequin Company', a small online business, found that the time taken to process paperwork is removing valuable time which would have previously been used to concentrate on manufacturing. Bay Tailor commented on the difficulty that small businesses face, since they simply don't have the resource to offload this type of added work. Also, larger more established businesses, such as Pennine Weavers, Ananas Anam, Camira Fabrics and a luxury handbag brand, also commented on the lengthy time taken to complete paperwork and the added complexities post Brexit. Pennine Weavers decided it was not worth the difficulties in continuing to work with some of the smaller customers in Ireland, due to the lengthy time to complete documentation and the increased duration for the material to arrive. A dye house in West Yorkshire, who regularly ship yarns to Dublin, have also experienced these increased delays, stating that prior to Brexit they could have transported yarn to the port for 4am and it would have been on the boat by 8am, however, post Brexit they now must book this into the port 24 hours in advance and ensure all the necessary documentation and coding is correct. Pincroft Dyeing and Printing explained that they could expect raw materials to arrive via sea freight within 10 weeks prior to Brexit, yet post Brexit, the time in some cases has risen to 4 or 5 months.

This experience has been a common occurrence among all companies shipping goods into the UK, and the longer lead times have subsequently been accepted by many within the supply chain as the new normal. Some companies have tried to negate these longer lead times by ordering significantly more stock and storing it. However, this is not always feasible, since many do not have the facilities or the upfront costs to pay for it. Other more established businesses have set up warehousing or fulfilment centres outside of the UK to overcome and help manage the delays and complexities that have arisen post Brexit. For example, a luxury handbag brand set up a warehouse in Hamburg, Pincroft Dyeing and Printing have opened a new factory in Portugal, and Ananas Anam have set up a fulfilment centre within Europe. Others have faced setbacks such as potential collaborations with companies in Europe, as the difficulties in importing and exporting items has put a stop to any such relationship continuing.

In some cases, shipments of raw materials have gone amiss due to customs arguing that the incorrect paperwork or misinformation had been supplied. Bay Tailor is one example of a company that had to reorder material at triple the price on a priority shipment, as customs had declared the documentation to be incorrect and was being sent back. Inevitably circumstances like these have arisen on many occasions and are causing delays and financial setbacks. A well-established Saville Row fabric supplier spoke of a situation where a European customer ordered fabrics to manufacture a tailored suit for a wedding, however, the material got delayed in customs for twelve weeks and they were unable to produce the garment in time for the wedding. Situations such as this have significant impacts on individual tailors, harming their profits, income and reputation.

"In 2016, not long after the Brexit vote happened, we pulled a team together to look at how Brexit was going to affect our trading relationship with the **European Union.**"

Camira Fabrics

However, not all UK FTT businesses have suffered the same effects. For example, a weaving mill in West Yorkshire have managed the situation of time delays by securing the shipment of items into the UK by air freight at the same cost as shipping, in some cases. Granted this business is on a larger scale and therefore may have had more leverage with their suppliers than a smaller business perhaps would. Prickly Thistle, a tartan and garment The Impact of Brexit

manufacturer in the Scottish Highlands, commented that they still export products into Europe and can do so without paying the higher tariffs. Camira Fabrics set up a team prior to the Brexit deal to understand the impacts that the business would incur and make sure the trading relationships with customers outside of the UK remained as seamless as possible. Fortunately, Camira Fabrics already had a European entity in Stuttgart which was able to continue as a trading partner for their European customers. However, they did experience frustrations with getting things to and from exhibitions within the EU, due to new tariff codes.

3.2 Relocation

The subject of relocation has revealed mixed opinions and strategies from businesses within the UK FTT sector. According to a study by Moradlou et al [31], business managers are re-evaluating where they choose to locate their supply chain so that disruptions due to Brexit as a geopolitical risk are reduced. A survey carried out by the UKFT [28] in 2021 discovered that 25% of fashion retailers are considering moving the location of all or part of their operations to somewhere within the EU to enable logistics, staffing and manufacturing to be simpler. Furthermore, 39% of those fashion businesses said that they would relocate to the EU if they were offered tax advantages.

"We have set up a warehouse in the Netherlands. Fabrics come in by boat to the port of Amsterdam and we distribute from there."

Anbo Textiles

"We opened a registered office in Germany which saves us an incredible amount of time, but it's still not perfect."

A well-established Saville Row fabric supplier, London

Early indications from the survey as well as the case study interviews have confirmed that offshoring and reshoring are both emerging themes. The initial data showed that most businesses had not planned to offshore to the EU because of Brexit. Although there was a small number who had considered this or who had already implemented this move. One example of a business who set up operations in anticipation of Brexit is Pincroft Dyeing and Printing. They have set up a factory in Portugal to ease the trade

with EU countries and globally, avoiding the new import and export tariffs as well as logistical complications. Other examples include Anbo Textiles who set up a distribution warehouse in the Netherlands, a luxury handbag brand who set up a warehouse in Hamburg, Ananas Anam who have set up a fulfilment centre within Europe, and a well-established Saville Row fabric supplier who have registered an office in Germany. The Production Lab considered setting up an office in Europe as they believed this would make things easier but, due to the cost of doing so, they decided it wasn't feasible at this time but may consider this in the future.



Open House © Anbo textiles

Similarly, the initial survey response in relation to reshoring also confirmed that most businesses were not inclined to reshore parts of their business due to Brexit. This was mainly due to the higher costs involved in doing so, such as high labour, raw material and production cost, lack of skilled labour and high levels of regulation. Conversely, the study by Moradlou [31] demonstrated that manufacturing back-shoring is thought to be a strategic decision and companies must make informed choices as to where they source or manufacture their products. Poor quality, reducing lead times and costs with regards to both logistic activities and coordination were the top motivations for reshoring. Likewise, a recent global report by Mckinsey [27] highlighted that 65% of fashion executives have said they are considering nearshoring to form new manufacturing hubs specifically to serve the US. UK and European demand, with the aim to limit transport bottlenecks and mitigate the impact of political or social instability. Additionally, around 60% of the fashion executives who participated in the survey mentioned that they are considering forming strategic partnerships with their suppliers to help navigate supply chain disruptions. This approach was affirmed in the report by Mckinsey, which describes strategies to future-proof business operations, enabling greater agility and visibility, as well as influencing the

reduction of a business's environmental impact. The report also advised that increasing speed and flexibility through incorporating business strategies, such as vertical integration, nearshoring and small-batch production, will enable brands to provide an enhanced response to shifting market and customer demands and simultaneously reduce inventory costs.

The initial survey responses in this report, highlighted that the small number of businesses that were considering reshoring, were due to reasons such as sustainability, and the 'Made in Britain' credentials, which was also confirmed in the study by Moradlou [31], suggesting that the 'Made in' effect has been demonstrated to show specific influence for back-shoring within the textile industry, as well as sustainability also being one of the pressing drivers for back-shoring. One of the participants in the interviews confirmed that, while they are not considering moving parts of their supply chain back to the UK due to Brexit, they are looking at ways in which this can be done for two reasons, one; growth of raw material suppliers and two; sustainability.

3.3 Staffing

The issue with staffing seems to be one of the most prevalent challenges faced by companies in the UK FTT sector. Skilled labour in the creative industries is few and far between due to low salaries and the association with often repetitive manual work. This, coupled with the relocation of manufacturing to the other continents in the last 50 years, has meant there has been less demand for these types of skills in the UK. Research from Bailey and De Propris [32], about the automotive industry, demonstrated that over the previous 20 years extensive offshoring has removed many previously nationally, and often regionally, based manufacturing sectors, resulting in a hugely reduced availability of skills from the UK.



Heritage Collection © Camira

Since Brexit, the shortage of the skilled work force has increased even further. Many of these workers were living and working in the UK, but held nationality in other countries, particularly EU countries. Brexit has now made it increasingly difficult for these workers to remain working in the UK due to VISA requirements, complexity in paperwork, and a justified reason why this person should be allowed to work.

During an interview with MAES London, a luxury womenswear manufacturer, the founder explained that 90-95% of their staff come from Eastern Europe. Although they have managed to retain these workers, they are now finding it almost impossible to grow their manufacturing team, as they simply cannot find people with the skills needed. This is having a direct impact on being able to grow the business and increase their productivity. Ananas Anam also commented on the difficulty they will face in growing the business, since the pool of skilled workers is so limited. Additionally, there are knock on effects of losing staff and being able to retain the same production levels. A small Scottish handbag producer explained that because of Brexit, the dyers they use to colour the yarns for the bags now have a 6-month lead time due to staff shortages. Holition, a marketing agency in London, explained that 75% of their staff are from outside of the UK, and during Brexit their staff experienced emotional impacts, due to the concern about being able to remain in their jobs and impacting their sense of belonging.

"90–95% of our manufacturing team comes from Eastern Europe, and many of them arrived here before Brexit."

MAES London

Another factor resulting from the shortage of skilled labour is the rising cost in retaining these workers, as the demand for these types of creative skills is so high, workers in this sector can request higher rates of pay against the competition. This can be seen in areas such as manufacturing, design and IT. Holition have seen this occurring within their business, where the cost to employ someone in computer coding has increased. The difficulty they then face is passing the cost onto their customers.

Conversely, some companies, such as Pennine Weavers in Keighley, West Yorkshire, haven't experienced any difficulties in employing new workers. Gary Eastwood, the Managing Director, explained that Keighley is not an area that is abundant in Eastern European workers, and they have never struggled to find people with the appropriate skills or willingness to learn. However, he believes there will be a real challenge in attracting younger generations into a textile manufacturing environment, and envisions the lack of people will be the biggest downfall for businesses in the future. "75% of my team are from outside of the UK — some are European, whilst others are from outside of the European Union and are here on a visa. It's not that we specifically look for foreign talent, London just attracts international talent."

Holition

3.4 Positives

While it appears that Brexit has brought about more negative impacts to the UK FTT sector such as the complexities and cost in import and export duties, many UK FTT businesses have soon adapted and continued to manage the situation well. An independent handbag brand from Leeds attended many seminars and workshops on how to navigate their way through Brexit, and ensure they were doing things correctly. They feel that Brexit hasn't impacted their business in a huge way. Camira Fabrics also had a team of people working to decipher the new Brexit rules, and although they are having to pay duties, they feel it's just the procedures that have caused significant issues.

"I've been to so many seminars and workshops and asked my accountant so many times if we are doing things correctly in relation to Brexit. I hope we are... So far I haven't noticed a huge impact from Brexit."

An independent handbag brand in Leeds

"With VAT and duty increasing, we are now becoming quite comparable to countries like Italy and Portugal, who have been increasing their prices due to inflation."

MAES London

Other UK FTT businesses have experienced more positive changes. Luxury womenswear manufacturer MAES London, deadstock fabric supplier The Materialist, and a dye house in West Yorkshire, and have seen an increase in the demand for UK manufacturing and materials as a result of higher import duties and more complex procedures. Rather than outsourcing production to the EU, to countries such as Spain, Portugal or Italy, UK FTT manufacturing companies have become more competitive on price in some cases and are therefore able to attract more UK business. MAES London also commented on how this helps companies reduce their overall carbon footprint, since they can keep everything more local. Likewise, Melin Tregwynt, a traditional Welsh weaving mill, decided to rethink their own supply of raw materials and work with UK spinners instead of Turkish ones. Conversely, a textile agent in West Yorkshire has experienced an increase in trade with EU countries since Brexit, picking up business with mills in Spain and India. A digital marketing agency in London has found Brexit to have a limiting impact on their business, since they are not physically transporting products, and are able to continue to work internationally via digital platforms. An article [28] also highlighted that although Brexit has resulted in the potential decline in UK-EU trade volume, it has also meant that the UK is no longer bound by EU collective bargaining, allowing the UK to strike favourable trade deals with other markets. For example, the development of trade deals between the UK and the US and China, meaning there is potential for sales of UK fashion and textile goods to increase to these markets. While there was no mention of this in the interviews, companies did remark on the increase in sales with countries such as the USA during the COVID-19 pandemic, which is discussed in the following sections of this report.

to Brexit they had just one supplier for their lining fabrics but are now concentrating on securing other suppliers as a fall back. It has also allowed them to reflect on the time taken to receive coloured yarns, which was previously taking 6 months due to staff shortages caused by Brexit. They have now decided to bring the dyeing in house to speed up the process, which improves lead times to customers.

An educational provider, Learn to Recreate, have also seen Brexit as an opportunity to look at ways in which they can deliver programmes and projects in a different way and to a different audience, as well as find new funding partners outside of the EU and diversify to find new streams of income.



"In terms of materials, Brexit has been positive for us, as people cannot easily import and so are looking to us for alternatives."

The Materialist

"Brexit has made us rethink our supply chain. For example, we're now looking to only work with UK based spinners."

Melin Tregwynt

Numerous businesses that were interviewed also commented on how Brexit was an opportunity to reflect and look in more detail at the business and costings model. A small business based in Edinburgh, that produces woollen bags for crafters, has perceived Brexit as a learning curve. Prior

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Dornier Loom © Pennine Weavers

→ Pennine Weavers Ltd Interview with Gary Eastwood, Managing Director

Pennine Weavers is a weaving mill based in Keighley, West Yorkshire. The company was founded in 1969 and is based in a mill first established in 1913. They supply high-end suiting fabrics to luxury brands across the world.

How do you feel that Brexit has impacted the business? Gary: Since my biggest customer is based in Paris, no good has come out of Brexit for us. Has any good come out of Brexit for anybody in our industry? Europe and Japan were our two biggest markets as an industry. So, whilst we've done trade deals with them, it's still difficult. It's not straightforward. The whole exporting process and importing process has become massively convoluted, much slower, more inefficient and has meant extra costs, at all levels, in pretty much every organisation.

Do you feel that importing goods into the UK has become as much of a problem as exporting?

Gary: I mean importing yarn, importing anything, just takes forever. Things are getting stuck in customs. If you don't have the right customs paperwork, the Europeans don't do you any favours whatsoever. Our yarn comes in from Italy and previously, the wagons would leave on a Monday and it would get here on a Thursday; now they'll leave on Monday and they get here when they get here. Also, we used to get parts from our machine manufacturers in Europe delivered overnight. If we had a major breakdown, we could pay all the costs to get it flown in. You ordered it before 2:00 PM in the afternoon and it would be here by 9:00 AM the following morning. Now you're lucky if you can get it 2 weeks later.

Has Brexit had an impact on the number of customers that you deal with outside of the UK?

Gary: I mean because our business mainly deals with people in West Yorkshire and Scotland, it's not made any great difference to the business. It's just made things more complicated, the whole process being slow. It's more my customers that we're having the upheaval from, we're having to work a lot harder to get the same amount of business.

I do have customers in Southern Ireland and two of the smaller ones - we just decided that it was becoming too much hassle to work with them. We both said this is just too much hassle, the paperwork and the time it was taking, and we don't just have the paperwork fully filled in. Whereas before, we just sent them, a wagon came up and picked them up, took a delivery note and took them away.

3.5 Key Findings

The below table depicts the key impacts, consequences, challenges and opportunities with suggested policy recommendations in relation to Brexit:

Impacts

- Additional import costs (duty, shipping)
- Shipments unpredictable and unexpected delays
- Bureaucracy more time consuming
- Increased supply chain fragility
- Skilled workers leaving UK
- Visa complications
- Fewer skilled EU workers are coming to UK

Consequences

- Smaller margins
- Increase in final product cost
- Loss of clients & contraction of business
- Relocation of some or all operations to EU •
- Digital only companies less affected
- Limited capacity to grow business
- Increase in staffing costs

Opportunities

- Reshoring: increased demand for UK production, reduction in carbon footprint
- Reappraise costings, increase efficiency
- Find markets beyond EU
- Mitigate impacts through relocation of operations to EU
- Increase in digital products, platforms and communication, potential reduction in carbon footprint
- Upskilling & training e.g. apprenticeship schemes, technical colleges

Challenges

- Limited capacity and competency within UK manufacturing
- Lack of suitable raw materials and technology •
- Financial investment to relocate
- Cost of industry-specific technologies
- Lack of skilled workers to provide training
- Negative perception of factories/manufacturing
- Need for investment

3.6 Policy Recommendations

- minimising delays.
- costs associated with reshoring.

Review and revise import/export tariffs: The government should conduct a thorough assessment of the impact of increased tariffs on businesses. Consideration should be given to reducing tariffs or providing financial assistance to mitigate the effects of higher costs on small and micro businesses. Streamline customs procedures and paperwork: Efforts should be made to simplify and expedite customs processes and paperwork to reduce the resource burden on businesses. This may include investing in technology and resources to facilitate smoother customs clearance and

Provide support for VAT-related issues: The government should offer guidance and support to businesses navigating the complexities of VAT regulations, particularly regarding imports and exports. Clear guidelines on VAT refund eligibility and procedures should be provided to help SME businesses claim back VAT accurately and efficiently.

Provide incentives for businesses to relocate within the UK: The government should introduce measures to encourage businesses in the UK FTT sector to relocate their operations within the UK. This could include tax advantages, grants, or other financial incentives to offset the higher

Support sustainable manufacturing and 'Made in Britain' initiatives: The government should promote sustainability and the 'Made in Britain' credentials to incentivise businesses to re-shore parts of their supply chain. This can be done through awareness campaigns, funding for sustainable initiatives, and regulatory support to ensure environmentally friendly practices.

Develop strategic partnerships with suppliers: Encourage businesses to form strategic partnerships with their suppliers to navigate supply chain disruptions. The government can facilitate this by creating platforms or networks that connect businesses with reliable and sustainable suppliers, fostering collaboration and shared resources.

Address the skilled labour shortage through targeted education and training programs: The government should develop and fund education and training programs that specifically target the shortage of skilled workers in the FTT sector. These programs should focus on attracting and developing talent in creative industries, emphasising the value and potential career opportunities available in these sectors.

Provide financial incentives for businesses to invest in training and skills development: The government should introduce financial incentives, such as tax credits or grants, for businesses in the FTT sector to invest in training and skills development for their workforce. This can encourage companies to prioritise skill-building and ensure a continuous supply of skilled workers within their organizations.

in the key points below.

Financial Strain – The COVID-19 pandemic was a period where many businesses suffered financially as a result of temporary or permanent business closures, changes in consumer habits or demand for particular fashion items, such as suiting or handbags, and the sheer rise in the cost of raw materials as well as freight coming in from overseas.

Redundancies — Many businesses made the decision to make redundancies due to the lack of work, business closures, or the transition to e-commerce platforms where the need for physical people was less. As a result of these redundancies, many workers returned to their native country, leaving the UK with an increasing skills gap and increasing rates of pay due to a limited pool of talent now available.

Business Diversification - Throughout the pandemic many businesses saw this as an opportunity to diversify into different market sectors, and particularly those areas where essential items were deemed necessary, such as medical products. Some businesses were able to offer more online services, such as consultancy, and it also sparked the creation of completely new businesses, as well as novel developments and innovations.

Adapted Working Practices – One of the main factors to arise as a result of the pandemic was the adaptation in how businesses are operating. The pandemic accelerated the practice of remote working through online digital platforms and forced businesses to consider and transition to e-commerce, which offered many businesses a lifeline and even contributed to an increase in sales. Manufacturers initiated new practices such as 'just in time' and changed their shift patterns which has had some benefits such as increase in efficiencies and profits.

4.1 Financial Impact

The financial impacts of the COVID-19 pandemic on the UK FTT sector have, in some cases, been significantly damaging to businesses, particularly smaller businesses or freelancers that lack financial backing. The owner of the Sustainable Seguin Company, a small online business, had to completely stop manufacturing during the first three months of the pandemic due to commitments of home schooling. Their revenue fell by 84% and orders decreased by 40% compared to the same period the previous year. Boy Wonder, a small clothing business, also struggled financially since they were unable to continue face to face selling throughout the pandemic, resulting in no or very little sales. They feel this has had the biggest impact on the business failing, as the lack of sales and financial support from the government meant there was no capital left in the business to continue once the lock downs were lifted. Mizansen Limited, a textile consultancy company, had just started business a few months prior to the pandemic beginning. During the interview, the owner explained that he has lost two to three years' worth of progress and is now at the start of the first year once again. Another participant was sadly made redundant; and after setting

The Impact of the COVID-19 Pandemic

The impacts of the COVID-19 pandemic on the UK FTT are summarised

up as a freelance sportswear designer, they had no financial support from the government due to being in the first year of business, which meant they fell outside of the remit for government help. They commented that this impact completely obliterated the business. Bav Tailor also spoke of how difficult it is for small businesses, and the trouble faced in retailers committing to a deposit, which would provide some financial security in these instances.

"The COVID-19 pandemic absolutely obliterated my business, just as it was just getting off the ground. There was no Government help available to me."

Freelance Sportswear Designer

Some companies suffered financially by trying to find ways to continue business throughout the lockdowns via novel methods. MAES London, for example, encouraged their employees to set up small manufacturing studios at home, and had to arrange couriers to transport materials and garments to and from individuals. However, within two to three weeks, they guickly realised the cost of doing so outweighed the profits.

Many larger well-established businesses also faced financial difficulties as a result of the pandemic, with Wood et al. [33], reporting that Next foresaw their profits in 2020 dive to only 10% of the previous year (£594m). followed by their full-price sales decreasing sharply by over 30% from March 15th to 17th, 2020, due to the impact of the COVID-19 pandemic. Additionally, due to the pandemic restrictions and the first lockdown Marks & Spencer suffered its first financial loss in 94 years, reporting a total loss of £87.6m before tax from March to September 2020, and consequently cutting over 7,000 jobs in August 2020 [34] [35]. Likewise, the interviews in this report conveyed similar situations. A West Yorkshire dye house saw the volume of work drop 90% overnight during the first lockdown. One of their main customers was serving aircraft seating fabrics, due to restrictions on travel, many airlines were no longer operating. This has had lasting impacts on the profits, with the business only just beginning to recover. Camira Fabrics spoke of the drastic drop in turnover, as the business virtually stopped during the first couple of months of the pandemic, and Culimeta-Saveguard, a textile manufacturer, saw a drop in capacity from 80% to 0% after the first two months of COVID-19. Similarly, a Saville Row fabric supplier had been heading towards their best year, but this was guickly diminished by the pandemic, setting them back three to four years in terms of budget. Lawford [36], reported in 2020, that the COVID-19 pandemic impacted the sales of luxury suiting, especially on Savile Row. A tailor who ran his business at home mentioned that during the lockdown he heard about different people he had previously worked with in the trade being made redundant from Savile Row every week. It is worth mentioning that over 60% of consumers on Savile Row were based overseas, and the sharp decrease in international trips and lockdown restrictions severely damaged their businesses. Maurice Sedwell, another bespoke tailor shop on Savile Row, which had a pre-pandemic level of 20 orders a month, only had two orders from March 2020 to October 2020.

"We were probably at 80% capacity pre-COVID. But then COVID happened, and demand after the first two months reduced to 0%."

Culimeta Saveguard

During the interview with Ananas Anam, they remarked on how their manufacturing facilities in the Philippines had completely shut down, causing their production to stop for over two months, impacting on their stock and sales. Pennine Weavers planned to invest money in new machinery in 2020 and built reserves to help the business grow. However, due to the pandemic, these reserves had to be used during the initial lock down periods to help support the business, including paying rates, rent, power, insurance and salaries, which left no or limited money to invest.

For those business that continued to operate, or reopened a few months later, the huge increase in freight coming in from overseas had substantial financial impacts. It was reported that freight costs had surged five times higher than pre-pandemic levels, adding extra pressure on brands to sustain adequate pricing for customers [37]. Pincroft Dyeing and Printing remarked on this, stating that a container price rose from \$3,000 up to \$18,000, with little or no negotiation in this price. Many other companies mentioned these significant increases during the interviews and the oncosts that this contributed to throughout the supply chain.

"During the pandemic our costs went up significantly. For example, if the normal cost of a container was \$3,000 pre-COVID, then post-COVID we were paying up to \$18,000, and the reliability was shocking."

Culimeta Saveguard

Companies also saw a demand in certain products decrease during the lockdown periods due to people staying at home. An independent handbag brand from Leeds, experienced this with their range and are still recovering from the effects now due to significant impacts on their profits. Similarly, Holition, a marketing agency had the initial worry that clients were unwilling to spend money on marketing materials and platforms during the pandemic, however, they are now starting to see companies beginning to show enthusiasm and willingness to reinvest once again.

4.2 Staffing

It is well known globally that the COVID-19 pandemic had a huge effect on the how companies managed their levels of staff, and the same applied to UK FTT businesses. According to the British Fashion Council, following the end of the first lockdown, in July 2020, the UK fashion industry was projected to suffer a loss of over 240,000 jobs within the subsequent 18 months, equating to approximately 27% of the fashion workforce [38]. The furlough scheme offered great support to businesses initially, however, over time when some companies were seeing less orders, due to other companies closing or the lack of high street sales as a result of the lockdowns, many businesses took the decision to make redundancies. Cath Kidson was one such example of a successful high street brand that continued to run an e-commerce platform and wholesale operations but without the physical stores. This caused over 60 UK stores to close and resulted in above 900 redundancies [39]. Similarly, in November 2020, Topshop, who registered huge losses due to the COVID-19 pandemic, entered into administration, causing the company to be put up for sale and putting over 13,000 jobs at risk [40]. In February 2021, it was announced that the online fashion retailer ASOS was the new owner of Topshop, as well as Topman, Miss Selfridge, and the activewear brand HIIT, in a £330m deal. However, being an online retailer, ASOS did not agree to buy any of Topshop's physical stores, which still left over 2,500 jobs at risk [41]. Manufacturing was an industry sector that the government encouraged to keep operating, particularly those businesses who were seen as producing key items such as hospital gowns or face masks for the NHS and care workers. The initial findings from the survey highlighted that one of the most popular changes in strategy resulting from the pandemic was changes or introductions of new product categories followed by the targeting of new customer segments. These findings are supported by the information obtained in the case study interviews whereby many businesses adapted their manufacturing capabilities to enable them to keep operating. However, the number of workers required to facilitate these adapted or necessary forms of manufacturing was often impacted, with numerous businesses making redundancies.



Boy Wonder Milk Sweater © Boy Wonder

A dye house in West Yorkshire is one such example who continued to operate on a much smaller scale during the pandemic, by dyeing surgical and hospital gowns for NHS staff. At this stage, staff remained at home under the furlough scheme, and only four employees returned to work to run the factory. However, with time, they made the decision to reduce the number of staff by 30-40%, as the number of orders being received was only at 70% of what they had pre-pandemic. Pincroft Dyeing and Printing found that the combination of both the pandemic and Brexit put pressure onto the business to restructure and reduce their labour force, by adopting different working practices, but still maintain an effective and flexible working plants. In total, they have reduced the number of employees by approximately 20%.

Culimeta-Saveguard, who have four business units globally with two in the UK, found that UK manufacturing industries that they serve very quickly closed their doors when the pandemic initially hit. However, they were determined to remain open and continue to operate, only closing or furloughing people when it was necessary. Despite being able to operate at a practical level, they did make redundancies, losing workers throughout the pandemic and Brexit due to reasons such as staff migration, better paid work, retirement and natural wastage. Fortunately, they were able to bring some of these people back into the business but were left with approximately £150,000 worth of redundancy pay-outs that were unnecessary.

"We have probably lost 30-40% of the staff that we had, and we're only doing about 70% of the business we had before the pandemic, but we're more efficient."

A dye house in West Yorkshire

"As a management team, we took the advice from Government that manufacturing per se should continue if it could. We took that philosophy for all of our business units."

Culimeta-Saveguard

Pennine Weavers, like most businesses both inside and outside the UK FFT ecosystem, implemented the help that the government were providing and also adopted the furlough scheme. Initially, the factory closed for the first 6 weeks during lockdown, with a smaller skilled team coming back into the business at a later date, while other workers remained at home on the furlough scheme. However, this initial period of the furlough scheme saw some businesses making decisions that were unlikely to have happened if businesses had been aware of the furlough extension and flexible furlough that was brought in thereafter. Pennine Weavers is one such example, who believed the level of business they had pre-COVID-19 was unlikely to return and therefore took the decision to restructure and reduce the number of weaving looms from 32 to 24, causing 18 redundancies during the initial furlough term. The managing director, Gary Eastwood, commented that they kept the most skilled workers, which meant they were effectively overstaffed in comparison to the period before the pandemic, as they used to run the factory with those workers that were essential. However, post-COVID-19, the efficiencies, output and quality have since improved, just by having slightly more workers.

Despite the governments recommendations to keep manufacturing going, some UK FTT businesses took the decision to close temporarily. Creative Apparel, a textile printing firm in Stockport took the decision to initially shut the factory down, restarting production a few weeks later, but due to the issues with safe working distances between personnel, it was problematic to operate effectively, forcing them to make redundancies. Lochcarron of Scotland had the unfortunate task of making redundancies of six new staff they had employed just two weeks prior to the lockdown. They also had to make redundancies at a smaller production site which they had to close during the pandemic but were fortunate enough to find a buyer who was able to keep the staff that remained.

Some companies were able to retain all their staff by adopting different ways of working, such as working from home (WFH). MAES London is one such example who have continued to embrace a WFH culture. They also brought people back onsite to work as soon as it was possible and adopted safe working practices. Melin Tregwynt in Wales were also able to retain all their staff, by making use of the furlough scheme, and continuing to operate with limited personnel until it was safer to bring others back. Since the pandemic they have increased their workforce, but have noticed a change in workers' attitudes, with staff being accustomed to a silo working mentality due to working at safe distances and WFH. They are trying to break these barriers and reinstate practices that were considered normal prior to the pandemic yet this can prove difficult to achieve. Likewise, Culimeta-Saveguard noticed a change in the attitude of workers towards manual work post lockdown, such as behavioural changes or poorer performance, which resulted in dismissals in some cases.

"We opened back up, but our hands were tied by regulation, for example with spacing. We couldn't produce as much as we used to, so that's when we started letting people go, because we just couldn't do it."

Creative Apparel

Other companies who made redundancies, such as a weaving mill in West Yorkshire, are now looking to recruit back twice as many workers as those who left, due to growth within the business. However, there is now a limited pool of skilled workers within the UK FTT sector as many returned to their native countries for a range of reasons, such as; Brexit and difficulties in VISA requirements; the COVID-19 pandemic forcing people to return home and be with family; redundancies; or finding a better paid job in a different industry sector. A well-established Saville Row fabric supplier also spoke about the difficulties that mills are facing in attracting workers back since the pandemic, which is having significant effects on production, since they are running under capacity. They also spoke of the bottlenecks this creates within the industry since there is a lack of skilled talent now available, and therefore it has become vastly more expensive to hire workers, as there are fewer options. "We didn't lay anybody off, and in fact since then, I think we've taken quite a few more people on. We also took advantage of the furlough scheme."

Melin Tregwynt

4.3 Positives

Despite the negative impacts experienced by many UK FTT business, there has been some positive effects, such as an increase in sales through online platforms and forward ordering from customers, which has brought a sense of security. Anbo Textiles saw an increase in their fabric sales online due to the sparked interest in people crafting at home, and a dye house in West Yorkshire also gained business from people taking up new crafting hobbies and started dying knitting yarns for hand knitting. The Production Lab tripled their turnover due to their online sales and found there was more support in the marketplace for sustainable and ethical brands. English Fine Cotton, one of the business units of Culimeta-Saveguard, saw a distinct increase in the demand for UK brands and manufacturing as a result of the pandemic. A small woollen bag business, based in Edinburgh, set up an online shop which was very successful during the pandemic, selling worldwide to countries such as Australia and the USA. Elvis and Kresse also saw their sales increase throughout the pandemic, which they believe was attributed to people being at home, with more disposable income. Melin Tregwynt believed their business survived the pandemic due to their ability to sell direct to consumers online. A fabric trader in West Yorkshire saw a niche side of their business increase, which related to outdoor fabrics, as the impacts of the pandemic forced people to be socialising outside more, and therefore, outside furniture became increasingly popular. Although this was short lived, it was a huge lifeline for this particular business.

"We actually did really well during the **COVID-19** pandemic. We tripled our turnover because most of our brands are online."

The Production Lab

Pennine Weavers have also benefited from clients beginning to forward order. This has been a result of companies becoming used to longer lead times as a result of the COVID-19 pandemic, where there has been no alternative but to accept this as the new normal. Previously, some customers would place an order that they needed within 10 weeks, which was unrealistic in certain cases. Now they are happy to place orders up to 9 months ahead. This gives Pennine Weavers a sense of confidence and security in their order books that they previously didn't have prior to the pandemic.



Open House © Anbo textiles

Business Diversification 4.4

One of the key themes emerging from the interviews with businesses in the UK FTT sector, was the adaptation of new business models or an openness to diversification as a result of the pandemic. This was a time that provided many companies with the opportunity to reflect on current practices and businesses strategy, with several making changes that have benefited them since. Similarly, the initial responses from the survey highlighted that the most popular change in strategy resulting from the pandemic was changes or introductions of new product categories, followed by the targeting of new customer segments. One example of a business who introduced a new category into their range was the brand Gymshark [42]. In 2020, Booker [41] conducted research using Attest, a consumer research survey tool, to determine how they could respond to the COVID-19 pandemic. The survey found that 60% of people intended to spend more on fitness clothing, and over 32% of people agreed that they choose to wear fitness clothing for most occasions. In addition, the study showed that mental health was the top priority for individuals, even over fitness. In this case, in June 2020, Gymshark launched a mental health platform called Deload to support people's well-being and they plan to continue investing in market intelligence to develop a long-term strategy for their business. Similarly, William Skinner, the managing director and tailor of Dege and Skinner, stated that they are now producing a wider variety of garments, including blazers, sport coats, and casual clothing, in addition to their traditional suits in order to keep

their business running [43]. Cad & The Dandy, another Saville Row tailor, invested in a coffee shop on Savile Row to attract consumers and increase footfall for other bespoke shops [44].

The interviews conducted in this research also shared interesting insights into businesses making changes within the day to day running of the business as well as innovations in products and the creation of new companies. The Production Lab, MAES London, Bav Tailor and a dye house in West Yorkshire all took the opportunity to make changes to the operations of their businesses which can be attributed to the COVID-19 pandemic. A dye house in West Yorkshire feel they have overhauled the company since the pandemic and explained how it was a period that offered them the chance to take a step back and look at the business from scratch. It has given them a better



Patriot Modern © Lochcarron

balance of customers, since they had to attract new customers from other industry sectors; previously 90% of the business was with a single customer. They also quickly learnt that having a night shift was consuming a large amount of resource for little return and therefore decided to remove the night shift entirely, placing them in a more competitive position than prepandemic. An independent bag manufacturer realised throughout the pandemic that it was possible to run the business from Leeds instead of London, and took this opportunity to implement this change, creating relationships with new stockists and embracing the concept of fashion brands outside of the capital.

A West Yorkshire weaving mill, who recently employed a new production manager, was able to look at the business with a fresh pair of eyes and implemented 'just in time' production to help reduce lead times to customers. Previously, they were building stock and not producing against orders, which was causing loss in efficiencies and longer delays to customers. Likewise, Pincroft Dyeing and Printing spoke of the same situation, stating that prior to the pandemic they and other businesses would have held a considerable amount of stock, but as businesses became more cash constricted they had to start reducing stock and consider 'just in time' processes. Pincroft Dyeing and Printing believe that the times of stress endured throughout this period allowed them to learn techniques to help manage areas within the business more effectively. Similarly, businesses also took this opportunity to learn new skills and create new capacities, such as a small Scottish handbag manufacturer who took the time during the pandemic to learn to plant dye fibres, setting a up a small outdoor studio with the aim of dyeing their own wools in the future. And businesses such as Holition, a marketing agency in London, reaffirmed their way of thinking during the pandemic, reminding themselves of the importance of being agile. This led them to create a series of narratives, which fitted with how the world was feeling during this unpredictable time, leading to new and exciting projects. One business, Wagland Textiles, decided that after the pandemic they were only going to continue to work with selected clients, and to strive to form better working relationships with those businesses, believing that life is too short to work with people who cause you difficulties.

Some companies, such as Pennine Weavers, have also seen benefits in their efficiencies following on from the pandemic. This was due to a slight increase in their labour force which contributed to improvements in the speed of operations as well as quality of the finished product. They also adopted a new pattern of work during the pandemic, running on four days a week, while maintaining 96 hours over two shifts. Gary Eastwood, the managing director, commented on how he finds this approach to work well for the team, even though they are not as profitable as they once were, due to lower levels of turnover following on from pandemic, but he nonetheless feels comfortable with the business performance.

"Due to COVID-19, offline events and speeches largely went online, and we were able to reach more people across the world with less travel cost and time."

Elvis and Kresse

MAES London remarked that before the pandemic they had been questioning the direction, vision and ethos of the business. They now feel that the pandemic forced them to slow down and understand the business better. They realised that WFH was feasible, even in a manufacturing setting. The director of the company wanted to support this way of working by employing people who had little choice but to be at home, due to care duties or childcare, and started to work with self-employment agencies to recruit staff in this category. By doing so, the company have increased their capacity within the business, which has increased opportunities. Similarly, Elvis and Kresse found that working at home, or in a remote setting, benefited the business financially; and that by having online events and speeches effectively removed the cost of travel and time. Bav Tailor also utilised online platforms and remote ways of working during the pandemic by setting up a consultancy strand to the business, offering guidance to new brands.

As mentioned previously, the severe delays and significantly higher rates in freight arriving from overseas was a significant issue for many UK FTT businesses. However, a weaving mill in West Yorkshire have used this period of the COVID-19 pandemic to expand their sourcing of raw materials to other countries, which has minimised the risk within the business. They also secured competitive freight rates from certain countries, such as Mauritius, by using air freight instead of sea freight. Likewise, it was also reported in the news that in 2020, many materials were held up in China due to the COVID-19 pandemic. This led to one luxury womenswear brand from Derbyshire, David Nieper, who after waiting for over three months for fabric to be delivered from Shanghai, to pay extra air transport fees to expedite the delivery process. This disruption prompted the brand to look for suppliers and labour inside the UK, which has not only saved them time, energy, and costs but also improved their supply chain efficiency and transparency [45]. Similarly, Ananas Anam commented during their interview that the pandemic taught them to diversify and think differently. They too began sourcing fibre from other parts of the world, such as Europe and Latin America, which has helped to reduce the uncertainty of raw materials arriving on time. Secondly, they had planned to start up-scaling the business, but the pandemic put a stop to this, giving further time to consider the best approach for growth in the future. Likewise, Bav Tailor remarked on the ways in which the pandemic taught them to be flexible to change, believing that this mindset saved the business as they were able to accommodate their suppliers and saw no cancellations of orders, in comparison to other companies who were experiencing issues during this time. They also adapted their website to a more holistic viewpoint by diversifying the message and way of communicating with customers.

"In terms of new products, we launched Camira stay safe, our antiviral treatment."

Camira Fabrics

As well as adapting and changing business practices and ways of operating, companies such as Camira Fabrics were able to create new and innovative fabrics due to the increased interest in antiviral and antimicrobial treatments and launched a new range of antiviral materials. Similarly, a dye house in West Yorkshire took on new business that saw them dyeing surgical gowns for hospital staff. There was also an opportunity for smaller freelance businesses to diversify and make protective face masks which they could sell online through Etsy all over the world. Prickly Thistle, a weaving

manufacturer in Scotland, also took the decision to start producing safety masks during the pandemic. They created a face mask which was available throughout the UK on a subscription service, which the consumer could send back for recycling, once used.

"The one thing, uncomfortable or not, that COVID-19 allowed you to do was to take a step back from your business and look at it from scratch. As a result, we totally changed what we do. COVID-19 provided an opportunity to almost start the business again."

A dye house in West Yorkshire

Donald Browne spoke about how the COVID-19 pandemic sparked the idea to create the company The Coded. Old partners within the supply chain contacted Browne to see if there was a way of helping factories throughout the pandemic, and together with an industry contact, they came up with the idea of The Coded. This business uses left over fabrics or trims to make garments and gives a unique code that relates to every part of the supply chain, enabling the consumer to resonate on a personal level with that piece of clothing and the people who have made it. Likewise, an independent handbag brand from Leeds was able to make collections of bags during the pandemic from the surplus rolls of leather that larger brands had left over. This worked particularly well for them, as the collections are much smaller and the tanneries were closed throughout the lockdown period, making their usual supply of material less accessible.

4.5 Digitalisation – Ecommerce and Online Communication

Increased digitalisation resulting from the COVID-19 pandemic was an emerging theme discussed during the interviews with UK FTT businesses. The expansion of an online presence or ecommerce was a key finding, as well as the adaptation of working in a more virtual basis. The initial survey responses also indicated that the pandemic was an instigator for an increased focus on, and investment in, online channels to promote services online, improve web presence and increase digital technologies. A previous report by The Industry.Fashion commented on the benefits and shift in consumer behaviour that the brand Gymshark experienced during the lockdowns. Specifically, there was a stronger attraction to online shopping, and an increase in trends towards wellness and casual attire. As a result, Gymshark's yearly profits after tax increased from £24.4 million in 2020 to £48.9 million in 2021 [46]. During the COVID-19 pandemic, Gymshark gained significant attention on social media. Ben Francis, the founder and CEO of Gymshark,

noted that their brand was one of the first to invest in social media and sponsor influencers to advertise their fitness clothing [47]. Likewise, Next, whose sales prior to the pandemic generated more than half of those through online channels, helped to contribute to the company's resilience during the crisis [48]. Their online sales in February and March 2021 surged by over 60% compared to the same months in 2019, surpassing those of competitors ASOS and Boohoo. Despite the closure of most of Next's physical stores in early 2021, the significant increase in online sales enabled the company to achieve pre-pandemic levels of profitability. Specifically, Next reported a profit before tax of £823 million in January 2022, representing a recovery from the £749 million profit before tax recorded in January 2020 [49].

"We moved our entire operation online for those first 12 weeks of lockdown, and then we carried on pushing online during the first 12 months."

Melin Tregwynt

"To reach our customers during the pandemic we quickly started to photograph collections and put together a digital brochure."

Lochcarron of Scotland

During the interview with Bav Tailor, they spoke of how the pandemic created an opportunity to redesign their website to become a more integrated e-commerce platform. They also expanded the brand to include links to consultancy services and to information on holistic practice in addition to the product offering on their website. Likewise, Melin Tregwynt, moved their entire operation to an online ecommerce platform during the first 12 weeks of lockdown, which has continued to be utilised effectively post pandemic, and are considering the use of interactive imagery for the future. Lochcarron in Scotland also had to consider how they could allow customers to see their collections during the lockdowns and developed a digital brochure that was well received, allowing customers to initially visualise a fabric, before asking for physical samples to be sent.

Bav Tailor spoke of how the pandemic gave them the opportunity to launch a virtual consultancy business which enabled the business to remain operational during the lockdowns. Cad & The Dandy, a bespoke shop on Savile Row, quickly adapted to the COVID-19 restrictions in April 2020 by directly contacting their existing customers and asking them to provide their measurements by email and involving them in the virtual fittings. This was a successful way of maintaining contact with their customers and supporting their business. Moreover, instead of making their staff redundant, they tasked them with making ready-to-wear garments by hand, when orders for bespoke had reduced [44]. Likewise, Camira Fabrics spoke of a fast transition to digital platforms during the pandemic, utilising online communication platforms such as Teams and Zoom to allow personnel to work from home. Learn to Recreate, an educational provider in the UK FTT sector, remarked how the pandemic has taught us all how to adapt to a different way of working very guickly. Perhaps this would have been the form of working we would eventually adopt too, but the pandemic has accelerated this change. The Sustainable Seguin Company also spoke of how they are rarely expected to travel for a meeting since the pandemic, as the online platforms are saving both expenditure on travel, as well as valuable time. The Materialist have also been working with people remotely for two years with few issues and are amazed at how fast and seamless this transition has been. Ananas Anam also use online meeting platforms for the majority of their daily work. They believe that while it is necessary to initially meet with people in person, they can continue this working relationship virtually. Similarly, a West Yorkshire dye house explained that while online meetings are effective in certain instances, it can be difficult to confirm if the customer is happy with the colour of a sample in a digital space and will always send physical samples. They consider face to face meetings help to form true working relationships and in some cases the need for discussing physical samples in this setting is still essential. Likewise, Ashleigh Jay, an embroidery designer, explained how she still prefers to see physical samples as it's important to understand the tactile qualities of the fabric which is not possible online.

"During the pandemic, everything suddenly became more digital, and very, very quickly. We never used to talk like this."

Camira Fabrics

"We've all learned a new way of working and we've mastered it well... COVID-19 taught us how to master it very quickly."

Lear to Recreate



TSSC and FFF bio sequin development © The Sustainable Sequin Company

→ The Sustainable Sequin Company Interview with Rachel Clowes, Founder

The Sustainable Sequin Company was founded in 2018 by Rachel Clowes. She makes recycled sequins in the South of England and sells these online to high-end designers and crafters.

How did the COVID-19 pandemic impact your business? Rachel: It had more of an impact, compared to Brexit, because I closed for about three months. I've got children and they couldn't go to school. We were homeschooling. So obviously, there was a time where I couldn't even produce work at all. The online revenue April to July 2020 fell by 84% and orders fell by 40% compared to the same period the previous year. I've got fewer orders, but also people spending less. I mean, I make sequins, so no one was going anywhere. I literally sat at home, none of the brands were making any party wear and nobody wanted anything.

Have there been any positive impacts on your business as a result of the pandemic?

Rachel: Yes, during COVID, we managed to apply for and get an Innovate UK Sustainable Innovation Fund and that was particularly focused on COVID recovery. So this was something positive that came from COVID for me. I then got some funding and I got to work with University of Leeds. So all the funding went to the researchers there and they looked at different feedstocks and we managed to kind of identify particular feedstocks and what was needed to make to make a biodegradable sequin. After that ended, we then applied for FFF [Future Fashion Factory] and got funding. The money goes to the university, to a postdoctoral research assistant at the University of Leeds and at the Royal College of Art, to commercialise the sequin. Not just the feedstocks, but working out the actual engineering of the film, how we're going to make it so the sequin doesn't dissolve.

Is there anything that you feel has changed in the last few years in terms of digitalisation as a result of the pandemic? Rachel: Most people don't ask me to go into London to meet them in person particularly. I mean, occasionally they do, but mostly they will ask: Can we meet on Teams, can we meet on Zoom? Obviously I still need to send samples and sometimes I go and see people because it's more about touching things. And colours are really important and that's really hard even when you're sending things through, you're never going to get the right colour or the right finish, when light hits something. So there's some things like that, that I can't exactly show on screen but in terms of speaking to people, like it's very rare that somebody will ask me to go and actually meet them in person.

Do you view that as a positive or negative change? Rachel: I mean, I think it's a positive because it saves time for everybody. It saves travel. And yeah, I think everyone's just got used to it now and it's absolutely fine.

4.6 Key Findings

The below table depicts the key impacts, consequences, challenges and opportunities with suggested policy recommendations in relation to the COVID-19 pandemic:

Impacts

- Significantly reduced business capacity or resulted in closure during lockdowns
- Clients remain cautious
- Reduced demand

Consequences

- Financial losses
- Redundancies
- Insolvency
- Time to pause and reflect

Opportunities

- COVID-19-related temporary diversification (e.g. scrubs, face masks, anti-viral textiles; use of deadstock fabric)
- Increase in sales for some sectors (e.g. crafts, digital)
- Increased flexible working (e.g. remote/hybrid working) and reduction in carbon footprint
- Increased resilience (e.g. diversification in sourcing/products)
- Global solidarity & distraction from Brexit
- Greater focus on sustainability (consumer demand)

Challenges

- Difficult to (re)recruit (combination of COVID-19 & Brexit) •
- Reduced capital/cash flow ٠
- Slow recovery (current issues: War in Ukraine, cost of living crisis, energy crisis)

4.7 Policy Recommendations

during challenging times.

- a new generation of skilled workers.
- and competitiveness.

 Enhanced financial security for retailers: The government should explore measures to provide financial security for retailers, such as encouraging retailers to commit to deposits or implementing insurance schemes that protect against unforeseen events, including pandemics. This can help businesses in the FTT sector maintain stability and continue operations

Mitigating increased freight costs: The government should work with industry stakeholders to address the issue of surging freight costs. This can involve negotiating with shipping companies to ensure fair pricing, exploring alternative transportation methods, or providing financial incentives to mitigate the financial burden on businesses in the FTT sector.

 Support for product diversification and adaptation: The government should offer support programs and resources to assist businesses in the FTT sector in diversifying their product offerings and adapting to changing market demands. This can include access to market research, innovation grants, or business advisory services to help businesses identify new opportunities and pivot their operations effectively.

Training and upskilling programs: The government should invest in training and upskilling programs to address the shortage of skilled workers in the UK FTT sector. This can involve partnering with industry associations and educational institutions to develop targeted programs that equip workers with the necessary skills and knowledge needed in the industry. Encouraging apprenticeships and vocational training can also help attract and develop

Support for flexible working arrangements: The government should provide guidance and support for businesses in implementing flexible working arrangements, including work-from-home policies and safe working practices. This can help businesses adapt to changing circumstances, such as the need for social distancing, and enable them to retain their workforce while ensuring employee safety.

· Invest in market intelligence and research: The government should invest in market intelligence and research tools to provide businesses with valuable insights and data. This information can help businesses make informed decisions about their strategies, identify new opportunities, and understand customer preferences and trends. Supporting businesses with access to market intelligence can contribute to their long-term success

Foster innovation and sustainability: The government should promote innovation and sustainability within the FTT sector. This can be achieved through funding research and development initiatives focused on developing sustainable materials, technologies, and manufacturing processes. Additionally, supporting initiatives that encourage upcycling, recycling, and circular economy practices can help businesses reduce waste and environmental impact while creating new business opportunities.

The Climate Emergency

points below.

Environmentally Conscious - Businesses within the UK FTT sector were shown to be very aware of the global impacts that the fashion and textile industry have on the climate and the environment. The COVID-19 pandemic offered companies a time to reflect on this in greater detail with many considering strategies that can contribute to more ethical and responsible practices, including more transparency within the supply chain. Likewise, it is believed that consumers are more mindful of their choices and interested in the stories behind brands.

Reduction in Carbon Footprint - UK FTT businesses appear committed to achieving the UK net zero target by 2030 with many businesses already implementing clear targets within their strategies to achieve this. Where possible, businesses are either sourcing local materials or considering how they can incorporate local supply into their collections to help reduce their carbon emissions. The use of renewable energy and improvements to older energy systems within businesses was also a key finding.

Use of Sustainable Materials - There is a clear drive for businesses to consider the origin and manufacturing methods in the materials they are using, stimulated by the consumer and the conscientious brand. Many businesses are using recycled synthetic materials where possible and others are looking at ways in which they can include natural materials. However, the use of more 'eco-friendly' materials is currently more costly and therefore can impact the choice of materials used in collections.

5.1 General Opinions on the Environment and Climate Change

During the interviews with companies in the UK FTT sector, it was clear that businesses and individuals are mindful of the negative impacts the fashion and textile industry are having on the environment. Likewise, the initial responses from the survey highlighted that 86.9% of businesses agreed that climate change was either extremely important, very important or moderately important in shaping the strategic priorities within the company.

During the interviews, Wagland Textiles stated how the fashion and textile industry has always been one of the most polluting industries in the world, due to the amount of water used to grow certain fibres and the chemicals used in dyeing. They remarked how on their visits to China for business they saw rice paddies in some areas which were polluted with the colours being used to dye fabrics for clothing. Ananas Anam and Elvis and Kresse both remarked on the state of the weather conditions seen throughout the world, such as droughts, high heat waves, and brown grasslands that would normally appear green. Elvis and Kresse commented on how we are experiencing climate change first-hand and how it will kill all businesses, not just those in the creative sectors. Ananas Anam stated that this is not just something heard about in the news anymore, the physical effects are real and apparent for many. Likewise, Wagland Textiles spoke about the distinct changes seen in seasons within the UK, noting that 10 years ago

The impacts of climate change on the UK FTT are summarised in the key

the seasons were more defined, however, now there is little transition between them. They also remarked how this change in weather makes it increasingly difficult to plan collections for seasons.

A luxury handbag designer spoke about how we must all play a collective and active role in combating climate change, and that businesses in the UK FTT sector should lead by example, demonstrating to customers how they are making necessary changes. Similarly, Prickly Thistle in Scotland discussed how they are not interested in being the biggest mill in the world, but how they want to make the biggest difference for the world by helping to support projects that can tackle environmental and ethical issues. Learn to Recreate discussed how they have always integrated environmental issues into their educational programmes, such as circular economy brand planning, as well as how they run the business itself, and this is something they endeavour to emphasise more in the future. Likewise, MAES London discussed how they are always questioning their individual choices within the business, not just at boardroom level, but in everyday discussions, such as how they can reduce their plastic waste, or increase reuse within their operations. Companies are also conscious about the delivery systems in place for delivering clothing items, not only to businesses, but to consumers as well. Bay Tailor remarked how there needs to be a change in the system to help reduce the amount of carbon emissions that are contributing to greenhouse gases and that there must be a shared responsibility to enable this to happen.

"This year we had the worst drought and highest heat the Southeast has ever seen. We are experiencing climate change first hand."

Elvis and Kresse

The COVID-19 pandemic has been a period where many have had the time to reflect upon decisions that may directly impact our planet, while becoming more mindful of the choices we can make to combat climate change. Donald Browne, from The Coded, remarked on the way his previous role at Ted Baker has taught him that the most important thing for businesses is to focus on our people and the planet, which are the very foundations that formed the company The Coded. Camira Fabrics believe that the pandemic has made people prioritise the environment, our climate and wellbeing, with many questioning throughout this period the amount of chemicals being used to combat the COVID-19 virus. Similarly, the Production Lab believe the pandemic has made consumers question which brands they buy from, as they become increasingly aware of the impacts that fast fashion is having on the environment, and therefore want to support smaller local brands, as well as buying fewer, higher quality

products. Likewise, Ananas Anam discussed the current energy crisis as an opportunity for businesses to question their source of energy, with a view to looking at more renewable sources.

"Save the planet, that's what I would focus on. Save people and the planet."

The Coded

"I think the reason why these big brands are fading is because fast fashion has got such a bad reputation now. People understand how bad fast fashion is for the environment and for the workers."

The Production Lab

5.2 Carbon Footprint

In 2021 the UK government published the Net Zero strategy, a plan to reach net zero greenhouse gas emissions by 2050. The plan encourages UK businesses to look at ways in which they can contribute to this target. The initial indications from the survey revealed that the importance of climate change on shaping strategic decisions was significant. This importance was highly evident in the case study interviews, which confirmed the awareness that businesses have on their impacts to the environment, as well as the necessary measures needed to achieve net zero or reduce their carbon footprint. The Project Earth Report by Selfridges [50] details improvements aimed at reducing the carbon footprint of their energy and operational practices, as well as their packaging and logistics processes. For example, they replaced conventional lighting systems with LED alternatives and installed optimised timers and motion sensors at all destinations to monitor and reduce energy usage. Additionally, they adopted the use of 100% plastic-free carrier bags and encouraged stores to reduce their packaging to further decrease their carbon footprint. These improvements align with Selfridges' sustainability goals and are a testament to the company's efforts to promote environmentally responsible practices in the retail industry. Likewise, outdoor brand Craghoppers has made a concerted effort to curb global warming by reducing packaging weight by half and enhancing container efficiency. As of 2021, the company has pledged to ensure that its products are entirely free of palm oil and animal products, in line with its commitment to sustainability [51]. The brand's efforts were recently recognised, winning a Drapers Sustainable Fashion Award in 2022 [52].

Camira Fabrics are looking at ways they can implement changes within the business to reduce their carbon footprint and achieve net zero. In the interviews, they discussed plans for investigations to enable the realistic setting of sustainability goals, potentially to achieve net zero before 2050. They are currently reporting their carbon figures on a yearly basis, as part of UK regulations and which is providing valuable information. Five of their factories are within the UK: four of those are in West Yorkshire (including a wool spinning plant, dying plant, and weaving mill) and they have a knitting factory in Nottingham which helps minimise their carbon footprint. Similarly, Boy Wonder, who will unfortunately close the company this year, prioritised the locality of their supply chain, with everything being made within a 20-mile radius of their design studio. MAES London also believe that they are contributing to a lower carbon footprint by helping British brands create garments within the UK rather than producing overseas. They, as well as a well-known Saville Row fabric supplier, consciously aim to consolidate items in one shipment where possible to keep the carbon emissions low.

"There's UK legislation where we have to report our carbon footprints on an annual basis, that gets reported within our annual company accounts and it gets audited."

Camira Fabrics

"We're local manufacturers, that is already reducing the carbon footprint of the sample, or the production travelling back and forth."

MAES London

It is not always possible to produce and source everything inside of the UK at present, but where companies are able to, they are often focused on keeping the supply of the materials and components as close to the factory as possible. One independent leather handbag brand, based in Leeds, carry out all their production and sourcing within Italy. Other brands such as the Sustainable Sequin Company commented during the interview that they currently source materials from China and are aware of the contribution to greenhouse gases and the carbon footprint that this may incur. However, at present they believe producing sequins within the UK would be more

costly, and raw materials more difficult to source. Additionally, they are also questioning the logic of producing in the UK if they are exporting their products globally. Similarly, The Production Lab would like to carry out more of their manufacturing within the UK, but at present believe the cost of doing this is higher than overseas. They also envisage that the lack of skilled labour available, as a result of Brexit and the COVID-10 pandemic, could be a challenge for UK production in the future.



Design process © Lochcarron

A weaving mill in West Yorkshire is thinking strategically about the impacts of their carbon footprint by considering the reduction of raw material suppliers outside of the EU. They hope to eventually use suppliers directly from the UK, although this is often more difficult, due to the types of wool available. However, Lochcarron of Scotland now source 100% of the wool for their British Wool Strome Kilts from Scotland, utilising a mixture of native Cheviot and Romney Marsh wool from Scottish farms. A luxury handbag designer is exploring ways they can achieve net zero target by 2035, by using British leather in their collections, working with British tailoring suppliers, and speaking with their overseas suppliers to find ways to reduce their carbon emissions. They are also keen to learn how they can slow the shipments of items and disrupt the traditional fashion calendar, which they believe will contribute to the reduction in carbon emissions.

Investment in technology for the improvement of energy efficiencies is also a concept that multiple interviewees mentioned. Melin Tregwynt in Wales, for instance, are considering solar energy to power parts of the business and introducing electronic car charging ports. Likewise, Pincroft Dyeing and Printing are constantly looking at ways they can be more energy efficient, and believe the crisis with the war in Ukraine, which is causing energy bills to rise, has accelerated the need to make improvements and contribute to the climate change levy. Similarly, a West Yorkshire weaving mill are investing in the dyeing strand of their business to improve their energy efficiency by using steam generators; and Lochcarron of Scotland are investing in a new boiler that has a smaller capacity and which is more energy efficient.

"We were able to locate Romney Marsh sheep farmed in Scotland which means that 100% of the fleece from the native Cheviot and the Romney Marsh is Scottish sourced wool. We are delighted to have made it to this point."

Lochcarron of Scotland

5.3 Sustainable Materials

There is a clear change in attitude since the COVID-19 pandemic and Brexit for companies to consider materials that are more 'eco-friendly'. Many of the case study interviews discussed the types of raw materials they are using and how in some cases their customers are demanding more transparency in the supply chain. Most of the companies interviewed were very conscious of the type of materials they were using or looking at new and innovative materials with better environmental credentials. In August 2020, it was reported that Selfridges unveiled Project Earth, a sustainability programme aimed at promoting sustainable sourcing practices and reimagining the future of fashion retail [53]. The project has prioritised diversity efforts in fashion sustainability, with several initiatives implemented since 2020. In 2021, the company achieved significant milestones by selling 17,771 preloved items, renting 2,163 items, facilitating 8,574 refills, and completing 28,493 repairs [50].

"One thing that we've done more recently is to develop fabrics from a recycled brand of ocean plastic, called Seaqual, and that has captured the markets imagination."

Camira Fabrics

In the interview with The Production Lab, they explained that customers would have previously been satisfied with using synthetic fabrics but are now asking for a more sustainable alternatives and asking in-depth questions on the manufacturing processes and the water usage. The Sustainable Sequin company also believes in a high level of transparency within their business and explained how they were once using sequins with a certified 100% recycled content. However, recently they are only able to source sequins with a 20% recycled content, and although they still have stock of the 100% recycled sequins, they are no longer certified for this and reflect this change in their communications by detailing 20% recycled content.



Seaqual Collection © Camira

Camira Fabrics are known for their eco-friendly vision and have recently developed a new collection of fabrics, "Seaqual", made from a recycled ocean plastic, one of many recycled materials they produce. Bav Tailor are very interested in using and showcasing innovative sustainable materials. however, in their experience, when they have approached companies selling these materials, the minimum order quantities are too high for smaller production runs, making it too costly to use. There are, however, mixed opinions in the industry about the use of the terms 'recycled materials or 'eco-friendly', with participants questioning the true meaning of these words or phrases. Donald Browne from The Coded commented on this topic in the interview, saying "We have with anything the name recycled on it. What does that really mean? It may mean that we're purchasing a fabric that was originally something else and is now this fabric, fantastic. But what's the next step? Is that recyclable?". Similarly, Andy Ogden from Culimeta-Saveguard believes that there may also be the concept of greenwashing occurring on the high street, with sustainability used as a marketing ploy. Browne also remarked that they are now considering using natural materials that already exist and how it may be possible to create new materials using biology and chemistry.

Ananas Anam are helping brands to achieve net zero by providing materials made from pineapple leaf fibres which have lower impacts on the environment compared to conventional materials. The company have noticed that other businesses are shifting to a more sustainable outlook, however, often brands are less willing to pay the higher prices associated with a material that has better environmental credentials. Ananas Amam believe people's mindset needs to change, as there are specific and justifiable reasons why a more sustainable material can cost more, such as the time taken to process such materials and the intricate manufacturing processes.

"The more innovative the material, the higher the minimum order or quantity... Why produce this innovative material, that can be a solution to the climate crisis, but then request a minimum order which is so ridiculous that it is not going to solve the climate crisis because you're left with excess waste material."

Bav Tailor

5.4 Other Environmental Factors

During the interviews, other topics relating to the environment and sustainable development included: social responsibility, sustainable education, transparency within the supply chain and reduction in waste. These topics will be covered in a future report that will delve deeper into the actions companies within the UK FTT sector are taking to help combat climate change.



Ananas Anam fibre extraction © Jacob Meantz

The Climate Emergency



→ The Coded Interview with Donald Browne, Founder

The Coded is an online platform offering fashion products directly from the manufacturer. The London-based company was founded in 2020 by Donald Browne, a former Production Director at Ted Baker.

How did you spark the idea of The Coded? Donald: A few of my old partners in the supply chain contacted me and asked me if I could do anything to help the factories through COVID. Together with somebody that became a friend, who was part of my supply chain, I started talking to them about what could we do. They came up with the idea that a lot of factories have leftover fabrics and trims, and perhaps if they could create their own styles, make their own designs, we could launch a website to sell directly from the factory to the consumer. I said, yeah, I like that idea, but what I like better than that is to actually tell the story of the factory, to give the factory a personality and to actually show the public, these are the people that make the clothes that you wear. Here's an example of a good factory that care that about the people that work for them, care about the environment, care about the local community and care about you, because they make the most beautiful product.

Where did the name 'The Coded' come from?

Donald: Well, factories loved the idea and started saying yes, we'll do it. We'll sign up with you. Some of them didn't want to create their own products, which is fine. They didn't have to. The ones that did, were saying: we're happy to create the products, but we're a bit worried about you using our name, when we're already selling to UK brands, we don't want them to think there's a conflict. So, we thought, oh, OK, what about if we gave you a code instead of a name, so it's simple then: if anyone wants to know who you are, they contact us. And that's what we did. We gave all the factories a code number, and we called our business 'The Coded'.

This is a really nice innovative concept; how do you see this developing in the future?

Donald: We've got a project with Central St. Martins and it's in the form of a competition, on how to create a new product from nothing. How to Initiate your design, by creating something only using waste, fabrics trims, swatches, garments. It's about designing something in a different way, you can't do it in the traditional way, this has got to be something that is already there that you can use to make the design that you're creating, and it has to have an element of print in it as well.

5.5 Key Findings

The below table depicts the key impacts, consequences, challenges and opportunities with suggested policy recommendations in relation to Climate Change:

Impacts

- Changes in climate globally, greater variation, increase in extreme weather, unpredictable climate and natural disasters
- Increased interest in sustainability since COVID-19

Consequences

- Anticipated to have negative impact on business •
- Impacts on sales of seasonal items
- Increase in energy cost (currently) •
- Heightened awareness of climate crisis
- Increased interest in sustainable approaches (consumers and businesses)
- UK 2050 net zero target •

Opportunities

- Shift to renewable resources
- Prepare for consequences of climate change •
- Cooperation between brands, scientists and experts •
- Innovation opportunities •
- Variety of approaches to sustainability (advanced thinking, more diverse)
- Consumer engagement strategies for product longevity (dovetails with loyalty)
- Carbon footprint reduction and cost savings (e.g. reduced energy use, less travel due to digitalisation, import costs, waste reduction)
- Increased resilience (e.g. local/shorter supply chain)
- Consumer demand

Challenges

- Investment is a barrier
- Lack of government subsidies, investment and incentives •
- Increased product cost
- Decrease in demand decreases profit margins •
- Sustainability as marketing strategy rather than meaningful change
- Lack of demand/interest, not a priority
- Limited (perceived) opportunities for improvement in some sectors ٠
- Skills shortage/capacity in UK manufacturing (for local production, carbon savings)

5.6 Policy Recommendations

- sustainability.
- zero targets.
- truly sustainable materials.
- material production.

Establish carbon reduction targets: Set clear and ambitious carbon reduction targets for businesses across sectors, aligned with the national goal of reaching net zero greenhouse gas emissions by 2050. Provide guidance and support to help businesses measure, report, and reduce their carbon footprints, encouraging them to take concrete actions towards

Support technology adoption for energy efficiency: Provide financial incentives, grants, or tax benefits to businesses that invest in energy efficient technologies and infrastructure. Encourage the adoption of renewable energy sources, such as solar power, and the implementation of energy-saving measures throughout production processes to reduce greenhouse gas emissions and improve energy efficiency.

Foster collaboration and knowledge sharing: Facilitate industry-wide collaboration and knowledge sharing platforms to promote best practices in sustainability. Encourage businesses to share their experiences, successes, and challenges in implementing sustainable initiatives, creating a supportive network that fosters innovation and collective action toward achieving net

Establish clear definitions and standards for sustainable materials: Develop industry-wide definitions and standards for terms like "recycled materials" or "eco-friendly" to ensure consistency and transparency. This will help consumers make informed choices and prevent greenwashing. Standardisation can also encourage innovation and the development of

Support research and development for sustainable materials: Allocate funding and resources for research and development initiatives focused on creating new sustainable materials with improved environmental credentials. Encourage, through funding mechanisms, collaboration between academic institutions, industry and government to foster innovation in sustainable

Transition to Digital — The COVID-19 pandemic was a clear driver in the acceleration to digital technology within UK FTT businesses, including the use of online and remote ways of working, transition to e-commerce platforms, the introduction of Computer Aided Design (CAD) software, monitoring of business operations, and the notion of the metaverse.

6.1 Energy Crisis

Recent events, such as the war in Ukraine and its impacts on energy prices, as well as the increase in inflation post Brexit/COVID-19 pandemic were also discussed with participants during the interviews. Respondents to a recent survey by BoF-McKinsey on the State of Fashion 2023 listed the war in Ukraine to be in their top 3 concerns for 2023. The ongoing war in Ukraine has significantly disrupted supply chains and created an energy crisis, which 58% of executives within the FTT sector believe will weaken the fashion market [27].

Pincroft Dyeing and Printing spoke of the impact of the war in Ukraine, creating millions of pounds worth of variation per annum in their energy prices, which reflects in their costs of goods sold and is hugely impactful to their customers. A West Yorkshire dye house spoke of their energy cost increasing 450% with the consequence of a surcharge on the invoices to their customers - this was essential to their survival. Due to this, negotiation on longer-term contracts with customers has become increasingly difficult, since they will inevitably consider alternative, less costly suppliers. Likewise, Melin Tregwynt explained how they are being charged a surcharge by their finishers. Camira Fabrics have been doing computer modelling to predict the increases the energy prices may have longer term, noting a potential increase of approximately 150%. Although they feel this is a concern for the business in the future, they will continue to invest in new products, trying to focus on the long-term vision for the company.

A luxury handbag designer spoke about how the energy crisis has helped drive the business to make savings across their stores, which also supports their sustainability agenda, by not just looking at reducing emissions, but also how they can use less energy, contributing to a reduction in bills. Likewise, Pincroft Dyeing and Printing and Prickly Thistle spoke of similar situations. Pincroft Dyeing and Printing explained how the energy crisis has made the business question their energy consumption, examining ways they can reduce their usage, and helping them focus more on the sustainable criteria for the company in the future. Prickly Thistle discussed how they are very conscious about the amount of energy or fuel the business uses - a key consideration since the founding of the company in 2018. They make conscious decisions about when it's necessary to use lighting or heating and were passionate about the notion of wearing appropriate, woollen clothing to compensate for the lack of heating, as people would have done in the past. Similarly, a well-known Saville Row fabric supplier commented

Current Times and Future Outlook

Energy Conscious – The war in Ukraine has caused large rises in energy prices which has encouraged many businesses within the UK FTT to consider alternative ways of operating to reduce their consumption.

on the way the business has become more aware of their energy consumption, with conscious choices to now turn off lights more frequently, and only use heaters when it's deemed absolutely necessary.

"I'm trying to incorporate more ethical materials into my collections, which is possible, but it's also tricky and expensive."

Alice Timmis

Bav Tailor commented on the way most businesses are experiencing an increase in the cost of raw materials and in some cases the minimum order quantities are increasing, causing a significant problem particularly for smaller companies, who in most cases must pass these costs on to the end customer. Likewise, Ashleigh Jay, a freelance embroidery designer, remarked how she is very mindful of increasing energy bills when using manufacturing items, such as a sewing machine and iron, as any increases are added to product prices. Alice Timmis, an embroidery and textile designer, commented that the increased cost in materials is making it increasingly difficult to incorporate more ethical materials into their collections. Ananas Anam explained how their process is not very energy intensive compared to conventional fibre and fabric production, however, they have still seen an increase in prices from their suppliers of approximately double. A recent survey by McKinsey also highlighted that the cost of apparel within the UK, as well as within other countries (US, France, Italy and Spain), has risen by 22 percent between July and October 2022 when compared with between March and June 2022. It is predicted that price increases will continue well into 2023, due to brands passing higher costs onto their customers [27].

6.2 Future Outlook

Companies also touched on how they foresee the future and the lasting impacts that the COVID-19 pandemic and Brexit has had on business, with both positive and negative opinions. A well-known Saville Row fabric supplier remarked how they feel that it will be at least another 12 months before the industry is running even close to what it was pre-pandemic and believe the after-effects will continue to change the way the industry operates in the long run. Similarly, English Fine Cotton, a business unit of Culimeta-Saveguard, commented that the accuracy level of supplier forecasts post-pandemic is still dramatically impacted, and they believe it could remain unpredictable for some time. Conversely, The Sustainable Sequin Company feel the level of business is already back to what they had pre-pandemic, and Lochcarron in Scotland are also operating at the same levels they were before the pandemic began. Lochcarron are even considering increasing their workforce to cope with the pent-up demand, which can be attributed to the delay of weddings during the pandemic, for which Lochcarron supply kilts. Likewise, Melin Tregwynt are taking on younger team members, with three new graduates starting in the last year. Although they feel this is a challenge, they understand the difficulties in finding skilled workers and want to encourage the uptake of younger generations who can learn from the skilled, more experienced, and often older workers. MAES London commented on the positive changes they have seen within the business post Brexit and the COVID-19 pandemic, such as a full-time pattern-cutting team and the expansion into a new studio, where they can offer consultations to designers to not only support them through the manufacturing process but to guide them on pricing their garments and financial help. The business sees a future where they mentor young designers or manufacturers as well as being able to offer grants to allow them to set up a studio of their own.

"There's a lot of people who say that Brexit and the pandemic is over, but all of the after-effects, particularly on the suppliers and various industries, will still continue to change the way we do things."

A well know Saville Row fabric supplier, London

of working culture into the future.

Patterns of work, such as working from home, or reduction of the working days within a week have also been seen as positive changes as a result of the COVID-19 pandemic, with many businesses encouraging the continuation of these practices. Pennine Weavers commented on their employees welcoming the working arrangements post-pandemic, as they transitioned from a five-day working week to a four-day working week. Likewise, MAES London is providing the option for staff to work from home with a view that this can help provide jobs to those who are only able to work from home due to care or disability reasons. They will continue to embrace this type

"We now have a full-time pattern cutting team and we've just expanded into another studio where we're going to be offering consultations and to work with fashion designers to create business plans which can support them towards more sustainable financial growth."

MAES London

6.3 Digital Acceleration

As mentioned previously, the COVID-19 pandemic was a time which saw many businesses transition to increasingly digital ways of working, including an increase in online meetings and e-commerce platforms. During the interviews, many companies also discussed how they see their businesses adapting to other forms of digital dimensions such as digital marketing platforms that are helping new designers such as Ashleigh Jay become more widely recognised and able to communicate her brand. She spoke of how digital social platforms such as Instagram are a real necessity for young designers trying to promote themselves. However, it can sometimes be difficult to find the right outlet to use, as there are so many platforms available, as well as difficulties in visibility due to algorithms and the sheer volumes of content being posted.

The topic of integrating digital elements within businesses to help track operational aspects with learning outcomes was also discussed. Camira Fabrics spoke of how they see digitalisation becoming a key part of their business strategy, which has been integrated into their five-year plan up to 2026, utilising digital technologies to help grow the business and provide increased operational analysis, and helping them to make better decisions. A recent report by McKinsey also highlighted that the global fashion sector should invest in digitisation so that companies can gain large cost advantages across the production process, through investing in tools like automation and digital end-to-end integration [27]. Similarly, MAES London discussed how they are a very technology driven and digital business, with everything they do being recorded in a digital way that helps to collate data that they can learn from. They also believe that digital technology provides them with a means of being transparent with their customers, which is an important element of the business. "I'd love to have more digital

programmes that are linked to industry, but I can't afford them, they're really expensive so I have to communicate with people in factories."

Alice Timmis



Digital software to aid the design process was also a common theme, with MAES London recently installing a new CAD software system, which is helping them to reduce the amount of paper needed for pattern drafting and helping them to achieve a more sustainable business. Alice Timmis, a London based embroidery and textile designer, spoke of how digital software such as Adobe is hugely important in what they do. However, the investment required in other digital programmes specific to the fashion industry are unaffordable in their case, which can limit their way of communication with factories. Andy Ogden, from English Fine Cotton, spoke of how they are planning to introduce an existing digital technology that creates made-to-measure clothing, following the unique shape of an individual's body throughout life, enabling the creation of an electronic signature that stores your personal measurements. And Sally Angharad, a trend consultant, spoke of the importance of digital design tools as they allow her to create marketing materials for clients who don't have the skillset to do so themselves. She also commented on how digital technology provides the option to visit exhibitions online, such as the London Design Festival, which is a large-scale event that most people don't have the time to view within a day, but online digital platforms make this experience possible.

MAES London Studio © MAES London

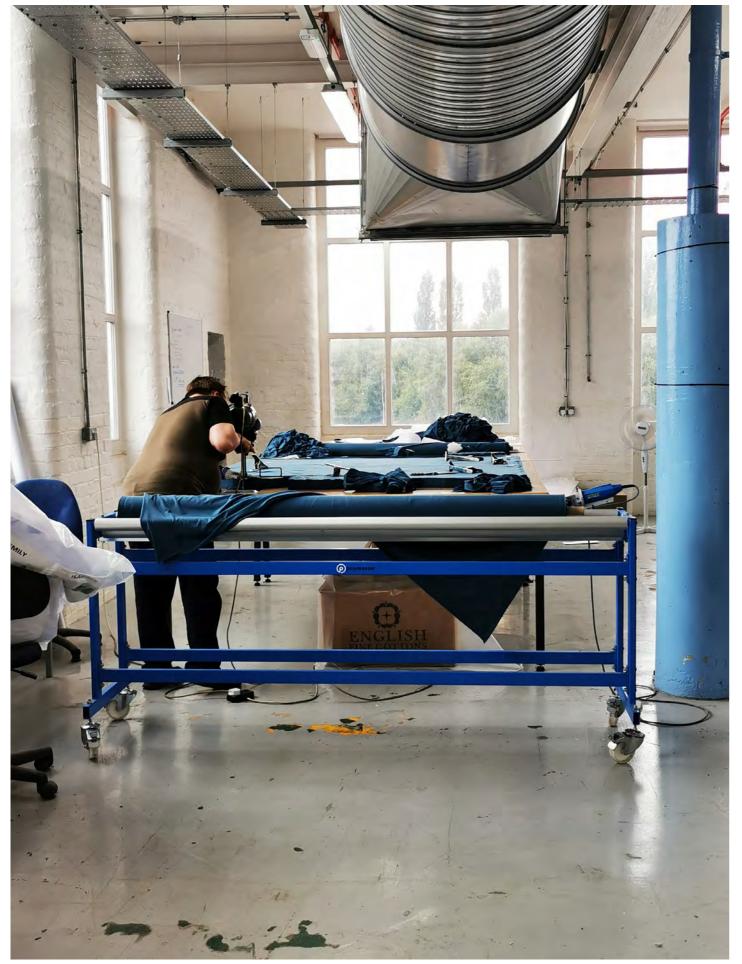
Donald Browne from The Coded spoke of how he has been encouraging the use of new digital technologies in the industry for over five years, including the concept of creating clothing designs for gaming. The concept of the metaverse was also considered by Browne as something that seems very futuristic at present but will soon become the new normal. Sarp Metin from Omurcek Textiles also commented on the fact that many fashion houses are considering video game collaborations, as well as providing consumers with a more immersive retail experience using virtual reality. The Materialist remarked on virtual fashion for gaming, as well as the notion of virtual fashion for online meetings, such as on Zoom or Teams, although they believe this idea is still very much in its infancy. Likewise, Holition, a marketing agency in London also believes that virtual retail experiences for consumers are still in the early stages of the journey, with limited businesses in the industry using this type of digital technology at present.

"London Design Festival is huge. You're never going to get around at all if you've only got one day out of the office. So having that online access is really great as a trend forecaster."

Sally Angharad



Jacquard Fabrics © Alice Timmis



English Fine Cottons © University of Leeds

→ Culimeta-Saveguard Interview with Andy Ogden, Director and General Manager

Culimeta-Saveguard manufacture specialist textile-based acoustic and thermal insulation products mainly for the automotive and industrial sectors. They were founded in 1993 in the North-West of England, near Manchester. They also have manufacturing operations in the USA, Italy and India. Their subsidiary, English Fine Cottons, is the only commercial cotton spinner in the UK and is based in a mill first used for cotton spinning in 1886.

You mentioned that you do sell direct to the consumer now. So, do you have a shop or have you changed to a more digital approach since the pandemic?

Andy: Since COVID, we've moved English Fine Cottons directly to the consumer offer, it only operates through our website. I mean technically, yes, we can open this shop and people can concur. But it's not a bricks and mortar retail High Street right operation. We changed the model from a stock-based model to a made-to-order based model. The reason for that, is that we've been able to show a capability of being able to act within about 5 to 7 days. So we've been able to do that. Partnering with downstream and upstream partners that can actually adorn our product. So if you want to add print to it, if you want to add embroidery to it, if you want to add sequins to it, we could do that.

Do you have any other digital technologies within the business or digital developments occurring?

Andy: Yes, we see even further digitisation within a very short period of time, which is based on an existing technology. It's just being able to finance it, and we believe that we're going be able to offer bespoke, made to measure, directly from our website within a day. There is technology, it's been there 10 or 15 years, where you're able to walk into a scanner. So why hasn't anybody used it? The reason why people haven't used it, is because there are platforms that are working extremely well. For example, you put in certain measurements into a table on a Shopify website and it makes you a product that fits you. We're taking that to the next level, following you and your shape through life. And you introduce your electronic signature to your shape profile, it automatically adds the adaptations to our t-shirt patterns. That's possible today. And we can see ourselves bringing that in as an extra offer to English Fine Cottons within three to five years.

Are you looking at other technological developments for the future?

Andy: Yes, we're looking at what we treat our cotton with and that the cotton can actually go into landfill without it actually having a detrimental effect to the environment. So we're challenging the circular economy. Why should you recycle it, if it costs you more utility. More expense, more power, and more human energy to do that, when you can put it into landfill instead and it has absolute zero environmental impact. In actual fact, it'll have a positive effect because it's acting as a fertiliser, when you put it into landfill. So we're looking at all aspects of that, to try and do it as environmentally sensitive as possible.

6.4 Policy Recommendations

6.4 Key Findings

The below table depicts the key impacts, consequences, challenges and opportunities with suggested policy recommendations in relation to Digital Acceleration:

Impacts

COVID-19 accelerated digital transition

Consequences

- Hybrid way of working and engaging with clients
- Increase in e-commerce, virtual consultancy, online showcase, webinars, digital marketing

Opportunities

- Improved efficiencies based on data, enabled through tech
- Increased transparency in supply chain (e.g. ID chip) and costing ٠
- Reduced need for travel; access to clients/staff globally; saves time and cost •
- Digital innovation: marketing opportunities
- Mass digitalisation beneficial to online-only brands
- Digital transformation of design process (e.g. using CAD to reduce paper use) •

Challenges

- High cost of industry-specific software, often inaccessible for smaller brands
- Digital marketing/tools not fully developed yet, still in flux
- New digital skills needed •
- Digital marketing does not always translate into more sales
- Impact on mental health •

 Digital skills training and support: Government should invest in programs to provide digital skills training and support for fashion industry professionals. This includes training on digital marketing platforms, social media management, digital design software, and other relevant tools.

Promote digital integration in business strategies: Encourage fashion businesses to integrate digital technologies and strategies into their long-term plans. Provide incentives or grants for companies to invest in digitalisation efforts, such as adopting automation tools, digital tracking systems, and data analytics platforms. This integration can enhance operational efficiency, decision-making processes, and overall business growth.

Promote digital skills training: Develop and implement programs to enhance digital skills and literacy among FTT businesses. Provide training and resources to help businesses effectively utilise online platforms, e-commerce tools, and digital technologies.

Facilitate e-commerce adoption: Offer financial incentives, grants, or tax benefits to encourage FTT businesses to establish or expand their online presence and engage in e-commerce. Support initiatives that help businesses integrate e-commerce platforms, optimise websites, and improve online customer experiences.

Research and development funding: Allocate funding for research and development initiatives that focus on digital innovation within the fashion industry. Support research projects exploring emerging technologies like virtual reality, augmented reality, and the metaverse. This investment can drive technological advancements, inspire industry-wide transformation, and position fashion businesses at the forefront of digital innovation.

Conclusions and Looking Ahead

7.1 Conclusions

The aim of this research was to explore the impacts of global challenges, such as Brexit, the COVID-19 pandemic and climate change on the UK Fashion, Textiles and Technology ecosystem (FTT). The findings confirm some of the challenges outlined by the initial BFTT report published in 2021 [1], which predicted the impact on the UK FTT in the next three to five years, specifically in relation to trade policies and Brexit as well as a shortage of FTT skills, increased awareness of environmental issues and greater emphasis on ethical, transparent and sustainable practices, as identified in the previous report, was also evident in our research.

Moreover, it has become clear that for most businesses, the lockdowns imposed during the COVID-19 pandemic caused significant financial disruptions and supply chain disruption, with Brexit creating an additional layer of complexity and financial strain. A reduction of non-British skilled workers post-pandemic, paired with the increased competition for staff within industry, stunted the growth of certain parts of the UK FTT. The demand for British-made garments and textile products appears to be on the rise; however, significant investment would be needed to re-shore an industry, that for the most part, shifted aboard over twenty years ago.

The global challenges faced by the FTT in the UK has left many businesses vulnerable or led to insolvency, with SMEs with smaller financial reserves being particularly impacted. However, the resilience and determination of companies has been remarkable, with numerous businesses diversifying into new market areas and making positive changes. The COVID-19 pandemic has accelerated the digital transition within the industry in various aspects of the supply chain, including marketing, design and manufacturing.

Rather than reducing the focus on sustainability, due to financial constraints post-pandemic, most companies continue to prioritise environmental concerns and strive to minimise the impacts of their operations. For example, by adapting more resourceful ways of working or by harnessing digital tools to reduce waste. The increase in energy prices has led to businesses seeking to reduce their usage or exploring renewable alternatives, thus reducing costs, while lessening their carbon footprint.

The sustainability of the UK FTT will be further expanded upon through additional funding secured through the AHRC Fashion Demonstrator project. Deliverables from this additional research will be available from late-2023 to mid-2024.

7.2 Looking Ahead

The study brought to light the global challenges faced by the UK FTT and the ways in which businesses have responded to these. The research highlights the opportunities and challenges currently evident within the sector and as a result, we propose 5 key recommendations to support the growth and prosperity of the UK Fashion, Textile and Technology industry in the UK: reducing the cost and complexity of trade; growing capacity and competency; building resilience; driving digital innovation and prioritising sustainable and ethical practices.

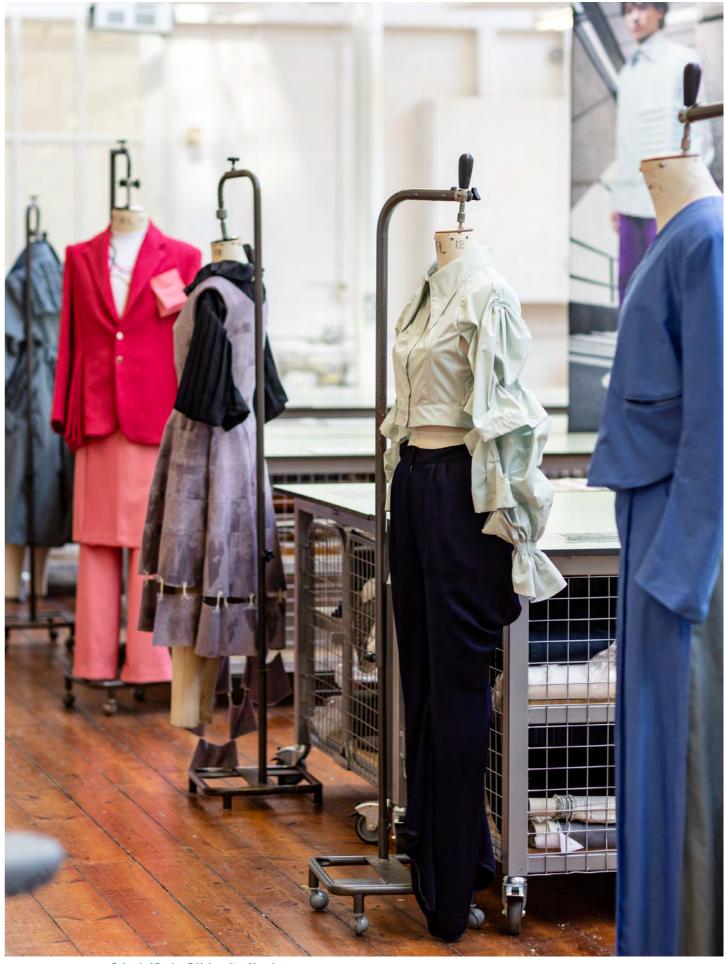
Reduce cost and complexity of trade post-Brexit, to increase access to global markets and improve competitiveness, particularly for start-ups and SMEs, e.g. through tax breaks, transparency, and clear guidelines.

Grow capacity and competency of the UK FTT sector, to reduce carbon footprint and create employment opportunities, e.g. through business development support, government subsidies, grants and incentives, training, and visa programmes for skilled workers.

Build resilience post-COVID-19 through agility, flexibility and diversification to protect financial sustainability of FTT businesses, e.g. through business guidance, mentorship and training.

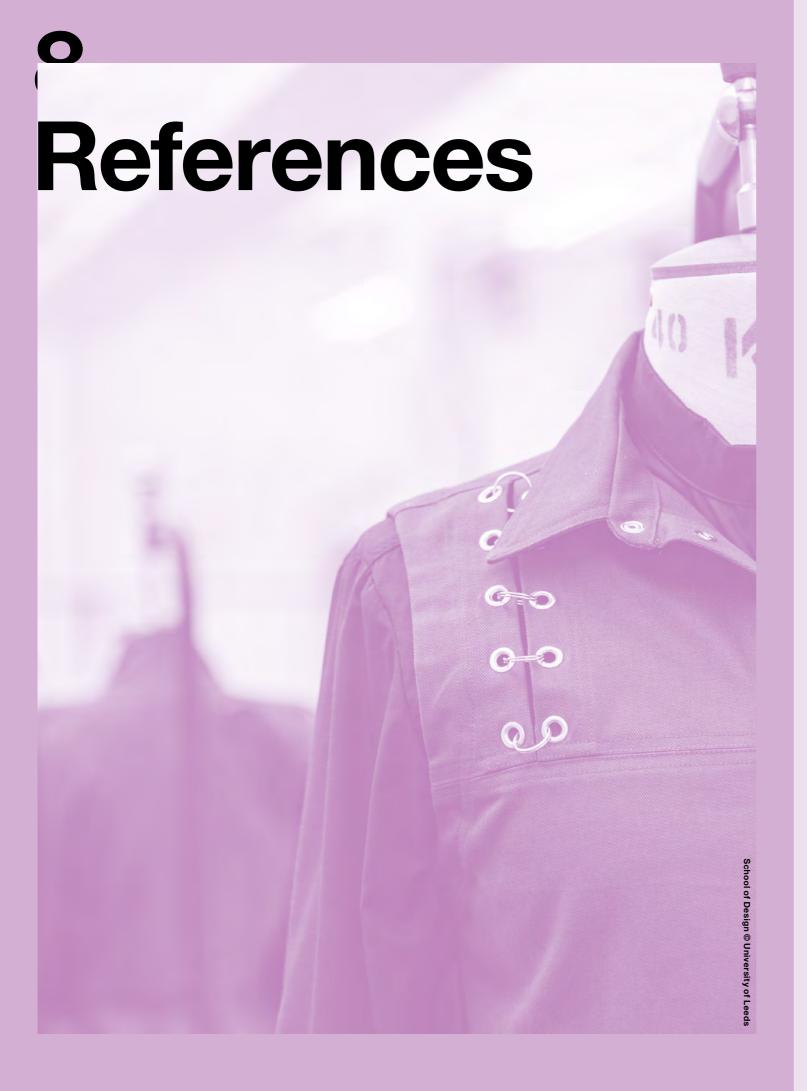
Drive digital innovation in the FTT sector, to increase capacity, efficiency and sustainability e.g. through increased access to digital tools and training, particularly for start-ups and SMEs.

Prioritise sustainable and ethical practices to address the climate crisis, improve health and equity for all, e.g. through legislation, government incentives and grants, investment in infrastructure, accreditation and business guidance.



School of Design © University of Leeds

Conclusions and Looking Ahead



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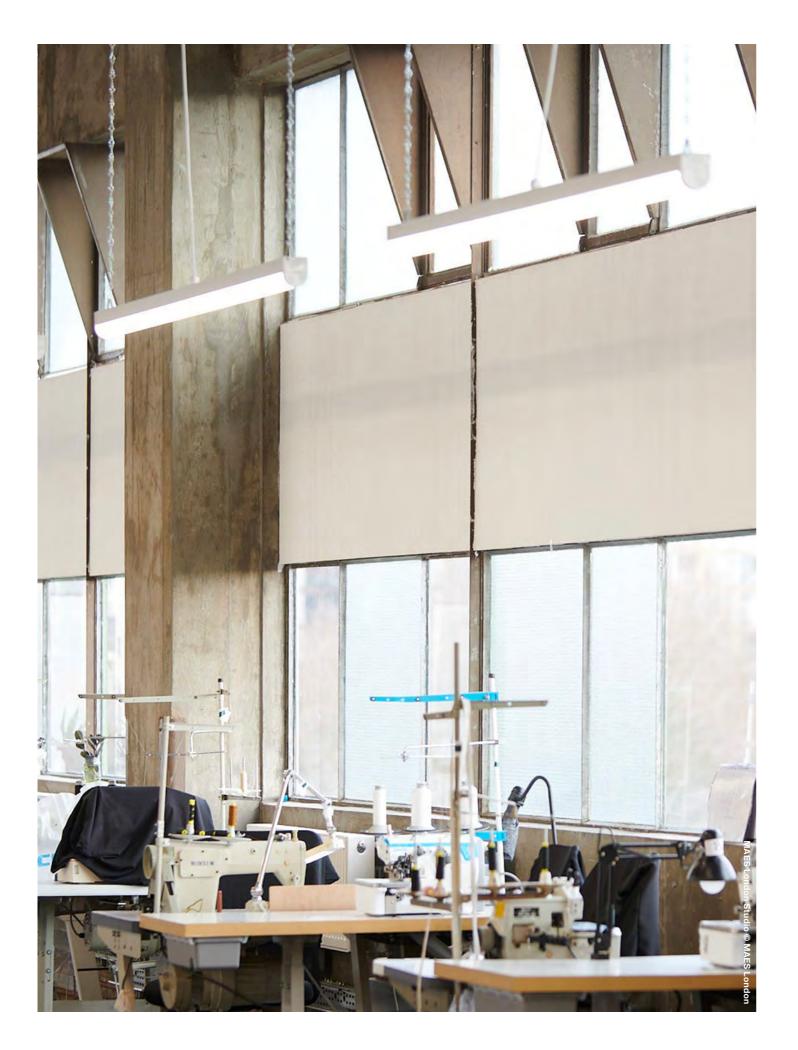
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Additional thanks All of the survey and interview participants from the Fashion, Textiles and Technology industry who have contributed their valuable time and insights into this research. Amy Hulme, Sue Rainton and Salah ud Din.

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