

STITCHING A BROKEN FUTURE



MADE IN BANGLADESH

How resilience can shape the future of an
'unheard' community

By

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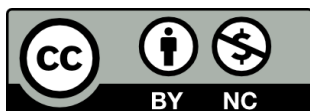
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Abstract

The COVID-19 pandemic has fundamentally disrupted the way we perceive our future. It has disproportionately hit hard economically challenged and socially marginalized communities worldwide. One such community is the informal subcontractors of the ready-made garment industry in Bangladesh. Inadequate coverage by scholarly research has made this sector one of the least explored areas where responses to the current pandemic may potentially impact millions of lives. This study investigates rarely known business strategies of this sector under a unique circumstance when disruptions are tackled to protect its existence.

The primary purpose of undertaking this research is to evaluate the role of resilient business planning in the context of an unprecedented public health emergency

such as the COVID-19 pandemic.

Specifically, this paper examines how informal subcontractors of the ready-made garment industry in Dhaka are innovating business practices in the wake of an unprecedented crisis and applying new strategies to adapt to the new normalcy. Subsequently, this project undertakes a potential intervention plan which could reveal the industry's barriers, opportunities, and surprises when explored through the lenses of strategic foresight.

The outcome of this project is a navigational tool that analyzes the intersecting spaces between organizational resilience and foresight in terms of the logical progression of innovation drivers. A deep investigation of underlying litanies of the complex sub-systems has developed multiple scenario pathways that stakeholders of the concerned industry can use to navigate into the future.

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Glossary

Term	Description
The COVID-19 pandemic	“The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing pandemic of coronavirus disease 2019 (COVID-19) caused by SARS-CoV-2” (Wikipedia, 2021)
Existential threat/crisis	“An existential crisis is a moment when someone questions whether their life has meaning, purpose or value” (Dabiero, 2019). In this paper, the researcher has used the term to refer to a crisis that forces organizations to question its existence.
First-tier suppliers:	Firms that directly export to international buyers.
Second-tier suppliers:	Firms that work for first-tier suppliers
Non-member	Firms that have no membership of an association

Term	Description
Member	Firms that have membership of one or more association
Subcontracting factory	Firms that are involved in subcontracting business
Millennials	Those who are born between 1981 and 1996
Baby Boomers	Those who are born between 1946 and 1964
Gen Z	Those who are born from late 90's to early 2010
Greenhouse Gas	“A greenhouse gas (sometimes abbreviated GHG) is a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect” (Wikipedia, 2021)
Backward-linkage industries	Associative industries to ready-made garments industry
Pre-crisis timeline:	Time earlier than Jan, 2020

Term	Description
Crisis timeline:	January 2020 – July 2020
Post-crisis timeline:	Time after July, 2020
F-commerce	“F-commerce refers to conducting online business activities on a Facebook page or Facebook application” (AT Internet, 2019)
E-commerce	“E-commerce (electronic commerce) is the activity of electronically buying or selling of products on online services or over the Internet” (Wikipedia, 2021).
Industrial Revolution 4.0	“The Fourth Industrial Revolution (or Industry 4.0) is the ongoing automation of traditional manufacturing and industrial practices, using modern smart technology” (Wikipedia, 2021)
Future Triangle	“The Futures Triangle expresses a plausible future in relationship to past challenges, present realities, and possible futures” (Inayatullah, 2008)
Backcasting	Backcasting is a planning method that starts with defining a future and then works backwards

Term	Description
B2B	<p>to identify events, key inflection points, potential future policies, and programs that might lead from the present to the future under consideration. It is an important tool to verify the alignment between drivers, world building, and a plausible path to that future (Wikipedia, 2021)</p> <p>It is an abbreviated form of Business-to-Business. “Business-to-business refers to business that is conducted between companies, rather than between a company and individual consumer” (Chen, 2020)</p>

Introduction

This study aims to investigate strategies that non-member subcontractors (NSF) of the garment industry in Dhaka are undertaking to survive the imminent existential threat of a global pandemic. The ready-made garment (RMG) export is the most significant export revenue source for Bangladesh, surpassing all other sectors' contribution combined by many folds. Due to its sheer importance to the country's economic progress, the RMG industry receives due attention in scholarly literature and articles. But apart from the export industry, there is a vast network of associated industries, which supplies vital support for the sustenance of its business. Little is known about their existing businesses' true potentials (Labowitz & Pauly, 2015), let alone how they will evolve in the future.

The COVID-19 pandemic has given us a rare opportunity to take a closer look at this grassroots industry's adaptation strategies in a desperate time. The purpose of this research is to evaluate the role of resilience in tackling current and future challenges for

an industry that is almost invisible to regulators, inspectors, and buyers (Labowitz & Pauly, 2015). In this paper, the researcher has attempted to produce robust future scenarios based on insights collected from interview data and evidence found in the existing literature. This project's outcome is a synthesis map that illustrates deflection points, pathways, and surprises in terms of barriers and opportunities for plausible futures.

This study may assist entrepreneurs with strategic foresight in envisioning a desired future for the industry. This pragmatic investigation may help entrepreneurs reflect on their past, respond effectively to the present-day crisis, and recover quickly to be more resilient. Furthermore, identifying risks and challenges of plausible futures will allow entrepreneurs to reduce uncertainties not just for the business but also for the millions of lives attached to it. Future researchers may use this paper as a source of knowledge for deeper analysis in the same or cross-functional field



Framing the Crisis: The Global Pandemic in Bangladesh

Ready-made Garments of Bangladesh: An Overview

In 2018, South Asia was the fastest-growing economic subregion in the world. It was also predicted to be the fastest-growing subregion in 2019 and 2020, with projected Gross Domestic Product (GDP) growth of 6.8% and 6.9%, respectively. Of all the countries from this region, experts predicted that Bangladesh would have the highest 8% GDP growth in 2019 and 2020. Such bold numbers were not only the highest in the sub-region but also in the whole of Asia. The nucleus of such

impressive growth is a flourishing RMG industry (Fig: 01), which claims 80% of all export from Bangladesh (Asian Development Bank, 2019). It employs 4.4 million people and generates enough revenue to claim 11% of the country's GDP (Fathi, n.d.). According to the World Trade Organization, in 2017, Bangladesh was only next to China as the second-largest exporter of RMG globally and claimed a 6.5 percent share of the market. Renowned fashion brands like H&M, Walmart, JCPenney, Inditex, Zara, Gap, M&S, Uniqlo, C&A, Tesco, Hugo Boss are regular buyers of RMG products worth billions of dollars from Bangladesh (The Daily Star, 2018)



Fig 01: A typical ready-made garment factory in Bangladesh. Source: (Ahad, 2020)

Impact Of A Global Pandemic

Like most other industries, RMG in Bangladesh is also hit badly by the COVID-19 pandemic. Global buyers, retailers, and brands canceled or held work orders worth \$3.18 billion due to nose-diving demand in the first quarter of 2020. After the COVID-19 outbreak, the sector saw a decline of 20.24%, 85.25%, 62.06%, and 11.43% in March, April, May, and June, respectively. One of the two most significant segments, Knitwear, fell short of 14.05bn dollars from the target, 17.65% less than the last fiscal year (Textile Today, 2020). In April, the earning from RMG export was 84% less than what it was in 2019 (Galib Ashraf, 2020). According to the Export Promotion Bureau (EPB), Bangladesh's apparel export was 6.18bn less than the previous fiscal year (Export performance Goods for FY 2019-20 July-June, n.d., p. 02).

A survey, jointly conducted by Bangladesh Garment Manufacturers and Exporters Association (BGMEA) and Centre for Entrepreneurship Development (CED) of BRAC University (BRACU) on 2526 subcontracting factories (SF), revealed that 606 were already out of production. Only 14% of the operating factories could switch from producing regular garment products to

emergency medical supplies like personal protective equipment (PPE) or masks. However, 53% of them were doing it for non-profit. As of 7th May 2020, 50% of the respondent factories reported not being sure if they will be able to continue operation in June 2020 (Operational Status of Export-oriented RMG Factories During COVID-19 Pandemic, 2020)

Job Loss

Due to a sharp decline in demand and order cancellation from international buyers, RMG and its supporting industries faced massive job losses. In June 2020, BGMEA president Rubana Haque said in an online conference:

“If the factories run at only 55 percent capacity, there is no alternative but to lay off the workers.” (Kabir, 2020).

Penn State University's Centre for Global Worker's Rights and the Worker Rights Consortium (WRC) reported as many as one million garment workers in Bangladesh had already been laid off by April, only after a couple of weeks into the lockdown (Ibrahim, 2020). Implications of such massive job loss have had far-reaching consequences for a 40-billion-dollar industry that plunged to a size of 10 billion within a matter of days (Uddin, 2020). It caused systemic challenges of unprecedented magnitude, the likes of which neither the government nor

the industry had the readiness to deal. Many employers had to shut down their factories without paying worker's due wages. Most workers learned about the discontinuation of their employment contracts over the phone (Imam Hossain, 2020). According to the Bangladesh Bureau of Statistics, 66.67% of RMG workers faced financial hardship during lockdowns (The Daily Star, 2020)

Labor Protest

Starting from 26th March, the government declared general holidays to control the spread of the virus. The government imposed a nationwide travel ban which remained effective till the 5th of May, 2020 (Shameem Reza, 2020). The government also declared a stimulus package of Tk956 billion (\$11.2 billion) to safeguard the priority industrial sectors. The package included a plan of Tk50 billion for RMG manufacturers to pay their workers' monthly wages.

Unfortunately, the deal fell short for this massive industry which needs at least \$470 million to pay salaries every month (COVID-19 And The Ready-made Garments Industry in Bangladesh, n.d.). As a result, millions of workers reported being unpaid for two months (Mei-Ling McNamara,

2020). For daily wage earners, who could not afford a decent life even before the pandemic, and who had already been underpaid, staying home was not an option (Anuradha Nagaraj, 2018).

In Dhaka and adjacent areas, RMG workers broke into protest in demand of reopening the factories (Fig: 02), and several others were stranded off on the streets protesting for due payments (Rabiul Islam, 2020). Most of them come from rural backgrounds with no qualification or degree to survive in alternative occupations (Kabir, Maple, & Usher, 2020). Therefore, miserable workers' stories started to surface in mainstream media, including a heart-touching story of two garment workers who had to sell their newborn baby to a stranger for settling bills in the hospital (Prothom Alo, 2020). In the wake of such an economic crisis, the labor ministry decided to keep factories open during the Eid holidays and instructed employers to pay due salaries for May (Shameem Reza, 2020). Suppliers accused foreign buyers of holding due payments for confirmed shipments. Hence, the BGMEA President appealed to the international buyers to pledge for their unpaid bills. (Brand BGMEA, 2020)



Fig 02: Garment workers protesting on the streets of Dhaka. Source: (Reuters, 2020)

Reopening Factories

Factories gradually started reopening from 26th April amid the risk of coronavirus transmission (Kabir, 2020). Over 700 factories were reopened in Dhaka, Savar, Ashulia, and Gazipur by the end of April (Shameem Reza, 2020). Some factories allegedly imposed mandatory returns for the workers despite not having proper arrangements to maintain social distancing (Kabir et al., 2020). Head of Garment Sramik Sanghati, Taslima Akhter, criticized the government's decision to reopen

factories as daily cases of infected workers went up, and 50% of that number was infected after the lockdown had withdrawn (Kabir et al., 2020). Although, BGMEA rejected such allegations (New Age, 2020).

While first-tier suppliers were struggling to maintain social distancing (Suman, 2020), conditions of Small Medium Enterprise (SME) NSF largely remained unknown. They had not produced as many headlines as their formal counterparts did (Rabbani & Chowdhury, 2020, p. 02). Hence, the researcher could not gather enough

evidence to outline their situation. However, this study anticipates that they were in a much worse condition. This research is grounded on a hypothesis that the pandemic was an existential threat for NSFs.

Before allowing the factories to reopen, many workers accused the government and BGMEA of not taking enough safety precautions (Suman, 2020). Many anticipated an outbreak from mass contamination could bring disaster to the lives of general people (Suman, 2020). However, a survey on non-member factories (NFs) later found that 95.1% of its participants were willing to comply with the government's instructions regarding Covid-19 (Rabbani & Chowdhury, 2020, p. 07). The same survey found that most NFs had already resumed operation by June 2020. However, entrepreneurs taking such high risks could have proved fatal for public health. As of April, 2020, Bangladesh has only eight hospital beds for every ten thousand citizens, and the country's entire public health system has 432 ICU beds to support a population of 170 million. (Asif Saleh, 2020)

Historical Crises

The coronavirus pandemic is more of an eye-opener for RMG manufacturers in Bangladesh. However, this was not the first time that the industry was tackling a major crisis. Many historical events have shaped this industry to its present form, and on several occasions, it returned from the verge of a significant collapse. Entrepreneurs of RMG once believed to have reputations involving bribery, dodging custom duties, evading corporate taxes, making inadequate long-term investments (Wikipedia 2021).

Despite many speculations and dilemmas, Bangladesh RMG has proven resilient, persistent, and reliant in the face of many odds. Safety standards for the apparel industry workers became a global headline when Rana Plaza, an eight storied building, collapsed in 2013, killing 1045 workers (Fig: 03). The Rana Plaza had collapsed only a few months after the Tazreen Fashion's fire tragedy happened. The fire had taken hundreds and twenty-two lives of daily wage earners. Later investigation found that the Tazreen was producing apparel products for a renowned U.S retailer under an unauthorized subcontract (Caro et al., 2020).



Fig 03: The site of Rana Plaza disaster. Source: (Reuters, 2020)

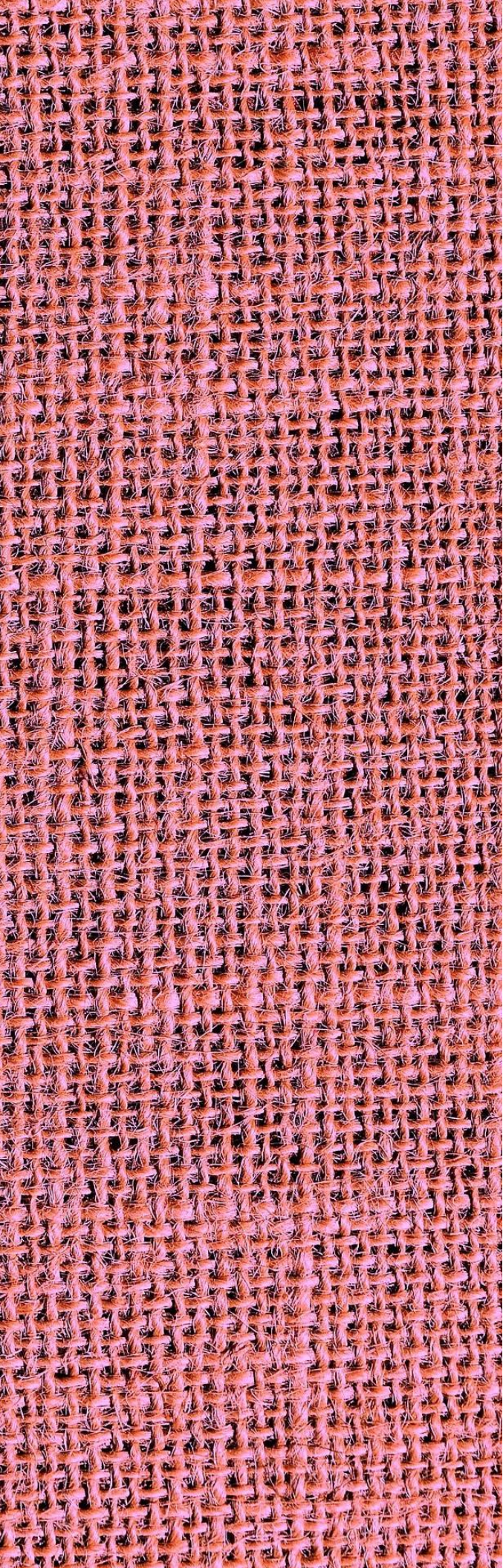
These incidents had raised many questions about the poor safety conditions of RMG workers in Bangladesh (Wikipedia Contributors, 2020). Remarkably, The Rana Plaza collapse had given birth to one of the most successful global campaigns in the apparel industry's history (Paton, 2020). One hundred and fifty international brands with more than 700 RMG factories formed Alliance for Bangladesh Worker Safety, a global alliance that ensured safety guidelines and security protocols at sweatshops. Garment factory owners, who sought opportunity in crisis, supported the alliance by embracing transformational

changes with an adaptive and resilient mindset. Ellen O. Tauscher, a former House member from California who is chairwoman of the alliance's board, said the Rana Plaza collapse "changed everything". She said:

"Bangladesh has a history of corruption, of political turbulence. It's a place where these businesses, instead of walking away, decided to do what is not typical for business. Most businesses spend most of their time trying to buy down risk. These businesses decided to take on risk..."
(Greenhouse & Harris, 2014).

A similar transformational resurgence was evident when the quota system was abolished in 2004, and experts predicted a decline in the RMG sector (Mlachila, &

Yang, 2004). Instead, the industry exported more than four folds afterward than what it used to produce before the announcement (Gateway Media, 2020)



Subcontracting in Bangladesh's Garment Industry

Subcontracting: Not A Hidden Truth

The rules of timely production govern the apparel industry. Suppliers must follow strict deadlines to keep their commitment to buyers. A late shipment may have consequences for both sides. For the supplier, it could be a more expensive air shipment at least or bearing the loss of a canceled shipment at most. In either case, such occurrences may prove to be fatal for the reputation of the business. To deliver within ever-narrowing fast-fashion windows - starting from the procurement of raw materials to the final shipment – suppliers often distribute workload through subcontracting. In general, the definition of subcontracting means ‘doing partial work of a contract originally received by others’ (Prasanta Sarkar, 2014).

Subcontracting is an integral part of Bangladesh’s low-cost-high-volume export (Wikipedia Contributors, 2021). Compared to the number of total factories in Bangladesh, only a handful of factories have all the units (such as knitting, dyeing, etc.) running under one roof. These factories are known as ‘composite plants’. They belong to the top-tier group of suppliers and ensure production for top international brands. Apart from composite factories, many other

factories have specialization in one or two services. First-tier suppliers often hire such firms under subcontract to provide support with their specialized assistance. It allows first-tier suppliers to temporarily enhance capacity and resources without investing substantially in infrastructure and machinery.

Subcontracting also occurs when a first-tier supplier is overwhelmed by seasonal orders (Prasanta Sarkar, 2014). It helps them deliver on time by distributing their production activity across various sources (Wikipedia Contributors, 2021) and saving in operational expenses by avoiding unutilized resources during off-peak seasons (Prasanta Sarkar, 2014).

Unauthorized Subcontracting

There are two types of subcontracting practiced in the RMG industry. “authorized” and “unauthorized” subcontracting.

“Authorized subcontracting is subcontracting that is disclosed and known to the brand. Unauthorized subcontracting is not known to brands” (Kim, 2020).

Hence, unauthorized subcontracting occurs when a supplier outsources part of its production to another party without consent from the buyer. Unauthorized

subcontracting is not an uncommon practice in the RMG export industry (Caro et al., 2020). In order to meet tight deadlines set by the contractor or to keep promises made to the buyer, suppliers often subcontract part of their production going beyond their legal contract. Such arrangements are concealed from the buyer’s visible horizon and cannot be directly controlled or monitored (Caro et al., 2020). This part of the value chain is ‘invisible’ to their ‘radar’ while monitoring non-compliance practices such as substandard fire safety systems, poor work conditions (Fig: 04), forced or child labor exploitation.



Fig 04: Poor work conditions in a non-compliant factory in Dhaka. Source:(Casillas & Shutterstock, 2015)

Facts & Evidence

Historically, the garment industry's business model has supported outbound subcontracting to keep the focus primarily on low-cost production (Clean Cloth Campaign, 2019, p. 05). Buyer's endless push for a low-cost production within ever-narrowing lead time often confronts overwhelmed suppliers with no choice but to take the risk of unauthorized subcontracting (The Centre for Research on Multinational Corporations (SOMO), 2015, p. 01). Such risky procurement processes have their roots linked to fundamental problems related to exploitative pricing (Gold et al., 2020, p. 1275) and disproportionate profit distribution (ILO, 2016, p. 07).

A survey conducted by the International Labor Organization (ILO) on various industries' global supply chains suggested that almost half of the participants belonging to the apparel manufacturing sector have sold their products under cost pricing (ILO, 2016, p. 08). The same survey suggests that a risk factor indicating dependency on buyers is disproportionately high (75%) in the garment industry than in other sectors. Brands and retailers having such a high advantage in power distribution can enjoy higher degrees of freedom in price

negotiation while making the supply side more prone to unauthorized dealings (Clean Cloth Campaign, 2019, p. 12).

Subcontracting: A Crisis Or An Opportunity?

The complex value chain of sourcing an apparel product may involve cutting, dyeing, sewing, printing, embroidering, washing, packaging, etc. Other industries provide support for logistics, distribution, raw materials import, procurement, and legal consultancy. It is rare to find a firm with the total capacity to ensure such a vast spectrum of requirements (Apu, 2013). Hired contractors do a significant portion of the procurement process. A study conducted on 30000 orders procured by 220 factories worldwide revealed that 36% of the orders had involved unauthorized subcontracting (Caro et al., 2020). Another report suggests that 50% of the total work in the textile and clothing industries is done with subcontracting (Apu, 2013).

Mega disasters like the Rana Plaza collapse and the Tazreen Fashion fire have raised questions against the widespread application of unauthorized subcontracting. They have also alarmed associated stakeholders to take substantial precautions. From the wake of the Rana

Plaza disaster, two apex bodies, named 'Accord on Fire and Building Safety in Bangladesh' and 'Alliance for Bangladesh Worker Safety', were formed to monitor and regulate substandard factories under strict surveillance (Paton, 2020). Patronized by western fashion brands, these two apex bodies have helped thousands of factories to improve work conditions in terms of safety standards (Paton, 2020). The government of Bangladesh has also imposed firmer regulatory clauses to bring more transparency and accountability to the procurement process. Following a National Tripartite Plan of Action (NTP) on Fire Safety and Structural Integrity, The Ministry of Commerce (MoC) has made it compulsory for all SF to be a member of an active association like BGMEA or Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA) (Munni, 2019).

But the challenges associated with unsustainable fashion are systemic and may go deeper into the roots of asymmetrical power relationships between buyers and suppliers (Kim, 2020). Advocates of sustainable fashion endorse that the due diligence promised by a supplier is subjected to systemic forces that originate from the supplier's intention to hide (Kim, 2020). Often the stereotypical response to subcontracting obscures the due diligence

required from the buying side. For instance, by 2018, since the collapse of Rana Plaza in 2013, prices paid by the lead firms to their suppliers had declined 13%, whereas the average lead time required for production had declined by 8.14% (Clean Cloth Campaign, 2019, p. 13).

Also, CSR-funded audit firms appointed by buyers have a history of producing questionable reports that lacked transparency and credibility. Ultimately, such information had proven to be fatal for many workers who happened to work for the factories they had endorsed. Disasters in Rana Plaza and Tazreen Fashion happened months after they were marked safe by several international audit firms (Clean Cloth Campaign, 2019, p. 07). Hence, firmer policies alone cannot prevent oversight problems with subcontracting. Instead, negotiating an integration plan through legislation and dialogue can be beneficial to the stakeholders involved.

Although prevalent and essential to the RMG value chain's existence (Apu, 2013), subcontracting has caught little attention in scholarly literature so far (Gold et al., 2020, p. 1274). Therefore, little is known about the real potential of this sector. However, one estimation suggests 2.35 million people could be directly involved in subcontracting business in Bangladesh (Apu, 2013).



Investigation Rationale

Why SME?

The complex nature of the RMG value chain demands multi-party contribution from procurement to shipment. Such collaborative action requires horizontal and vertical integration of multi-layered production units. The list can be ranging from core industries such as textile, clothing, logistics to backward-linkage sectors such as chemical manufacturing, packaging, labeling (Apu, 2013). These support industries are critical not only to the production of RMG but also in creating new employment opportunities and new investments. For instance, 63.2% of the RMG value chain comprises backward-linkage industries, most of which are SMEs (COVID-19 and the ready-made garment industry in Bangladesh, n.d.). According to a survey conducted in 2019, 93% of all sectors operational in Bangladesh are SME, and their contribution to total employment and GDP of the country is 31.5% and 4.85%, respectively (Naznin Ahmed, 2020). In fact, most garment workers worldwide are employed by privately owned small businesses (Merk, 2014).

According to the industrial policy of Bangladesh-2016, the number of workers in an SME may range from 16-300 (Naznin Ahmed, 2020). However, information from

unreliable sources suggests that the median size of SME factories may be more than that. Therefore, for this research, the researcher has only considered factories that have less than 1000 workers.

Research Question

How are small and non-member subcontracting apparel factories of Dhaka innovating resilient business plans that might shape post-pandemic plausible futures for the industry?

Innovation & Resiliency

Bangladesh RMG is standing at a fate-defining crossroad of historical importance. From the wake of the Covid-19 pandemic, buyers are prioritizing productivity, speed, transparency, digital transformation, sustainable production, automation, and social justice in their supply chain (Berg et al., 2021). They rely on demand-driven smaller and faster shipments from suppliers who are less likely to be disrupted by the next crisis and maintain a sustainable value chain (Berg et al., 2020). Systemic implications of shifting trends can directly influence how the apparel industry operates today, affecting millions of lives working at

the bottom of the supply chain. Therefore, business model innovation is critically essential for the supply side to succeed in the next normal.

Before discussing the relationships between innovation and resiliency in the context of a pandemic, it is important to shed some light on the definition of resiliency at large. The typical definition of resilience is defined by the characteristics of a person's capacity to recover from unfavorable life events (Hurley, 2020). Notably, it refers to one's ability to bounce back when confronted by adversity and dire consequences of an unprecedented life event. Highly resilient people find their way out of a traumatic event through perseverance, agility, and emotional self-healing instead of getting drowned in the grief of their failure.

On the other hand, organizational resilience is defined by its capacity to absorb stress, recover critical functionality, and thrive in alternative circumstances (Reeves & Whitaker, 2020). In a world of growing complexity, uncertainty, and volatility - originating from risks and failures of both man-made and natural disasters, such as rising inequality, climate change, and economic recession - businesses are constantly stressed and challenged by the sheer unpredictability of the future. However, resilient organizations embrace

these uncertainties by adapting to the changing environment and by accepting the dynamic nature of the interconnected world we live in. But it is not only about merely turning back from a significant loss. Resilience also means coming back stronger and identifying opportunities in the crisis (Jun Wu, 2020).

The global pandemic has heightened the importance of strategic resilience by exposing global supply chains' fragility (Diedrich et al., 2021). It has also revealed how resilient organizations have moved forward with greater productivity, efficiency, and creativity (Sinar et al., 2020, p. 19,25). During the COVID-19 pandemic, BetterUp researched 17000 U.S professionals to understand the role of resilience in a crisis. The report suggests resilient workers have shown 31% higher productivity, 20% higher cognitive flexibility, and 18% higher team creativity, and most importantly, have 22% higher innovation score (Sinar et al., 2020, p. 19,25). Dr. Gabriella Rosen Kellerman, Chief Innovation Officer, BetterUp says:

"What we've found over time is that the most resilient workers are much more innovative. Their teams are more creative. We see that when teams have more resilient leaders, they are more innovative, too. Resilient leaders create an

environment of confidence, empowerment, optimism, and empathy that teams need to innovate." (Jun Wu, 2020)

A survey conducted by McKinsey on 300 senior executives has endorsed a similar relationship between resilience and innovation (Diedrich et al., 2021). More

than half of the responders said the Covid-19 pandemic has helped to find weaknesses in 'strategic resilience' - a term they used to define business models' resistivity to external disruption. Also, three-quarters of the respondents endorsed business model innovation to be the most critical strategic driver in addressing the crisis.



Pre-existing Conditions

This chapter aims to identify key areas of challenges where the industry is struggling regardless of a crisis. Later the researcher has analyzed the role of such challenges in shaping the future through the lens of strategic foresight.

Lack of Innovation

Despite being resilient in the face of natural and man-made disasters and being persistent in surviving under hostile conditions, local entrepreneurs have largely overlooked other key areas of importance, such as process innovation, product development, and new value creation (Uddin, 2019). In the past decade, the workers' monthly wages have significantly increased, but the portfolio of offerings has not been enriched much in comparison (Ahmed, 2019). Furthermore, most RMG premises lack research and development facilities for product innovation and process improvement (Ahmed, 2019). According to Rubana Huq, President of BGMEA, diversification of the industry is one of the reasons for the falling trend of revenue in 2019 (Textile Today, 2020).

Over-capacity is one of the major barriers to product diversification as it narrows down suppliers' focus mainly into the production of staple items (Uddin, 2019). About two-thirds of Bangladesh's export earnings come from only five products - trousers, jackets, t-

shirts, sweaters, and shirts (Prothomalo, 2019). As a result, 73% of manufacturers are involved in the production activities of these five products (Prothomalo, 2019). Therefore, the entire country's export market is highly dependent on low-end regular garment products. Bangladesh has yet to make any noteworthy progress in manufacturing technical or smart clothing items (Textile Today, 2020). There are untapped potentials worth billions of dollars in manufacturing specialized clothing that Bangladesh can explore.

Volume of Export

Although Bangladesh stands second in the index of global RMG export, it is significantly lagging behind China in terms of total market share and volume of export. China serves 39.3% of the global market, whereas Bangladesh's exports account for only 5.9% (Khan, 2017, p. 301). This huge gap between the top two exporters indicates a lack of capacity in high volume production. Recently Vietnam has made remarkable progress in RMG export that is very alarming for the RMG exporters of Bangladesh thanks to the investments made in Vietnam by Chinese investors that ensure offshore production for North American and European brands (Textile Today, 2020).

Import

In Bangladesh, more than 50 percent of the woven fabric used by the local factories needs to be imported from China (The Daily Star, 2019). Moreover, around 80-85% of dyeing chemicals and 40% of raw materials for accessories and packaging are also imported from China (The Loadstar, 2020). Annually, local manufacturers need to import raw materials worth 8 billion dollars from neighboring countries like India, China, Pakistan, and Turkey for woven items only (Textile Today, 2020). Due to high dependency on imported cotton, yarn, and fabrics, Bangladesh's lead time (90-120 days) is much higher than that of its closest competitor, Vietnam (50-60 days) (Islam, 2019)

Foreign & Local Policies

Bangladesh's foreign policies with North America, the European Union (EU), and China significantly influence the cost matrices of RMG export. The country is exempted from paying Goods & Services Tax (GST) which puts them in an advantageous position against competition from developing countries like India, which does not enjoy this facility (Fashionating World, 2017). On the other hand, Vietnam's Free Trade Agreement (FTA) with the EU and its geo-political advantages with China put Bangladesh in a challenging position,

making it increasingly challenging to retain global buyers by offering competitive pricing. Mohammed Hatem, vice president of BKMEA, said in an interview,

"We need to pay 15 percent duty when we export garments to the US, while Vietnam pays only 5 percent. That is how we fell behind" (Harmachi, 2020).

Although mostly favorable to the flourishing of the business, local infrastructure poses some challenges that cannot be overlooked. Industrial electrical utility, for example, is more than three times costlier in Bangladesh than that in Vietnam (Harmachi, 2020). The quality of the service, on the other hand, has not been so impressive. Voltage fluctuations and frequent power interruptions are two of the most pressing issues the industry has been dealing with. (Gateway Media, 2020).

The Economic Model

The increased cost of raw materials and higher electricity charges are not the only concerns. A double-digit interest rate on loans from banks is a strenuous burden on an industry that is built on the foundation of low-cost pricing. Whereas the profit margin is merely somewhere around 6%, bank interest rates may go as high as 12% (Textile Today, 2019). Balancing their operation between such disproportionate figures, entrepreneurs often ship products at the

cost of a net loss. New entrants of the global market, like Ethiopia, Myanmar, are putting additional pressure on the already shrunken profit margin by offering competitive pricing. Countries like Vietnam and Cambodia are also appearing on the scene as growing threats with semi-skilled workforce joining their workforce.

On the other hand, buyers have more options to source their product from and have the liberty to choose from various propositions offered by other manufacturing countries. Therefore, suppliers forcefully settle down with a low-profit margin while negotiating a new business deal. Declining apparel pricing in the global market poses another risk for this labor-intensive market. The abundance of affordable labor is the only significant advantage Bangladesh has over its competition (The Daily Star, 2019).

Changing Consumer Behavior

Fast Fashion has been driving the pace of the global fashion industry for a long time; until recently, the trend has gone down. The Fast Fashion trend inspires international fashion retailers to hire faster and cheaper production units down in their supply chains (The Centre for Research on Multinational Corporations (SOMO), 2015, p. 01). The retail brands that could come up with the latest trends in the fastest time are the ones that enjoy more profit (The Centre

for Research on Multinational Corporations (SOMO), 2015, p. 04). But manufacturing cheap clothing leaves a heavy toll on natural resources. For instance, the production of one cotton t-shirt takes enough water that an average person drinks in two-and-half years (Schipani, 2019). In addition to that, apparel factories worldwide combinedly produce 1.2 billion tons of Greenhouse Gas (GHG) in the form of emissions every year (Schipani, 2019). Not only that, fashion brands outsourcing their products through multinational supply chains often make scandalous headlines with their suppliers' involvement in child labor, forced labor, or gender discrimination (The Centre for Research on Multinational Corporations (SOMO)).

With the widespread communication network and advancement of information technologies, consumers are increasingly becoming more aware of the social, environmental, and economic impacts of their consumption. To avoid such substandard work conditions and hold retailers responsible, informed consumers worldwide have displayed resistance against such wrongdoings by taking part in global campaigns such as 'Who Made My Clothes' (Fig: 05) (Moni Omotoso, 2018). Organized by the non-profit Fashion Revolution, another such movement is The Fashion Transparency Index, which has caught the

attention of responsible buyers worldwide (Kent, 2019).



Fig 05: A poster of 'Who Made My Clothes' campaign. Source:(Konda, 2019)

Thus, consumers around the globe have shown signs of moving away from fast fashion to reduce their footprint on the planet and force fashion brands to bring changes in their way of doing business (Stein, 2019). H&M, the world's second-largest clothing manufacturer and the largest buyer of Bangladeshi garments products, had to shut down 160 stores in 2018 after clearing out 4 billion dollar unsold inventory with significant discounts (Stein, 2019). Another fast-fashion retailer, Charlotte Russe, has filed for bankruptcy recently due to a fall in demand for their products (Stein, 2019). There is growing evidence that groups advocating for

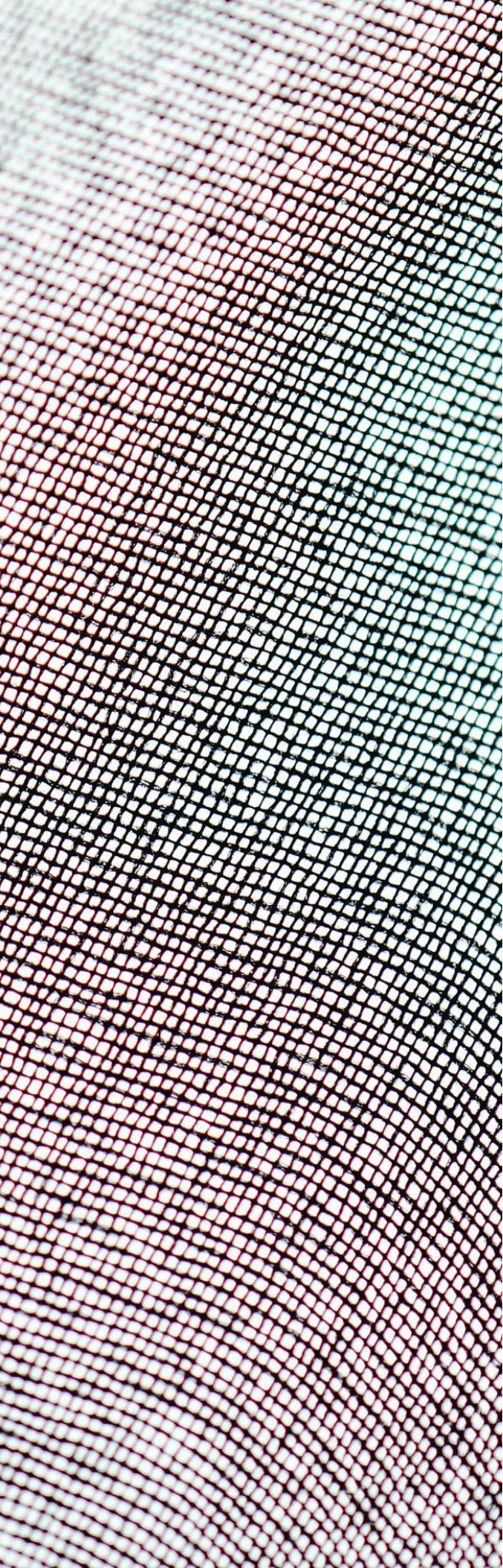
sustainable fashion are increasing in numbers. These groups are mainly from the Millennials and Gen Z population. They are raising awareness on ecological impacts and questioning fashion brands to maintain transparency about the entire life cycle of their products (Stein, 2019). According to the State of Fashion 2018 report by BoF & McKinsey, 60% of millennials are willing to spend more on sustainable brands, and 90% of the same group believe their choices can influence or alter existing business practices (Luna Atamian Hahn-Petersen, 2018). Advocating such changes are brands like Patagonia, who have pioneered sustainability as the central theme of doing business (Rauturier, 2019).

Digital Transformation

The pandemic has changed many perceptions regarding the RMG industry. But one thing that has not changed is the importance of digitization and automation in building a resilient future. According to an estimation by McKinsey in 2018, the production of simple garments such as t-shirts, tank tops, etc., will be fully automated by 2025 (Roberts-Islam, 2019). In the age of Industrial Revolution 4.0, organizations must orient strategic actions regarding a mandatory transformation that they need to undergo to digitize their core. The application of bots, software, analytics, machine learning, and artificial intelligence

can help to improve service quality. At the same time, usage of Enterprise Resource Planning (ERP), Computer-Aided Design (CAD), Management Information System (MIS) can increase flexibility, productivity, and efficiency. According to Tata Consultancy Service (TSC) COVID-19

Business Impact Survey 2020, organizations with essential digital capabilities not only adapted more quickly to the new normalcy of life but also outshone others in excelling business (“TCS COVID-19 Business Impact Survey 2020,” 2020)



Research Methodology

Background

Despite their impressive contribution to the growth of the industry and their economic importance to its value chain, the subcontracting sector has not been explored adequately by scholarly literature. Lack of visibility and transparency has also contributed to fewer sources that support concrete evidence of contemporary findings. The scarcity of trusted sources also raises concerns about the unreliability of data (Labowitz & Pauly, 2015).

Therefore, a rigorous analysis of the pandemic's impact on the industry demands an up-close look into the experiences of the concerned stakeholders. Thus, the researcher explored viable data collection techniques that are appropriate to the context. However, respecting COVID-19 travel restrictions across international borders, the researcher curtailed scopes to feasible methods that can be performed remotely. Options like Focus Group Discussion and Empathy Mapping Workshop were disregarded due to the lack of control the researcher would have had on remote facilitation. Taking confidentiality and privacy of participant's identity into account, the researcher finally opted for one-on-one virtual interviews for the entrepreneurs and an anonymous

questionnaire survey for the workers. Later, the questionnaire was also discounted for various limitations, detailed in the 'Limitations' section.

Screening Process

Researcher Shahria Khan distributed a call for participation with a link to an online screening form to potential candidates via his professional contacts and through various social media groups. The form dynamically filtered out all ineligible inputs and only allowed eligible entry providers to move forward. After completing the screening process, qualified candidates had access to the consent form, which had taken them into the next step. This automated screening process ensured accuracy in participation without any physical interaction.

Participants

The screening process confirmed the selection of adult (equal or more than 18 years) participants of any gender, who are either an entrepreneur or an employee of small-sized (operating with <1000 workers), informal, subcontracting, apparel firms in Dhaka, Bangladesh. Gender neutrality in the selection was important as this research

intends to investigate the role of resiliency in the crisis regardless of participant's gender, age, race, or ethnic background. However, all participants needed to be adults enough to provide their consent. Research suggests, standard-sized SFs generally employ 55 workers on average (Labowitz & Pauly, 2015).

Interview

Successfully screened participants received invitations for an hour-long, semi-structured interview session scheduled at their preferred time. Following a semi-structured interview format, the researcher probed participants with questions that explored the deep underlying causes behind their motivation. Designed questions were to provoke vivid descriptions of their experiences during the pandemic and highlight the processes of choosing

alternative paths while navigating their whereabouts during the crisis. In this way, the researcher could correctly capture the drivers of innovation shaping the industry's future. The participants were also allowed to give free expressions on their plans of achieving a desired future.

Interviews were mainly taken over online video calling app Zoom for familiarity with the participants, although an additional link of Microsoft Teams was also given to them.

Sample Size

The researcher interviewed ten entrepreneurs for this research. Experts suggest that for a homogeneous group of interview participants, a sample size of 10-12 is ideal for reaching a saturation point where gathering fresh data no longer sparks new theoretical knowledge (Latham, 2019).

Data Analysis

Process

The researcher followed a narrative data analysis technique to evaluate collected raw data from interviewees. It's a qualitative analysis method that reveals underlying causes or meaning in a participant's response. The narrative data analysis technique is a research-focused method of analyzing conversational narratives linked to an event or incident. It is a helpful technique to validate assumptions by analyzing supplementary questions connected to a central theme or the research question (Hammond, 2019). In this research, the researcher used it to extrapolate information relevant to the drivers of innovation.

First of all, raw data was collected by recording interviews upon taking prior consent from the participants. Each questions' answer was then plotted together in an Affinity Diagram mapping exercise. Affinity Diagram is a collaborative approach to make sense of large data sets that include ideas, opinions, insights, and needs (Rikke Friis Dam & Teo Yu Siang, 2020). Participants using this tool in a physical workshop place similar idea to generate clusters that will set the foundation for central themes. Ideas are then linked across themes to go deeper into further analysis.

Due to various limitations of holding a physical workshop, the researcher clustered similar information together based on vote count for each mention to mimic the process of an actual workshop. The researcher plotted raw data in a digital canvas using a remote collaboration tool, Miro. Then each insight was given a number based on the total vote it has received. As the central themes started to develop, the researcher also found growing patterns of sub-theme around the context. In the early phase of the analysis, sub-themes were arranged next to the central theme in circular shapes to form larger clusters. Later, each element was further characterized by associating its significance with the varying size of the circle. The larger the size of the circle, the greater is the significance or importance.

Scrutinizing data further into the analysis, the researcher followed a color code to label the circles. Each color refers to a driver of innovation that has monumental roles to play in shaping this industry. These driving factors are derived from the literature review and research findings. Circles colored with solid fill are associated with growth, whereas border-only circles are associated with degrowth. Later in this paper, findings from the literature review have also been described using the same color codes.

The Driving Factors

The six driving factors of innovation derived from research findings are Identity, Leadership, Production, Policy, Process, and Partnership. Research finding suggests these drivers carry significant importance in distorting the future vision both in positive and negative ways. They will also play an essential role in identifying vulnerable, blind spots in the recovery process. In the synthesis part, the researcher has developed three alternative future scenarios from the intertwined relationship between these six drivers, presented in the latter part of this paper.

Identity

The SME, non-member backward linkage manufacturers are one of the large contributors to the economic growth of the overall RMG industry. Apart from that, the industry generates a constant flow of skilled and semi-skilled laborers in great numbers. According to one estimation, the backward linkage industry is worth 5.1 billion dollars and employs 5.5 million workers (Mapped In Bangladesh, 2020, p. 03). However, according to many participants, the true size of the industry is much bigger than that. Despite such noteworthy contributions, the

industry receives little or no media coverage compared to its formal counterpart (Mapped In Bangladesh, 2020, p. 02). Non-member subcontractors often struggle to find their identity as part of the RMG value chain. Their presence is eclipsed by superior manufacturers who bank on their reputation and legislative status. This lack of identity allows non-members to work freely without the hassle of paperwork, legislation, and the cost of membership of an association.

However, the process also puts them in a disadvantageous position when it comes to price negotiation. Generally, larger firms outsource excess orders to the lowest bidder for timely delivery. For the last few decades, the number of bidders has increased rapidly. Thanks to inadequate monitoring, fewer restrictions, and good business opportunities that had fueled the growth, the price negotiations are subjected to constant threats of being outbid by aggressive newcomers. Bidding competition often takes down profit margin dangerously low for entrepreneurs to sustain their business. Sometimes the price is offered lower than the manufacturing cost of a product. Participants have identified such practices as ‘unhealthy’ and ‘toxic’ for the industry.

Consequently, plummeting profits prevent the accumulation of enough funding for the

risk-takers to invest in sustainable growth opportunities. Underdeveloped identities thus produce lots of barriers to innovation. Identity also profoundly impacts the internal developments and external dynamics of an organization (Lin, 2004). It influences the direction of innovative activities and, in turn, reinforces how organizational identity evolves (Anthony & Tripsas, 2016, p. 418). Hence, poor organizational identity has implications on both internal and external innovation management processes. Interviewees particularly recommended taking the crisis as an opportunity to restore their reputation as a committed partner.

Leadership

This paper identifies key areas of leadership where entrepreneurs focused during the lockdown. Their reaction toward the crisis was instantaneous and vital to the sustenance of their businesses. The participants indicated deep underlying causes that resulted in such responses. Most administrative actions taken during the lockdown were linked either to immediate rescue planning from economic downfalls or to substantiating resources for survival in the near future. Almost all participants prioritized worker's safety and security through their initial response. Many were

set back for planning a worst-case scenario following massive order cancellations amid lockdowns. While some entrepreneurs downsized operations to minimize risks, others put their bet in the future by retaining experienced workers. Beyond their initial responses, entrepreneurs also shared their vision of the future. Unlike their initial reactions, participants expressed interest in following different paths in future planning. Analysis suggests leadership style was a central force in such planning.

Participants were divided into two groups by the directions they had indicated to follow. The first group of responders abdicated further capital investment before the crisis is over. Their vision of the future was vaguely sketched for the transitioning period and beyond. Many participants of this group had responded to have little or no clue about their next action plan. They also shared the intention to reduce operational expenses by downsizing working hours for staff under their direct payroll, although none of the entrepreneurs confirmed any forced lay-off. Instead, they emphasized retaining experienced workers by keeping them on their payroll even if they had no work to do. Such conservative responders justified their actions by playing on the 'safe side' until the situation improves or changes.

“Keeping a low profile during the crisis would cost us minimum damage and will prevent further losses. At this moment, we are focusing on survival. No future planning is in our mind at this moment.”

One interviewee responded to a question asking about the vision of his future for the industry. However, responding to a probing question, some participants revealed that their ultimate response to the crisis might involve relocating business elsewhere if this catastrophic crisis prolongs longer.

The other group of participants expressed a more opportunistic vision of the future. Despite being in the same situation, they exhibited a more resilient mindset while portraying the future. The latter group had focused on developing a collective response to the predicament by fostering cooperative bonding among close peer groups. Participants of this group also emphasized managing integrity during challenging times to maintain calm and avoid anarchy.

Leadership played a central role in rebuilding team dynamics as well. One participant of this group had swiftly altered a vacant space in his factory into temporary storage for essential supplies. Another participant reported having her workers engaged in voluntary delivery service of critical commodities to keep their morale high. When asked about their future,

participants of this group had referred to some pre-existing conditions, which they identified as barriers to success. The participants identified poorly developed innovation management processes as a big challenge for the industry. If it has to grow more, the sector must enrich its portfolio of offering in high-value production.

Another highlighted area of improvement that emerged from the interviews was the lack of professionalism. Inefficient processes leading to poor productivity are a common occurrence for SME factories. On top of that, operating within a dangerously narrow margin shrinks opportunities to focus on resource development. Not enough scopes are there for the workers to follow a visible career path with growth opportunities and lucrative incentives. A poorly incentivized workforce also means low hiring capacity of the firms in employing professional resources.

Production

Innovation follows a top-down approach for the subcontracting industry largely because of their poorly incentivized economic models. Often NS firms operate within a hair-thin margin under the shadow of a more prominent firm. They have the less financial freedom to make significant changes in the system. Participants of this

research have identified this limitation as one of the major obstacles to innovation. For the same reason, the subcontracting industry is heavily reliant on larger factories for new orders. Mass order cancellation impacted direct exporters as well as subcontractors who were working for them.

Consequently, challenges were cascaded down to the endpoint of the value chain affecting every stakeholder involved. The crisis exposed how fragile and vulnerable this entire value chain can become without a continuous supply of new orders. All participants unanimously agreed that the financial crisis started almost immediately after order cancellation. They also acknowledged that there is no future lying ahead, be it good or bad, until production is resumed. Thus, when asked about their future based on the current situation, they repeatedly insisted on going back to production first. Without a constant supply of orders, this massive value chain has no reason to exist.

Few participants shared stories of taking innovative approaches to either resume production or keep the momentum going amid restrictions. These approaches include reorganizing working spaces, introducing new safety guidelines, producing safety equipment like masks and PPE. But none were effective enough to promise long-term sustenance. Most participants emphasized

creating new values as part of their future planning only if the global demand restores to the state where it was in the pre-crisis time.

However, that will have to be preceded by widespread acceptance of sustainable business practices first. The practicality of such reformation would call for a collective effort in developing a mindset of professional attitude, which is unlikely to happen without collaborative effort and advanced monitoring. One of the participants emphasized following methods like 5S to increase productivity. He referred to a case study where an organization increased its productivity up to 128% after following this method. 5S is a workplace organization method developed in Japan and primarily used in Lean manufacturing (Sutevski, 2016). While sharing this information, the participant also criticized workers' reluctant attitude in following such disciplinary methods. Although productivity obsession may reduce resilience (Martin, 2019), the industry first needs to find an equilibrium spot to consider this trade-off.

A more optimistic vision of a distant but plausible future portrays manufacturing products and supplying skilled human resources for the global industry. On the other hand, several participants imagined a less innovative but more predictable future. In this future, online marketplaces evolve to

become a more popular choice for procurement. Buyers will be more likely to have sourced their products through online channels. It will allow smaller players to compete with larger production units and eventually serve more orders. There is a growing number of emerging markets to which Bangladesh was catering before and even during the pandemic. Participants are hopeful that new revenue channels from new markets will not only compensate for the falling revenue trends but will also sustain growth in the future. Find more details about emerging markets discussed later in this paper.

Policy

Most participants reported having their vulnerability exposed badly during the COVID-19 crisis when the Government of Bangladesh declared an \$11.2 billion stimulus package without including non-member firms (Mapped In Bangladesh, 2020, p. 03). It curtailed scopes and opportunities for the SME entrepreneurs by limiting access to public funds and worsening other prevailing conditions such as the weak bargain in profit distribution. Not only designed policies but also their implementation and communication plans disfavoured the NSs. The stimulus package included BDT 200 billion for banks to lend working capital as a loan to the SME industry (cottage industries), but multiple issues related to the formal proceedings discouraged firms from taking this loan (Raihan, 2020). None of the participants mention taking this loan.

It is undeniable that the announced funds and policies for the RMG export industry reflect the government's honest intention to support it (Uddin, 2021). However, due to its economic significance, the RMG export industry is backed by a strong advocacy group to bargain with people in power. The trade bodies maintain strong liaison with

the government and represent the export industry in policy forums.

On the other hand, non-member entrepreneurs lack the support of any formal association. Without a legal representation, their voices remained absent in the dialogues for emergency relief planning.

“As if we do not exist,”

one participant said during the interview. Many participants have indicated relocating resources once the dust is settled.

In 2019, the Department of Inspection for Factories and Establishments had confirmed that about 800 to 1000 factories operating in Bangladesh are non-members (Munni, 2019). In the case of unauthorized subcontracting, policies stereotypically hold suppliers accountable without acknowledging the circumstantial pressure that may have influenced their decisions (Kim, 2020). A recent study suggests that stricter policies are not the only way to prevent unauthorized subcontracting (Caro et al., 2020). Hence, more comprehensive research may bring more clarity to the topic and help policymakers understand the implications of non-inclusive policies more deeply.

Most participants of this research refused to imagine a future without having a functional

safety net. According to most candidates, a financial recovery from the downfall of this pandemic would become strenuous for entrepreneurs if the state policy does not include non-members into their plan. Thus policies likely to play an essential role in shaping the future for the NS industry.

Process

In response to the COVID-19 pandemic, the innovation landscapes are changing across regions, countries, and industries to sustain businesses within the perimeter of economic viability. An existential crisis inflicts a critical sense of urgency, enabling organizations to drop all other priorities and put all hands on deck to solve just one problem (Johnson, 2020). 3D printing enthusiasts, for example, printed ventilator splitters for the Covid-19 patients when hospitals across the US were running short of supplies (Culver, 2020). Crisis demands prompt actions on ideation, resource planning, and execution (Clark, 2020). Participants of this research shared similar experiences as well. At least three participants reported having their regular processes altered significantly in response to this crisis. Others modified their normal operations partially. Entrepreneurs who had considerably changed operational processes said that it had triggered from their worst-

case scenario planning. Worker's safety and sustenance of the business were two of the most primary concerns in their mind.

Participants chose different paths for innovating their way out of the crisis. While a group of participants mainly focused on minimizing impact following safety precautions such as reducing staffing, limiting the operation, and de-prioritizing productivity, others had responded by creating new value through frugal innovation. Such innovative solutions involved selling unsold inventories to online marketplaces, approaching local retailers, and producing protective equipment for the first responders. However, none of the participants executed anything too radical or extreme due to a lack of funding. Four out of ten responders had to borrow money from individual lenders to pay the due wages of their workers. Under such limitations, a funding opportunity for anything radical would have been too expensive for the business.

As discussed earlier in this paper, a narrow profit margin has been a long-persisting challenge for the SME industry. Most factory owners reinvest a significant portion of their earnings in raw material imports (Akter, 2020). Moreover, Bangladesh's high dependency on import (60% of oven fabrics and 80-85% dyeing materials from China) increased production cost by 40% due to a

shortage of raw materials in the first few months of the pandemic (The Loadstar, 2020). On the other hand, buyer's payments have decreased 3-4% in the last decade, making production costlier for the suppliers (Akter, 2020). On top of that, subcontractors often need to pay for the commission of broker houses as well. SME manufacturers operating in such hair-thin margin are constantly battling for survival, regardless of the presence of a pandemic. Hence, a crisis fund is often non-existing for an SF, let alone any funding for research and development.

Participants have identified some commonly practiced processes that refrain positive changes. Their progressive vision of the future involves the development of these processes.

First of all, they look forward to introducing new technologies that will automate critical processes, including but not limited to product design, logistics, transportation, packaging, resource planning, and resource optimization. Most garment factories of Bangladesh operate at 45-55% efficiency (Akter, 2020). With manual monitoring systems, work standards are difficult to improve. Participants with progressive vision concluded, in addition to a disciplined workforce, the industry must practice higher ethical standards with due diligence and accountability if the future has

to be any different from what it was before the pandemic.

Secondly, three to four years down the line, the SME industry should build more research and development capacities to develop high-value products. Although none of the participants particularly highlighted the importance of research, there is empirical evidence available in the literature to justify the role of research as a key milestone in achieving their desired future.

Diversification of the portfolio is another area where participants would like to focus on innovating new sources of revenue. And that would require alignment with the rapid expansion of online businesses. With the widespread availability of the internet and mobile technologies, buyers have higher degrees of freedom to source products from a wide range of suppliers who fulfill their ever-changing needs. International buyers can directly access suppliers through online platforms, such as Alibaba and Facebook Marketplace, without having any middleman involved. This transformation has the potential to disrupt the way this industry operates today. Suppliers will receive orders from SME firms demanding smaller quantities, which would not have been entertained otherwise by a more prominent manufacturer having minimum quantity restriction. Evidence of such a trend was reflected in patterns of

participant's responses when they were asked about alternative business plans. Many participants reported that they were already supplying products for buyers from The Middle East, Philippines, Malaysia, and other countries, where import policies are less restrictive than Western countries. However, participants also articulated alternative futures where key events may alter the fate of their organization.

None of their plans would have the overpowering capacity to alleviate this industry from the dire economic ordeal it is already in. Certain conditions must be fulfilled before organized processes can start remarking any positive change. Poor financial conditions may prove to be fatal if the global demand for apparel products is not restored. NSF with inadequate financial capacity will find it increasingly difficult to survive if a prolonged crisis intensifies already worsened conditions of an unhealthy price war.

In the long run, the SME industry losing its control would mean the overall RMG industry would have to deal with lower capacity. There is evidence that many SME factories have closed their operation in recent times as they could not generate enough revenue to sustain operations (Akter, 2020). Survival will continue to top the list of priorities while pushing 'necessity of innovation' further down in that list. The

remaining survivors may be forced to compromise in quality.

Partnership

COVID-19 pandemic has highlighted the importance of effective collaboration in a crisis. However, a crisis can also lead individuals to solve their problems alone (Gardner & Matviak, 2020). When businesses are in trouble, leaders often limit their actions to self-preservation, which creates mental obstacles to innovating their way. Such repellent individuals may also get confronted by a phenomenon called the 'performance pressure paradox' stemming from anxiety and the risk of failure (Gardner, 2012).

They are less likely to try new things during a crisis and may prefer to follow historically proven paths. In terms of the desirability of partnership, entrepreneurs of NSFs who participated in this research can broadly be categorized into two categories. The first group reached out to their peers and called out for co-survival. They formed 'micro-ecosystem' within their peer group to support each other. However, such tribal formation also prevented them from seeking out new opportunities outside of their group. Mostly trusted allies, who had followed this path together for a long time. At least one participant confirmed that she

supported stakeholders with voluntary service, while another participant confirmed joining a syndicate of five SME factories. This group of entrepreneurs was optimistic in envisioning a brighter future after the crisis. They also shared a collective vision of recovery from the crisis combining multiple strategies. Two participants, for instance, had contacted their local allies to sell left-over stock.

The second group of entrepreneurs tried to manage this crisis individually. This group was less optimistic or hopeful about the existence of their organization in a better future. Their governance model primarily gravitated toward risk aversion when questioned whether or not the organization should stay dormant during the crisis or try innovating solutions to find a way out. The members of this group took normative actions to minimize risks and uncertainties. One participant feared, having weaker bonds among smaller firms can lead to further isolation and polarization if the crisis prevails. However, further isolation may affect the relationship between contractors and subcontractors, given the power gap between them. One participant shared during his interview:

“While a buyer is paying 30-35 taka per item, a subcontractor may receive only 9-10 taka from its contractor.”

The pandemic has exposed how badly the industry has exploited the power gap. Thousands of workers were laid off in Bangladesh because buyers refused to pay their overseas suppliers, violating partnership agreements unlawfully (Mei-Ling McNamara, 2020). Asda, a UK-based supermarket chain and a subsidiary of Walmart, even demanded to pay up to 70% less for assignments that were already completed but had not been shipped (Worker Rights Consortium, 2021). The consequence of denied agreements from these wealthy brands cascaded down to millions of workers who had been working for them directly or indirectly (Hoskins, 2021). The crisis not just eroded external partnerships but also caused harm to internal bonding of trust and faith. According to the Business and Human Rights Resource Centre (BHRCC), some firms disproportionately laid off workers who actively advocated for worker unions (Grant & Carroll, 2020).

Covid pandemic not just exposed power gaps but also revealed how unified partners could bring solutions. A joint lawsuit representing 21 Bangladeshi factories was filed against US-based retail brand Sears in June - which they had won in January 2021- making it the largest lawsuit win ever by any Bangladeshi supplier against an international buyer (Dhaka Tribune, 2021). Also, peer pressure from organizations like

Human Rights Watch persuaded Primark and H&M to agree to continue payments for their workers (Retail Detail, 2020). Such collaboration is needed to give voice to the marginalized communities and create equal ground for innovation at the root level. Participants have expressed their desire for strengthening partnerships between

stakeholders by forming a larger ecosystem. They referred to a mindset shift toward long-term vision and collective accountability in restoring the image of subcontracting.



Interventions

The Map

This synthesis map is the systemic representation of dynamic and complex relationships conceptualized by the underlying interpretation of knowledge translation and communication. The map is a visual guideline grounded by the theories of visual design language to describe the architecture of a complex, multilayered, dynamic system. The researcher has developed a mental model for the innovation landscape of the NFS industry using data obtained from research and literature. Users can expect to use it as a tool for exploring plausible futures within the boundary of a contextual system defined by the criteria and scopes of this research.

This visual mapping technique is inspired by two different tools and methods - Future Triangle and Backcasting.

- The visual framework is laid on an x-y axis graph where the **horizontal axis** represents a timeline starting from five years before the crisis and ending five years after it. This timeline is basically a linear representation of The Futures Triangle (Inayatullah, 2008), which expresses a plausible future in relationship to past challenges,

present realities, and possible futures.

- The **vertical axis** of the x-y axis graph represents the overall recovery states of the industry before, during, and after the crisis. Elements of change are strategically plotted against the timeline allowing users to identify key deflection points along with surprises and blind spots.
- There are clusters of elements that signify a bundle of actions that may coincide on the timeline. The centerpiece of each group contains the central theme. Clusters also have a role in aiding users in formulating a mental model of their own to reach a desired future.
- In interviews, participants were asked about their desired future model and subsequent steps that need to be followed to reach there. These questions were asked intentionally to identify key milestones that users can mentally connect with their desired pathway to the future. The researcher has practically embedded knowledge of applied Backcasting in the timeline for users to navigate with ease.

Navigation

The purpose of this map is to be a dynamic tool for making informed decisions and minimizing risks of uncertain futures. Each element plotted against the timeline contains three pieces of information.

- A. The size of the element refers to the degree of evidence found (Fig: 06). The greater the size, the more substantial the evidence. A relatable scale is given in the legends of the map for better navigation.



Fig 06: Degree of evidence captured with different shaped objects (scale 40%)

- B. Next, the shape of an element represents the source of information from which data is collected (Fig: 07). Square-shaped figures stand for evidence that is found in literature only. The circular shapes refer to research data, and square shapes with rounded corners refer to data supported by both literature and research.

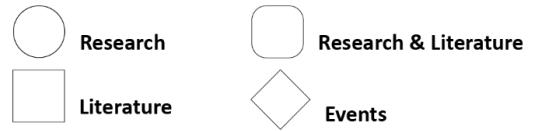


Fig 07: Different shapes representing different sources of data.

- C. The third and final information embedded in an element is its color. Following the same color codes (Fig: 08) of research data (As discussed in Data Analysis), literature insights were also marked in six different colors and placed on the map strategically. Colors and their respective drivers are given in the legends of the map.

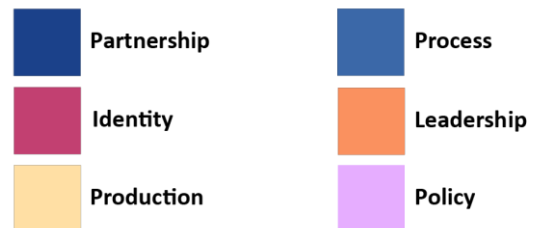


Fig 08: Color codes used for six major drivers.

- D. There is a special type of element that is marked with diamond shapes (Fig: 07). Elements marked with that shape represent key events and hence have no color coding.

Methodologies for Intervention

Alternative Futures

In the interviews, participants were asked probing questions to provoke their vision of the future. The questions are inspired by six basic future questions discussed by Sohail Inayatullah in his research paper ‘Six pillars: futures thinking for transforming’ (Inayatullah, 2008). Answers to these questions were deliberately articulated into narratives that indicated key drivers of alternative futures. Alternative futures are one of the six basic pillars of futures thinking (Inayatullah, 2008). It’s a powerful technique for managing uncertainty and improving decision-making (Goldschmidt, 1984, p. 01). While it is impossible to predict a future accurately, an alternative future-thinking approach can minimize risks and uncertainties of distinctive but plausible futures.

Scenario Building

There are many established theories to construct scenarios of alternative futures from present-day drivers and trends. The researcher chose to apply the multi-single variable method (Inayatullah, 2008) in building future images. With the Multi-single variable method, users can create a

range of future scenarios based on the chosen drivers, such as technology, corporation, values, and/or demographic, etc.

The reasons for choosing this method are three-fold:

- Focus on the strongest contenders of change that hold the key to shape innovation landscapes for the NS industry. This research suggests that the crisis has instead intensified pre-existing challenges more than the ones it has newly produced.
- Define the characteristics of innovation within the confined boundary of present reality. A reality that has been shaped by the past and will continue to impede the future, regardless of the presence of a pandemic.
- And finally, to paint the future concerning resilience, one needs to look back into the past for historical evidence and scan the present for contemporary findings. The timeline derived from The Future Triangle can help draw such a relationship in terms of the six drivers specified.

Modeling

The models of leadership discussed in ‘Leadership’ dictated the choice of scenario modeling technique. Being grown under the

shadow of larger units and often being charged for their unlawful actions, SME NSFs have operated under strict obligations and restrictions. Imposed restrictions may have possibly resulted in better safety standards for the industry, but they have also discouraged advocacy for this group. Therefore, powerful scenario-building tools, such as the Causal Layered Analysis (CLA), that produce a wider range of future perspectives would have captured greater details in the worldviews but narrower information in the concerned field. Furthermore, litanies known to have surfaced on mainstream media are mostly related to the overall RMG industry. Moving forward with such evidence could have resulted in generalized output. To get a sharper focus on the research topic, the researcher has followed a model developed by Peter Schwartz, which specialized in conceptualizing organizational futures (Inayatullah, 2008). In this model, the future is described with four scenarios:

1. **Worst Case:** where nightmares become true
2. **Business as usual:** Continuing the regular path
3. **Best Case:** where the organization thrives
4. **Outlier:** A surprising future defined by a major disruption.

Ironically, the outlier scenario defines the present context of the situation (as of 31st Dec 2020). Hence, it would be redundant to include this scenario in future planning. Instead, the researcher explored three other scenarios while keeping the ‘Outlier’ scenario as the anchor.

To avoid confusion with the terminology and not indicating any path as ‘best’ or ‘worst’, the researcher has renamed them as follow:

1. **Scissors Cut** (Fig: 09).
2. **Double Needle** (Fig: 10).
3. **Feather Stitch** (Fig: 11).

Scissors Cut

In this scenario, the industry struggles to find its way out of the crisis for the next five years. After the initial economic downfall in 2020, entrepreneurs find themselves drowning in debts. Without financial support, it is doubtful they will make it to 2021. Thanks to the flawed cost-vs-revenue model that has intensified the problem, orders are minimal and disproportionately claimed by a handful of top-tier suppliers. Firms surviving with minimum orders are making lower profits than what they used to

make before the pandemic. International restrictions on travel have increased lead-time making it costlier to import than the previous year. Workers are paid irregularly from personally borrowed money and told to stay home, but staying home is not an option for a daily wage earner. Experienced and loyal workers are migrating to larger firms compromising with a lower but regular supply of remuneration. Suppliers, who downsized operations to minimize risks, had put their bet on getting back to business as usual. Unfortunately, the crisis has lingered for more than a year, making it more challenging to come back.

By the end of 2021, half of the world population is vaccinated, but COVID-19 is far from being eradicated. The global apparel industry continues to battle with low demand. Plummeting demand keeps the fierce competition growing, making it harder for smaller factories to get new orders. Factories with association membership could regain economic stability with the help of long-term recovery deals powered by the government's stimulus package. Non-members find it increasingly harder to negotiate bargains among each other and within a larger ecosystem. Desperate entrepreneurs are financially too weak to challenge this status quo and to invest in innovation. There is barely any room for research and development. Monopolistic polarization is favoring a

handful of suppliers forcing others to the verge of extinction.

In 2023, entrepreneurs will start to relocate resources elsewhere. Vietnam has now taken the position after China as the second-largest exporter of RMG. Buyers also feel more confident in dealing with Vietnam for their disciplined workforce, structured processes, and commitment to deadlines. Due to the low demand for fashion products and decreasing popularity of fast fashion, buyers no longer find Bangladesh's low-cost-high-volume export attractive. For the remaining market, competition is fierce, and BGMEA will have to increase monitoring because historically, compromising profits have increased the risk of unauthorized subcontracting.

In 2024, NSFs find themselves on the verge of extinction. Those who are still in the business are either planning on quitting or trying to supply local retailers. In 2025, the overall industry suffers a shortage of skilled workers. Unskilled workers, who used to get their first hands-on experience in SME factories, now have fewer places to go.

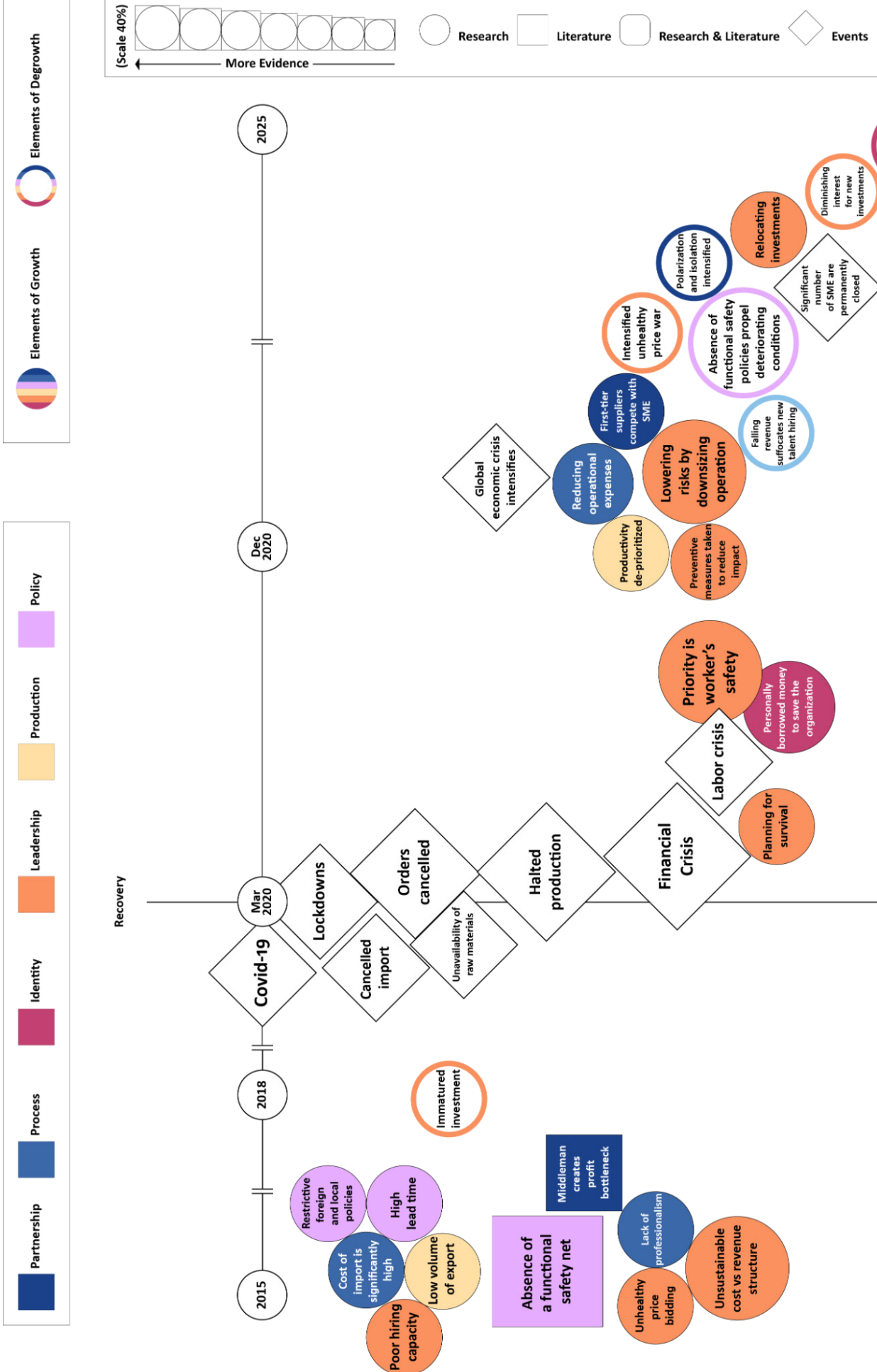


Fig 09: Scenario 'Scissors Cut'

Double Needle

At the end of 2020, Bangladesh RMG slowly recovers from the economic crisis. Global fashion houses shift their businesses online to adapt to the new reality. Vaccine rollout has started, but the progress is slow, and it will take more than a year before everything goes back to where it was in 2019. The pandemic has shaken the economic stability of the industry, but it could not disrupt the unbroken spirits of young entrepreneurs. Their collective approach to survival has delivered for the worst part. Now it is time to rebuild businesses as the world needs to leave this crisis behind. The pandemic may have left a deep scar, but the industry knows well how to rise back from deep trouble. Historically it has shown resilience against natural and man-made disasters.

In 2021, the global fashion industry restores economic stability. Most procurements are sourced, managed, and maintained online. SME factories are pivoting fast to cope with this transformation. The crisis has forged bondage between firms who used to compete with each other. If it were not for their collaborative approach, none of them would have survived alone by now. Together they act as a tribe that competes against another tribe. These tribes have many limitations within their bubbles, but they act

as a composite plant, a one-stop solution for an external buyer. Integrity and ethical standards are maintained strictly as the margin of error is non-existent. Bangladesh has also regained its position as the second-largest exporters of RMG. Although the volume of export and diversity in production is satisfactory, the recovery has not been as impressive as Bangladesh's closest competitors. Vietnam could reduce the lead time essentially to within thirty days by adopting new technologies. They could swiftly mobilize resources with the help of favorable policies. However, Bangladesh has shown some real progress in terms of short-term recovery. But barely any noticeable change has been made to conventional work processes that most firms have followed. Internally, the changes are scattered, sparse, and inadequately absorbed.

By 2022, NSF's have enough orders to repay their loans incurred from borrowing money on personal grounds. Tribalism has helped to save the industry, but it has also intensified polarization among groups. Divided by different levels of ambitions, there is no unifying leadership to call for an association. Therefore, their voices are still unheard in top-level discussions. Now that the pandemic is fading away, some firms are drifting apart from the tribe they belonged to. Many entrepreneurs are leaning toward alternative markets hoping to form new

partnerships. In either case, core business practices have remained the same.

In 2023-2024, Bangladesh continues to focus its business strategies around five staple items. Due to the pandemic, many workers, who had moved away to alternative careers, are finding their way back to old professions. Stakeholders are still promoting affordable labor costs as their unique selling point (USP), but that too is threatened by many African competitors. Buyers constantly under the pressure of regulations, investors, consumers, and journalists are looking for cheaper and greener solutions. The green revolution has transformed the way top-tier manufacturers of Bangladesh operate. Many are pioneering the movement by gradually increasing investments in greener technologies. But these well-funded factories do not represent the majority of the supply chain. Most smaller units in the ecosystem find it much harder to transcend from traditional to greener production smoothly. The pandemic has left them with debt that will not allow ambitious plans involving substantial resources.

In 2025, physical malls around the world are re-opened. As a result, Fast Fashion has regained tractions, although slowly losing ground to sustainably sourced products. Innovative activities are disproportionately taking place in the high-end supplier of the

supply chain, where only a handful of factories have internalized sustainable practices. Government policies reflect a greater interest in the overarching industry, but they are still non-inclusive, marginalized, and less incentivized for the NSFs. For example, policies are there to restrict firms from wrongdoing, but hardly there is any program that incentivizes them to be compliant.

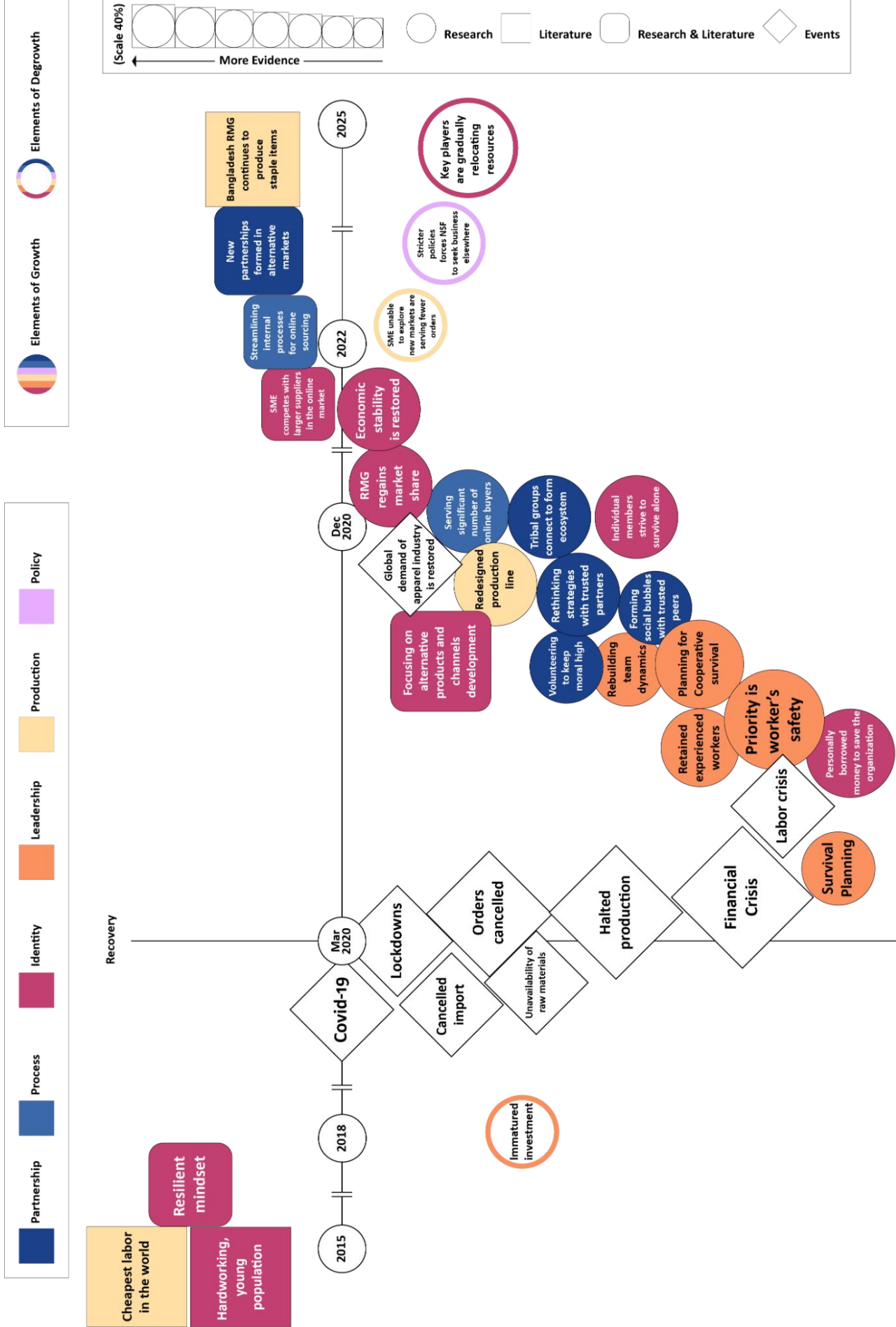


Fig 10: Scenario 'Double Needle'

Feather Stitch

The NS industry, woken up by the shock of a pandemic, starts to redefine what is possible in the future. United as never before, it starts mobilizing funds for internal process development. The co-operative network formed for the initial survival has also worked as a channel to utilize distributed resources. Innovative processes are now managed and shared between the network members, often going upstream, suggesting new changes to the core functionalities. Initially, the focus is to revive economic strength. Thanks to a successful national vaccination campaign that has helped factory owners to resume operation by the end of 2020.

In 2021, the global fashion industry reconnects with its customers after a long pause of economic recession. The delay was critical for the sector to reunite with a common goal. The restart means not going back to business-as-usual. Instead, it is about fostering growth and sustainability in every step of the supply chain. That means first-tier suppliers recruit more accountable, responsible, and equitable partners, who, instead of reactively following instructions, step up proactively in suggesting new changes. Suppliers equipped with the latest technologies are more preferred as partners

than those who follow traditional methods. Widespread application of advanced technology will reduce the overall cost of production by optimizing resources. Cost reduction will ultimately compensate for the extra cost incurred for the installation of new technologies. SMEs following the trend will have monetary funds available to develop a professional workforce.

In 2022, the SMEs start seeing early signs of development in the human capital index. Sustainable business practices are at the center of innovative activities. Automated systems, monitoring, and advanced reporting lead to maximum utilization of resources. Cost minimization coupled with greater efficiency is financing human capital development projects. At this point, the industry has the opportunity to look beyond just subcontracting. Entrepreneurs aiming for ambitious goals are looking beyond just staple products. Reformed management workflows remove redundant steps from the procurement processes allowing SME owners to contact buyers directly. Gradually the importance of mediators is diminishing. Smaller firms are experiencing greater stability, freedom, and belonging.

In 2023, new value creation undergoes a major transformation. The hiring capacity of SMEs improves over time to expand the horizon of possibilities beyond their existing portfolio. The trend of embracing

technology that started in 2020 continues to foster innovation in 2023. Product portfolios continue to grow following the expansion of f-commerce and e-commerce businesses. The industry sees more experiments with high-value garment products such as uniforms, gowns, protective equipment. There are more motivations for smaller firms to research value creation.

In 2024, the identity shift finds reflection in the local policies. Governments and regulatory bodies recognize NS as a critical part of the RMG value chain. Compliant factories are provided with support and funding from financial institutions as part of a more extensive campaign aiming to boost local industries. The leaders of the NSF form an association to have their voices heard in higher forums. Consequently, international buyers will be more assured and confident in introducing subcontractors as part of their value chain. As more factories unionize under the legal framework, they will continue to evolve to find new identities, voices, and ambitions in the process.

In 2025, the SME industry enjoys more choices than ever before. Firms are enjoying financial liberty to attract and hire new talents. Global movements of sustainable manufacturing in clothing continue to justify the acceptance of new practices.

Bangladeshi local brands are now competing in the international market while advocating change for an equitable, sustainable, and resilient value chain. However, changed identity has influenced a shift in focus from productivity to sustainability, which slows down economic growth. At the end of 2025, Bangladeshi professionals start to find higher positions in the RMG value chain.

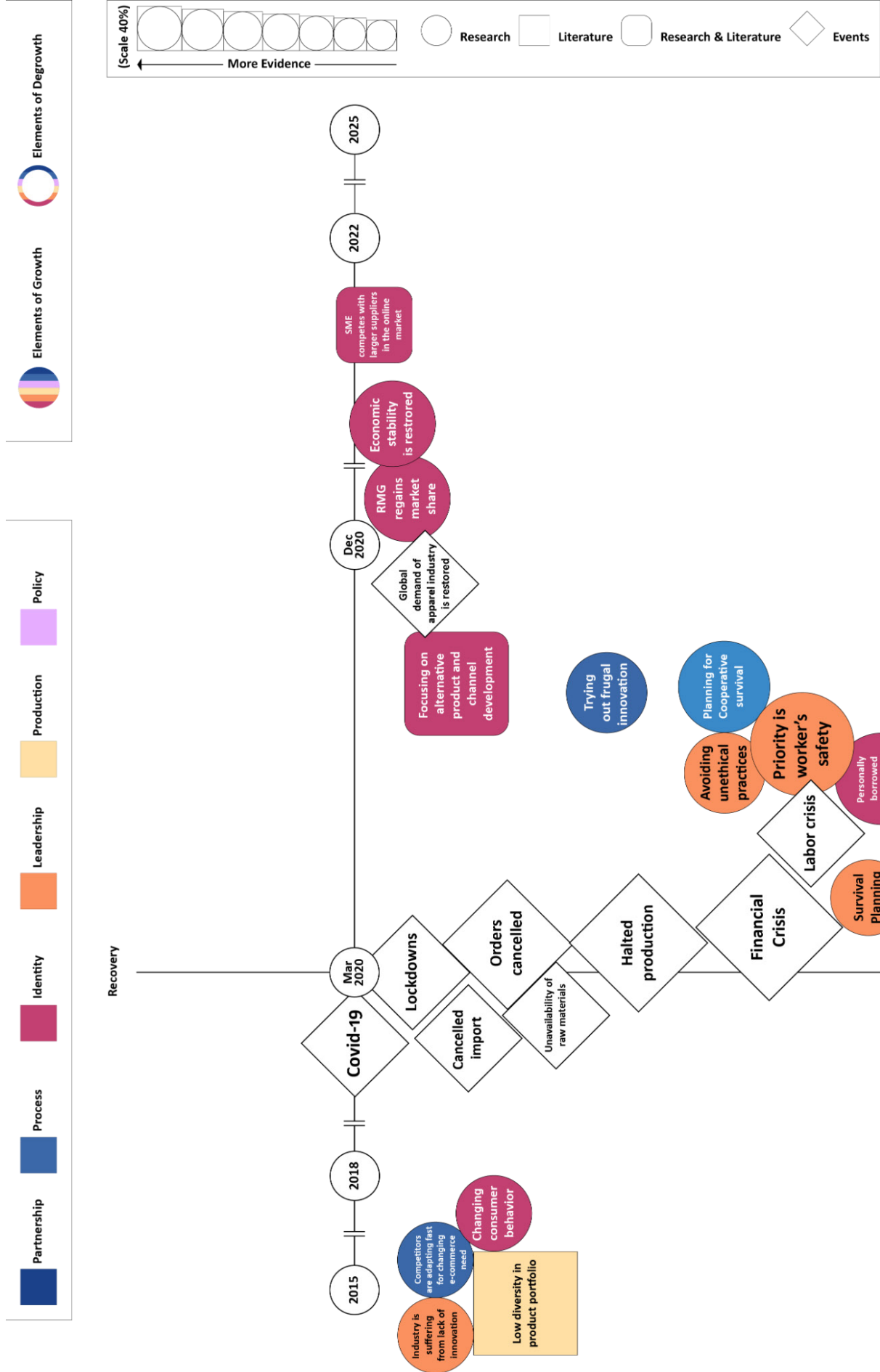


Fig 11: Scenario 'Feather Stitch' (Bottom-left and bottom-right quadrants)

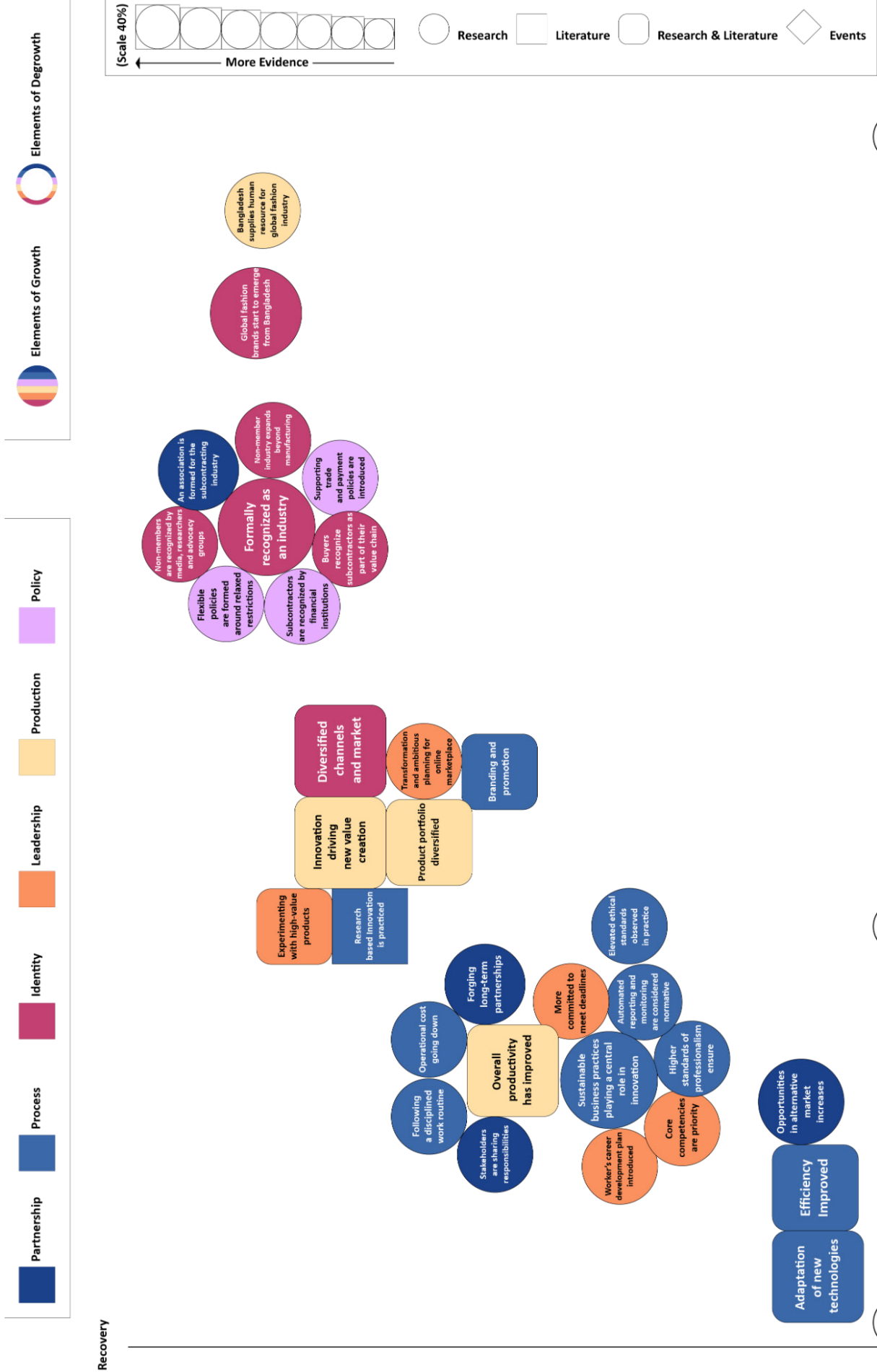


Fig 12: Scenario 'Feather Stitch' (Top-right quadrant)



Observation

The following sections contain the researcher's opinion on what he observed from analyzing the map as an external viewer. These opinions are not meant for guiding readers to a conclusion. Instead, they are about stimulating more questions than answers. Readers may utilize the following discussion as an anchor point for commencing dialogues within and outside the subcontracting industry.

Reflect On The Past

Lots of research data indicate that the crisis has intensified pre-existing conditions more than it has created. Participants who have a less optimistic vision of the future insisted on referring back to these problems before they could paint any bigger, brighter, or desired picture of the future. Some of their issues have links to unchallenged orthodoxies deeply rooted in practices. For example, the need for an association is something no participant has denied, but none of them provided any definite evidence why it has not formed yet. It is also unclear what has caused so many people to invest so heavily in this business. Finding answers to some of these profound questions may reveal interesting spaces where further research can take place.

The researcher has also observed that most of the challenges discussed in this paper are strikingly similar to that of the overall RMG industry. NSF inherits these challenges without formal recognition, which makes them escalate into bigger problems. How their partners tackle common challenges and how they end up at the bottom of the RMG supply chain is another topic for research.

More empirical evidence would be required to bridge gaps in our understanding before any conclusive statement can be derived from our solutions. More research on pre-existing conditions holds the key to unlocking a prospective future for this industry.

Power Distance

The crisis has exposed many vulnerabilities and challenges for the subcontracting industry, but none would be as vivid as the power distance between key stakeholders. Simply moving away from the crisis would not solve this deep underlying problem. A solution would take long-term strategic action planning in alliance with buyers, customers, regulators, and policymakers. Fair treatment of a compliant supplier must be taken as seriously as the prohibition of unauthorized subcontracting, and the spirits of entrepreneurial leadership should not be

intimidated by general accusations. More inclusive research needs to be conducted in this area to negotiate supply chain resiliency in terms of a crisis.

Disproportionately Innovating

Bangladesh has the highest number of LEEDS (Leadership in Energy and Environmental Design) certified RMG factories in the world (Light Castle, 2019). These factories are leading the way for the

‘Green RMG’ revolution (Fig: 13).

Impressive progress has been made so far by other factories too. But this may not be true for all levels of suppliers belonging to the industry. They are falling behind in trends, technology, infrastructure, and funding. Such an unequal pace of innovation within the same industry will have consequences to follow. This inequality may propel traditional firms out of business by intensifying the power gap and polarization. Especially after being disproportionately hit hard by this pandemic, many SME firms may find it hard to keep up the pace.



Fig 13: A LEEDS certified factory in Dhaka. Source: (Hossain & Dhaka Tribune, 2020)

The Future Is Digital

Most participants of this research acknowledged that there is no prospective vision of the future without the digital transformation of processes. Leaders aiming for sustainable growth in RMG will continue to digitize the core functionalities of their organizations. The future will be more challenging for those who will fall behind. To enjoy the benefits of an entirely digitized supply chain, stakeholders would require a seamless integration process within and across industries.

With the widespread usage of mobile internet and electronic devices, it is getting easier to afford digital services capable of streamlining repetitive, time-consuming tasks. A growing number of B2B e-commerce platforms deliver products at doorsteps making it hassle-free for the users to take charge of logistics and transport. A mobile application-based attendance tracker, for example, can make reporting tasks easier. These are some of the examples that came up in the conversation with participants. But practically, there are unlimited options to explore.

Moreover, constrained conditions are often favorable to bring in quick adaptation. For instance, during the first wave of the pandemic, an astonishing number of (82%)

RMG workers received their payment through digital channels (Farjana Liakat, 2020). A phrase popularized by Rahm Emanuel says:

“Never let a good crisis go to waste.”
(Miller, 1970)

Entrepreneurs of NSF would like to remember this quote because the supply chain is as strong as its weakest link. The interconnectedness of the value chain will produce bottlenecks if partners are not equally equipped with digital technologies. End-to-end digitization of the value chain will remain one of the most important goals to achieve in the foreseeable future.

Rethink Policy

After the collapse of Rana Plaza, authorities, regulatory, stakeholders, and international organizations helped policymakers define strict boundaries in which subcontractors need to operate. Buyers played a vital role in forming the apex bodies for regular inspection. There is no doubt that stricter policies helped authorities to regulate unauthorized subcontracting. But it does not deny the fact that SME non-member factories exist, and the livelihood of thousands of workers depends on them. The pandemic has revealed how fragile this

system could be without formal support. Even before the pandemic, fifty-nine factories – most of which were SMEs - shut down their operation between July 19-Jan,20 for failing to comply with rules (Khan, 2020).

This is an area where urgent attention is required from the policymakers. Concerned authorities, such as human rights associations and trade bodies, can help to finance further research in this area to find answers for critical questions like:

“If prevention of unauthorized subcontracting is the reason for stricter policies, then what is there to encourage compliant investments, and how can we make policies more inclusive for NSF?”

The most significant driving factor for the ‘Scissors Cut’ scenario identified in this research is also linked to this question. If things are to be changed positively, designing inclusive social safety nets and innovating better integration processes are key areas where policymakers would like to focus.

Don't Just Recover, Rebuild

Experts from ILO believe the fashion industry should rebuild frameworks that have supporting structures for the human-

centered approach in the recovery process of this pandemic (Hoskins, 2021). The industry simply cannot go back to its former reputation where suppliers having poor bargain points are treated unfairly. A human-centered design approach will be needed to reconfigure workplace and work standards based on empathy, equity, and inclusivity. There are three major areas where typical recovery would not be enough.

To begin with, leaders would like to define a sustainable bidding culture across the industry first. Poor profit vs. revenue structure is one of the largest contributors to degrowth for the SF industry. From initial crisis to long-term challenges, most economic problems have links with extreme-low profit margins. Collective standards of pricing need to be ensured by all-party alignment, including subcontractors.

Substantial investment in value creation and portfolio enrichment is the second area where urgent measures are critically needed. Multiple scenarios suggest that a positive future has strong ties with rich portfolios. Thus, typical recovery may not be enough. Along with economic recovery, more investigation, investment, and collaboration may take place in portfolio development. Subcontractors stepping forward proactively in this regard will enjoy being treated as long-term partners.

And finally, one of the three most prominent clusters in the 'Feather Stitch' scenario is the adaptation of sustainable business practices. This area should receive more attention than it has received so far. If the work standards are not improved, digitized monitoring systems may not help improve efficiency alone.

Sustainability First

The rapidity in which innovation takes place in a crisis may have its connection with urgency, but to shape the industry's long-term vision into reality, emphasis must be on sustainability. Burning out resources for short-term benefits may not provide solutions in the long run. One point on which all participants were undivided is that they wanted to ensure their worker's safety first. Most of them kept their workers on the payroll, although non-member factories received no instruction from the government on paying their workers. Entrepreneurs had put their trust in tested relationships. Even under an existential threat, they were investing in long-term relationships. Similar traits were observed when some participants united with their trusted allies to form survival groups. These traits are essential to keep for days to come. However, there are barriers that might

suffocate innovation in the long run.

Unhealthy price bidding is one such barrier that entrepreneurs need to overcome by developing consensus and unity. Once the crisis is over, SME firms would like to focus on long-term goals other than just surviving their way out from one order to another.

Unity Is Strength

The strength of unity is not a new thing to discuss. But in the case of non-member RMG, unity is critical for their voice to be heard. It is also imperative to bring order and discipline in recognizing this industry as a part of a larger value chain. Leaders of the industry should take this opportunity to have dialogues between stakeholders on forming an association. Having representatives in the higher forum will make their voices heard and thus ensure upward mobility in status.

Limitation

The Context

Contextual elements of this study are inspired mainly by a series of unforeseen incidents that had taken place during the first six months of a global pandemic. Although very relational to the context of this researcher, the global pandemic substantially influenced how this research was conducted, limiting its scope to a great extent. In fact, the entire study was planned and executed remotely due to international travel restrictions imposed by the governments of Canada and Bangladesh. The same limitation also curtailed accessibility to data that are not readily available online. Hence, the literature review of this research is based on a less comprehensive understanding of the context than what was initially envisaged.

Participation

This paper aimed to understand the role of resiliency in guiding innovation through the lens of strategic foresight. It did not consider the implication of having a diverse demographic such as age, gender, level of education, etc., and how that might change the vision of the future. Also, the research is based on feedback collected from SME entrepreneurs only. Initially, the project aimed to collect at least 30 responses from

anonymous workers through an online survey along with the data collected through interviews. But due to the poor digital literacy of potential candidates and constrained scopes of online research, the survey had to be abandoned even after introducing incentives into the process. For instance, after campaigning for almost a month, the researcher received only one complete response to the survey.

Furthermore, the researcher did not classify participants based on their organization's position in the multi-layered RMG value chain. For example, it did not consider whether the organization produced a first-tier supplier or a second-tier supplier. Going deep into that analysis could reveal more interesting data, but that field is too vast for the limited scope of this research.

Methodology

The researcher had to be mindful of his choice of methodology because of the unique context of this research. He had to be mindful of the participants' flexibility, comfort, and mental state as they were all going through a crisis, the likes of which they had never dealt with before. Due to the complexity involved in remote research and the unfamiliarity with online-based collaborative platforms, no group activity could be planned within the given project timeline.

Conclusion

In unprecedented times like the Covid-19 pandemic, the future is vaguely describable, often resulting in blurry vision for leaders. However, there is no hard evidence of an accurate future that one can predict. It is always uncertain, volatile, and unpredictable. In moments like this, strategic foresight is effective in having dialogues when there is a high degree of uncertainty involved in planning for the future (Organization for Economic Cooperation and Development, 2021). Articulating images of alternative futures during a crisis may give us clues to what opportunities are lying ahead and what pitfalls need to be avoided. The value of this research is to identify those opportunities, events, surprises, and 'signposts' for non-member subcontractors of the Bangladesh

RMG industry. This study has aimed to find the answer to a research question that is defined by the role of resiliency in that recovery process. While several limitations are constraining this research, it is believed to be one of the first (if not the first) studies to have this question asked. The value is looking into things from a different point of view and asking questions that would allow further research and analysis to go deeper. No single research would be sufficient to explain how and what should be done in the next five years for this industry to grow out of a crisis it has never seen before. But there is always a start. Hopefully, future researchers may find these scenarios helpful for finding answers to more complex questions.

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