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**A Qualitative Analysis of Transparency and  
Governance in Open Supply Hub and Bangladesh  
Ready-Made Garment Industry Data**

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**ABSTRACT:**

Open Supply Hub (OSH) has become a significant digital transparency solution in global value chain, especially in labour-intensive industries like in the ready-made garment industry. In Bangladesh, labour issues, compliance and industrial safety have resulted in heightened significance of transparency and availability of structured supply chain intelligence. It is on this context that the digital platforms like OSH have gained more prominence in enhancing visibility and coordination of supply chain actors. This thesis considers the operationalisation of supply chain transparency via Open Supply Hub and the connections between these practices and governance and coordination in the Bangladesh RMG global value chain. The thesis takes a qualitative, document-based case study design based on Global Value Chain theory. It uses only publicly available secondary sources, such as Open Supply Hub governance documentation, technical guidelines, platform resources, case materials, and facility level data. These datasets consist of factory name, geographic location, unique OSH identifier and source of data contribution. Data sets were used for a qualitative interpretation of transparency practices. A thematic method of analysis was applied to the collected materials and essential patterns were identified in response to transparency mechanisms, standardisation of data, data verification, and stakeholder involvement. It is revealed that transparency in OSH is operationalised by a co-existence between institutional rules, technological systems and multi-stakeholder collaboration. The governance framework in the platform determines the contribution, validation, and sharing of data, and technological attributes allow integrating and comparing data across different contributors. Moreover, the involvement of brands and suppliers, non-governmental organisations and industry associations helps to create and confirm shared data. These mechanisms have been applied in the context of Bangladesh to aid greater visibility of suppliers and enhanced access to organized information on production networks. GVC analysis of the results shows that transparency has an impact on governance, mainly by enhancing information flows and lessening information asymmetry. Open Supply Hub promotes coordination among the actors through more access to supply chain information and the standardization of data without fundamentally altering already existing structures of buyer-driven governance. The findings further show that there are forms of transparency that can be used to improve certain forms of supplier upgrading, particularly visibly and relationally. However, these will not be assured and will depend on the degree of participation, thoroughness of data and institutional support. Overall, the study contributes to the literature by demonstrating that transparency, in its form through digital platforms, is a governance support mechanism in the global value chain. It emphasizes the use of open data systems in developing coordination, sharing of information, and interaction with stakeholders. The outcomes can also be used to guide policymakers, players in the industry and platform developers who may be keen on improving transparency and accountability in international supply chains.

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**KEYWORDS:** Supply Chain Transparency, Global Value Chains, Ready-Made Garments, Open Supply Hub

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## Abbreviations

GVC- Global Value Chain

RMG- Ready Made Garment

OSH- Open Supply Hub

BGMEA- Bangladesh Garment Manufacturers and Exporters Association

BKMEA- Bangladesh Knitwear Manufacturers and Exporters Association

# 1. Introduction

## 1.1 Background and Importance of the study

Readymade garments industry is the center of the industrial and export scene in Bangladesh. It has developed since the early 1980s to the second largest apparel exporter in the world after China by a considerable proportion of the total export earnings and employment (BGMEA, 2024). This is the main sector that has been facilitating the female employment, rural to urban migration and foreign exchange inflow and thus, this sector is one that has been a foundation of the socio-economic growth of Bangladesh.

The industry is an important node in the Global Value Chain of the production of apparels. The design, market, and sales of fashion products by global brands headquartered in Europe and North America are offset by production scattered in developing economies in Bangladesh, Vietnam, and Cambodia. In this buyer oriented GVC, the lead firms determine the standards of products and prices and the delivery time, whereas the suppliers perform the manufacturing and finishing process with high cost competition (Gereffi et al., 2005). This global division of labour connects the millions of workers in Bangladesh with consumers in different parts of the world but also leads to information asymmetries and governance problems that affect efficiency, accountability and prospects of upgrading (Gereffi et al., 2005; Barrientos et al., 2011)

Transparency has become one of the key issues of governance within GVC over the past few years. Consumers, regulators and civil society organisations are now demanding that firms reveal more information on their suppliers, sourcing and procurement. Open supply chains mean more visibility and allow the stakeholders to check on the location and conditions under which products are manufactured. In the case of developing country suppliers, transparency can also be considered a strategic resource that can improve the reputation, attract ethical buyers, and enable gaining access to high end markets (Mol, 2015; Egels-Zandén & Hansson, 2016)

With the global prominence it is enjoying, the Ready-Made Garment industry in Bangladesh has been suffering chronic constraints in reaching such heights. The networks of supply are still very fragmented, containing thousands of factories, subcontractors, and informal units. Supplier relationships, lead times and production capacities data are not often centralised and therefore, coordinating it is not easy as well as reducing traceability. In addition, small and medium sized manufacturers have no or minimal digital tools to record and share the production information. Therefore, there are still information gaps between the global buyers and the local suppliers.

As a response to the necessity of change, more and more Bangladeshi manufacturers, have started voluntarily sharing factory related information using open data projects and online mapping. Their involvement is a significant cultural change towards data driven transparency, with the industry slowly moving towards international standards of openness and responsibility.

In line with these developments in the country, Open Supply Hub has come as one of the pioneering global projects that enhance transparency by means of open data. Open Supply Hub is a non profit online organisation that gathers, digitalises, and publicly publishes factory level data of brands, manufacturers, and non-governmental organisations (Open Supply Hub, n.d.). It aggregates these datasets thereby generating a single map of global supply networks to every individual. In the case of Ready Made Garment sector in Bangladesh, Open Supply Hub provides a rare chance at visualising inter factory connections, as well as to comprehend how transparency may be institutionalized within GVC systems.

The research on the importance of the Open Supply Hub is thus meaningful both academically and practically. Scholarly, it gives the case that can be analyzed regarding how transparency systems are transforming governance in GVCs. In terms of policy, it assists in evaluating the potential of digital infrastructures to enhance competitiveness and resilience in the biggest export in Bangladesh.

## 1.2 Global Context and Literature Overview

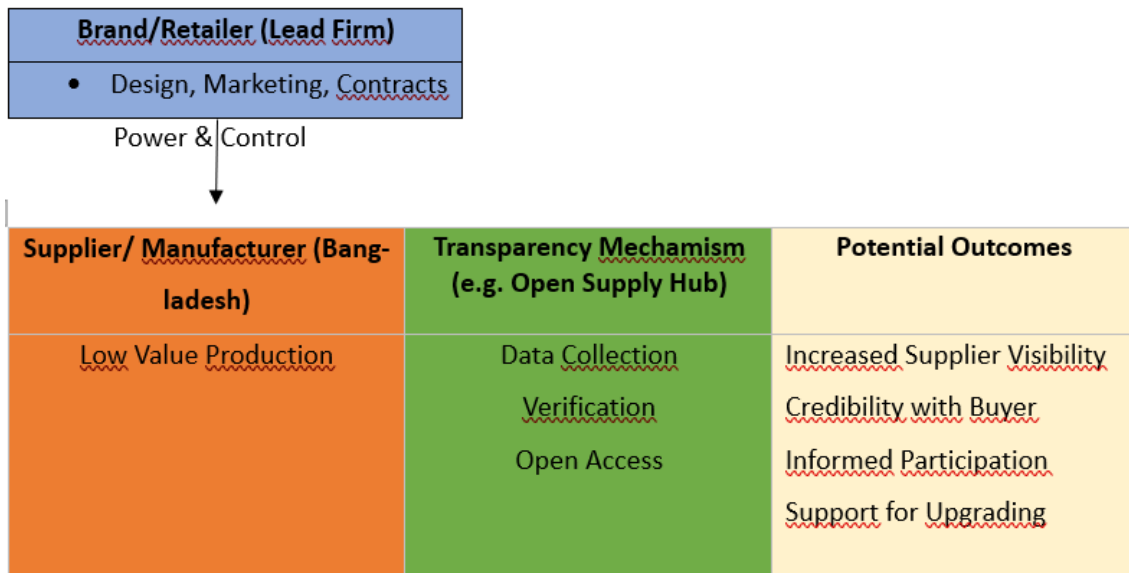
The theoretical basis of the current work is the theory of Global Value Chain (GVC) and the increasingly developing research on the topic of transparency in the supply-chain. The literatures are interconnected; the GVC theory explains the structure of production and its regulation as well as the production of value within the global networks and transparency studies focus on how informational flows shape the coordination, trust and the possibilities to upgrade within the supply chains.

Global Value Chain (GVC) theory is a theory that can be used to examine the distribution of power, roles and responsibilities within global production networks (Gereffi, et al., 2005). In buyer-oriented chain like apparel, footwear, and consumer electronics, the power is held to a great extent by the retailers and brand owners which manipulate design, marketing, and retailing. In developing countries such as Bangladesh, suppliers tend to work under captive or modular control based on stringent requirements stipulated by purchasers. GVC theory therefore offers a conceptual prism through which the possibility of industrial upgrading is analyzed in terms of how the flow of information and forms of governance influence this outcome.

Transparency and information governance has become one of the important tools in order to deal with these asymmetries. Transparency can be described as the availability, reliability, and accessibility of information about the supply chain by the different stakeholders such as suppliers, buyers, policy makers, and consumers (Mol, 2015). It entails disclosure of the producer, location of manufacturing and conditions of production. Transparency has over time ceased to be a voluntary corporate social responsibility tool and evolved into a strategic instrument of governance. Digital technologies, such as cloud databases or blockchain technologies, enable the companies to amass, validate, and disseminate information effectively at various levels of suppliers. Studies indicate that supply chains with transparency enjoy higher levels of trust, improved performance, and fewer risks (Egels-Zandén & Hansson, 2016). The benefits are, however, disproportionately allocated: selective disclosure is a typical scenario that does not always cover

subcontractors or temporary manufacturing plants, and developing countries struggle with other restrictions because of their small digital presence and competition.

The interconnection between the GVC theory and transparency literature offers the information on how to lessen the effects of information asymmetry and promote better governance. Transparency is a facilitative mechanism that enhances visibility, credibility and involvement of suppliers in global value chains. Public access to supplier data enhances their willingness to collaborate with buyers, and opaque chains preserve leadership companies. Although brand led disclosure programs are thoroughly researched, standalone infrastructures like Open Supply Hub are not examined intensive. This thesis addresses that gap by discussing OSH as a platform through which transparency in the apparel GVC is operationalized without direct control over the buyers or suppliers. Theoretical framework of a buyer-directed GVC, which emphasizes the asymmetries of governance and the benefit of information transfer, supplier visibility, and functional potential of upgrading in the apparel industry through transparency mechanisms, like the Open Supply Hub (OSH). This is to illustrate visually the concepts discussed and this is inserted as figure 1.1.



**Figure 1.1: Buyer driven GVC and Transparency Mechanism**

### **1.3 Bangladesh Ready Made Garment Industry in the Global Value Chain**

The emergence of Bangladesh as an exporter of clothing is a sign of how the country has been embedded in the world networks of production in the last forty years. The low labour costs, high production capacity and the good trade arrangements like the European Union generalised system of preferences (GSP) are the competitive edge of the industry. The products are supplied by thousands of factories to many countries, where the brands require short lead times and high flexibility. But this success has also demonstrated structural vices. The prevalence of foreign purchasers in terms of price bargaining and the absence of local design and innovation has limited the ability of the sector to move along the value chain.

Current literature on the Bangladesh ready-made garment industry has established a number of challenges in its global value chain that are related to governance. Although this has increased, the industry is still experiencing structural constraints in world value chains. Global brands in buyer-driven industries still enjoy a lot of power to dictate price, product features and delivery terms, and the suppliers are mostly limited to the production process (Gereffi et al., 2005). The imbalance restricts the possibilities of the Bangladeshi firms to migrate into more value added roles like design, branding and logistics and restricts upgrading possibilities (Barrientos et al., 2011). Current studies indicate that the Bangladesh RMG sector faces a number of issues in governance. One of them is the existence of information asymmetry between buyers and suppliers that influences supply chain coordination and trust (Mol, 2015).

Moreover, intricate and multi-level production systems, such as sub-contracting networks, decrease visibility and traceability along the supply chain. Such structural features complicate tracking production processes and providing effective coordination of actors. The institutional coordination is also not even, with various actors in the industry being more or less integrated. All these challenges reduce the transparency, traceability and coordination in the supply chain. Transparency is now being regarded as a tool to deal with these structural issues. Transparency of supplier information, manufacturing, and

sourcing relationships can enhance visibility and facilitate coordination between parties (Mol, 2015). Here, the digital transparency initiatives have become the means of facilitating the exchange of data and enhancing traceability in the global value chains.

Most of these challenges can be addressed through transparency. Transparency can increase visibility in supply chain and enable coordination among actors by enhancing availability and accessibility of information on supplier networks, production processes and sourcing relationships (Mol, 2015). However, transparency does not necessarily lead to better results since the ability of transparency to work depends on how this information is used in the current governance systems.

Here, digital transparency programs have become relevant resources in enhancing traceability and sharing of information. Open Supply Hub is a place to unite and standardise data about factories, allowing more visibility of global supply networks (Open Supply Hub, n.d.). These types of initiatives can be used to increase transparency and coordination in the Bangladesh RMG sector but its efficacy again will remain dependent on the terms of overall governance.

#### **1.4 Research Gap and Justification**

The gap and the justification of the research. Though the concept of transparency has recently become a popular topic in the research of operations and development, the mechanisms by which transparency is established in the global production networks have not been well researched. The three important gaps that warrant this study are:

1. Empirical Gap -Transparency Mechanisms: Current studies are inadequate to provide a systematic review on the use of open data platforms to gather, measure and distribute information to improve visibility in supply chains such as OSH.
2. Contextual Gap- Developing country view: Majority of the transparency research is on global brands in developed economies. The limited insights to be made on the

stakeholders of the suppliers country, especially in Bangladesh, and how they interact with or receive the open data systems.

3. Theoretical Gap - GVC integration and Transparency: The literature is limited and few works have investigated the impact of transparency programs on the GVC governance structures, power distribution, and supplier upgrading opportunities.

It is not only theoretically but also practically important to fill in such gaps. Policy wise, greater transparency of supply chains can contribute to enhanced coordination, compliance, and competitiveness in the export-driven sectors like the Bangladesh RMG industry. In research terms, the study of digital transparency platforms will offer the possibility to comprehend the role of data-driven mechanisms in governance in global value chains.

This thesis thus focuses on Open Supply Hub as a case and through which to examine the concept of transparency in the Bangladesh Ready Made Garment value chain. The publicly available documentation on the platform offers viable and strong dataset upon which qualitative analysis can be conducted with extensive exploration without the limitations that primary fieldwork and its limitations present. Although the research has already been carried out on the transparency of corporate disclosure and supply chains governance, less research has been conducted on the platform-based open data transparency and its impact on the governance processes in Global Value Chains.

## **1.5 Research Aim and Question**

The thesis intends to explore the role of Open Supply Hub as a solution to improving transparency in the Global Value Chain of the Ready Made Garment business in Bangladesh. The following research question is used in the study:

*RQ: 1*

*How is supply chain transparency operationalised through Open Supply Hub's documentation and data practices in relation to the Bangladesh ready made garment sector?*

RQ: 2

*How can these transparency practices reflect Global Value Chain concepts of governance and coordination in buyer driven apparel value chain?*

Objectives:

1. *To consider the existing literature regarding transparency and GVC governance.*
2. *To examine the documentation provided by OSH to establish mechanisms that facilitate transparency.*
3. *To explain the transparency mechanisms identified in terms of Global Value Chain concepts of governance and coordination.*
4. *To develop implications on supplier competitiveness, policy and future upgrading.*

## **1.6 Contribution and Significance**

This study is relevant to the Global Value Chain (GVC) literature because it presents a document based analysis of how transparency is conceptualised in a digital open data platform and how these practices can be understood in terms of GVC governance. This thesis does not quantify power shifts or results of enforcement; it characterises governance related aspects, manifested in the documents of Open Supply Hub, including data standardisation, verification processes, participation policies, and coordination systems. The study explains how digital transparency infrastructures can be used to support coordination and the exchange of information within buyer based value chains through the interpretation of these attributes by means of GVC governance typologies. Through so doing, the study conceptualises transparency as a governance practice, integrated in organisational and technological compositions, but not as a moral or voluntary disclosure practice. The study contribution is, therefore, analytical and interpretive in nature, and it deals with the structure of governance relevant transparency practices in a digital platform.

This study offers one of the first academic studies on the topic of the open data disclosure in the apparel sector by qualitatively studying the documents of Open Supply Hub. It recognises organisational, technological and collaborative processes that render transparency working and charts their applicability to the supplier environment in Bangladesh. Practically, the research has findings that can guide policy-makers on how digital transparency initiatives can help enhance supply chain visibility, coordination, and compliance.

To manufacturers, the analysis shows how engagement in open data projects can enhance reputation, ease collaboration and competitive advantages. NGOs and other development partners encouraging ethical and transparent production can also direct their outcomes.

### **1.7 Scope and Delimitations**

This thesis relies on qualitative research on the secondary data based on the publicly available sources. The data to be analyzed is mainly documentation prepared by Open Supply Hub, which is supplemented with literature and industry reports. There is no primary data collection (interviews or survey) because of time and access limitations. The research involves the ready-made garment (RMG) industry in Bangladesh and looks at transparency as an aspect of global value chain governance. The problems with labour rights and environmental issues are only considered to the extent to which they touch on transparency and information flows in supply chains. The study is restricted to the analysis of transparency mechanisms based on documentation available. Although Open Supply Hub offers detailed information on supply chain structures, not all production plants are addressed. As such, one should view the findings as indicative as opposed to comprehensive. However, the existing data gives a helpful foundation to the analysis of transparency practices and their implications on the governance in the global value chains.

## 1.8 Organisation of the Thesis

In the thesis, there are five chapters:

**Chapter 1** presents the background of the study, theoretical framework, gap in the research and objectives of the study.

**Chapter 2** presents the review of the existing literature on Global Value Chain theory and transparency that builds the framework of the analytical results.

**Chapter 3** contains the explanation of qualitative research design, data sources, and the procedures of the thematic analysis.

**Chapter 4** This chapter provides and discusses the results of the process of Open Supply Hub operationalising the Bangladesh Ready Made Garment sector.

**Chapter 5** The final chapter summarises the study by highlighting the insights made, outlines the theoretical and policy implications and provides future research directions.

## **2. Literature Review**

The chapter provides a review of theoretical and empirical literature that has provided the base of the present study, which examines the issue of transparency in the Bangladesh ready made garment (RMG) supply chain using the Global Value Chain (GVC) theory. The chapter has three purposes, connected with each other. This thesis first traces the conceptual origins and development of the GVC theory, noting its applicability in buyer led sectors like the apparel industry and the fact that it can be used to explain the dynamics of production organisation, governance, and upgrading. Second, it is a synthesis of existing literature on the topic of supply chain transparency, which frames it as a practice of governance relevance affecting coordination, information flows, and supplier involvement. Third, it combines those two outlooks into a conceptual framework by which the how of transparency operation by Open Supply Hub can be interpreted and analysed.

The review includes global theoretical debates about value chains and governance, but then moves down to industry specific information about the apparel industry and then considers how the digital open data infrastructures restructure the information flows and governance processes. Such an organisation enables a methodical study of the ways in which transparency is operationalised in OSH, the impact that it has on coordination amongst actors in buyer led GVCs, and the support provided by these practices to the involvement of suppliers and their potential upgrading.

The chapter offers a basis of the analysis of documentation and data practices in the garment industry within Bangladesh by focusing on the interaction between theoretical frameworks and empirical examples and particularly answering the research questions of the study: how the idea of transparency is realised through OSH and how the practices could be explained in terms of the concept of GVC governance.

## 2.1 Global Value Chain (GVC) Theory

The Global Value Chain (GVC) theory is an extension of previous theories including the world systems theory (Wallerstein, 1974) and the commodity chain analysis of development economics. These notions were later redefined by Gereffi (1994,1999) in the 1990s as Global Commodity Chains, which evolved to the GVC model (Gereffi et al., 2005). The main hypothesis of the GVC is that the present day production is physically dispersed but at the same time centrally organised at the organisational level, which implies the intricate coordination of the activities of the firms situated across nations.

The framework examines the chain of the value addition processes as well as the institutional and organisational structures that connect them. It has turned into an influential instrument of comprehending globalisation, outsourcing, and industrial upgrading as a result of which scientists can see the location of design, production, and distribution and how value will be created along the chain. The GVC analysis in the apparel, electronic and automobile industries illustrates that even though production moves internationally, lead firms have control and governance over the industry. One of the main contributions of GVC literature is the typology of governance structure, which describes the flows of information, knowledge and power between buyers and suppliers (Gereffi et al., 2005).

The nature of market governance entails a simple and transactional relationship with a small amount of coordination. Modular governance occurs when the suppliers manufacture as per buyer specifications but maintain certain capability autonomy. Relational governance is based on trust, and collaboration, but the captive style, which is common in the apparel sector, is realized when small suppliers are very reliant on the few and strong buyers. Vertical integration in a given firm is in the form of hierarchical governance. In these governance structures, information is vital and in the buyer based chain, information asymmetry is usually strengthening dependencies between suppliers where the lead firms determine the quality standards and delivery times and compliance.

These governance mechanisms are important in understanding the impact of transparency practices, including those facilitated through Open Supply Hub documentation, in

facilitating coordination and involvement of suppliers. Upgrading in the GVCs is the ability of firms to develop their processes, products, functions or even venture into a new industry (Humphrey & Schmitz, 2002). Process upgrading entails the enhancement of efficiency and productivity whereas product upgrading is associated with the production of more sophisticated or better value products. When the suppliers develop more value added activities, e.g. in the form of design or logistics, this is known as functional upgrading; when switching to entirely other industrial sectors, the same is called chain upgrading. The suppliers in developing countries usually attain process and product upgrading but they face difficulty in functional upgrading and chain upgrading because of limited market information access, dependence on buyers, and because of low transparency.

In that regard, an improved transparency is one of the main tools to lower the information asymmetry and knowledge transfer, which may contribute to fairer upgrading possibilities. The clothing sector is a good example of a buyer based GVC. In North America and Europe, the design, marketing, and retailing are in the control of the brand owners with production being outsourced to the Asian manufacturers including Bangladesh. This is a model that focuses on the low cost, flexibility and fast turnaround times. The processes of cut, make and trim (CMT) are mainly done by local manufacturers in Bangladesh where raw materials and designs are sent by the buyers. The control of lead firms is done by audit, inspection, and adherence to contractual agreement whereas the suppliers compete on price and delivery as their main factor.

These are dynamics of captive governance, in which asymmetries in information and power are still prominent. The supply chain transparency, in such circumstances, becomes one of the key governance instruments as it could help to share information, minimize asymmetry, and involve suppliers in the value chain more efficiently.

## 2.2 Transparency in Supply Chains

The supply chains transparency refers to the extent of information about actors, products, and processes available, visible, and verifiable to interested parties (Mol, 2015). Buyer-driven Global Value Chains (GVCs) like the apparel industry are not just voluntary or moral, but also a process of governance that affects coordination, compliance, and information flows among actors. All these concepts can be used to bring transparency with the help of digital solutions and the rules of governance. Intimately related notions, including traceability and disclosure, play a part in operationalising transparency. Traceability is the technical ability to trace materials and the production process through various steps and disclosure is the deliberate exchange of the supply chain information with the stakeholders. Together, these concepts have the potential to promote transparency with digital systems and governing structures.

Transparency, internally and externally to external stakeholders like regulators, civil society organisations, and the population, is important in influencing responsiveness and involvement of suppliers in world production chains. In the situation of developing countries, like Bangladesh, the transparency plays a critical role, where suppliers usually work in a situation of dependence on the lead companies, where they are requested to provide design specifications, production standards, and access to the market. Motivation of the apparel industry towards transparency practices is driven by several aspects that involve the increasing awareness of consumers of ethical production, the pressure of non-governmental organisations and investors, reputational issues, and the increasing use of digital technologies (Egels-Zandén & Hansson, 2016). As a result of increasing criticism of both labour standards and environmental performance, brands and retailers have diversified their disclosure activities. These involve publishing supplier lists, releasing audit reports, being involved in benchmarking programs like the Fashion Transparency Index and using multi-stakeholder platforms. These efforts help prevent information asymmetries among buyers and suppliers, a hallmark of buyer-led GVCs where lead firms have a stranglehold on design, production schedules, quality, and compliance specifications (Gereffi et al., 2005).

But, it is in this context, that these developments are seen to reflect, that according to empirical evidence, the industry does not reflect equally in the practice of transparency. As an illustration, benchmarking research reveals that most companies remain underperforming in responding to supply chain risks and transparency expectations, meaning that the disclosure pledges and their practices do not align (KnowTheChain, 2021). There are a number of challenges related to the implementation of transparency. Companies might not be willing to share commercially sensitive data, and the data may not be in the same format and verification is also expensive. Additionally, smaller suppliers commonly do not have the digital systems necessary to gather and disseminate data successfully (Egels-Zandén & Hansson, 2016). A substantial share of garment factories are sub-contractors that do not have access to sophisticated enterprise systems in Bangladesh, or formalised data management practices. This limits their participation in voluntary transparency programs, and is a contributor to the information gaps already existing in the supply chain. Such structural constraints serve to generate information asymmetries that remain and limit the capacity of suppliers to undertake more value-added activities like functional upgrading.

However, transparency has significant benefits of governance. Transparency can also facilitate coordination between buyers and suppliers, mitigate operational risks and be more responsive to production and compliance problems by encouraging the use of standardised and verifiable data (Mol, 2015). In addition, transparency can contribute to trust and collaboration especially needed in capture and relational types of governance in GVCs. The current initiatives within the apparel industry depict how transparency can be realised by using shared information systems. Some of the ways in which information sharing between the brands, suppliers and non-governmental organisations can assist in coordinating and governing include platforms such as the Open Apparel Registry, Better Work Programme and Accord on Fire and Building Safety in Bangladesh. Digital platforms can in a wider context be used to standardise and integrate supplier-level data across multiple sources and enhance visibility and traceability in complicated supply chains.

Although these platforms may be of different scope and design, they are a signifier of a wider trend of data-driven transparency as a governance tool in global value chains.

### **2.3 Linking Transparency and GVC Governance**

The connection between supply chain transparency and Global Value Chain (GVC) governance is key to understanding how information is used to influence the coordination and power relations in the global production networks. Supply chain transparency can be conceptualized as a governance relevant practice which organises the coordination, flows of information, and suppliers roles in buyer led Global Value Chains. In this type of chains, the design, quality criteria, manufacturing cycle, and regulations are traditionally dominated by the lead firms, whereas the suppliers lack access to market patterns and anticipations (Gereffi et al., 2005). Transparency may be operationalised by using the open data platforms that lead to standardised documentation, verification procedures, and participation regulations and allow supply chain data to be more open and comparable among parties (Mol, 2015; Egels-Zandagen and Hansson, 2016).

Another area where digital technologies help facilitate transparency in global value chains is significant. Cloud computing, the Internet of Things (IoT) and data analytics are some of the tools that can be used to track production processes, logistics, and compliance activities and support more efficient information control and traceability (Mol, 2015; World Benchmarking Alliance, 2021). Here, transparency can be seen as a process which can be defined as more than information disclosure, and can be perceived as a process that can influence coordination and governance.

Transparency can help to mitigate information asymmetries by enhancing the accessibility of information and its comparability, allowing buyers and suppliers to interact. Digital transparency tools can also help to enhance compliance and better integration of suppliers into global value chains in the case of developing countries, but their effect on upgrading is conditional on the overall governance circumstances (Egels-Zandén & Hansson, 2016).

Although, transparency in Bangladesh is emerging, the use of platforms such as the Open Supply Hub offers opportunities to operationalise transparency mechanisms that are relevant to governance. This research aims at exploring the role of transparency as one of the governance tools in the Bangladesh garment value chain by analysing the roles of standardisation of data, verification processes as well as the participation rules entrenched in OSH. The approach is in line with the objectives of how transparency is realised and construed via GVC governance conceptions, of offering analytical knowledge on how coordination, information flows, and supplier participation are construed.

## **2.4 Open Supply Hub (OSH) and Open Data Transparency**

Open data transparency has become an ever more relevant tool to improving visibility and coordination in Global Value Chains (GVC). It may be described as the use of digital infrastructures that enable the process of systematically collecting, standardising, and sharing supply chain information with different participants. contrast to the traditional firm-level disclosure which is usually limited, selective, and controlled by individual firms, open data disclosure is system-wide. This enables various stakeholders such as firms, policymakers, civil society organisations, and researchers to get and use common datasets. In this regard, transparency is integrated into digital information systems and infrastructures as opposed to being an optional corporate practice (Mol, 2015).

Governmental wise, transparency in open data is an important tool in mitigating the information asymmetries that typify buyer-driven GVCs. The firms that are leading and are usually in the developed economies control key aspects like product design, quality standards and the market access, but suppliers, especially in the developing countries, usually work with little access to important information about the market dynamics and supply chain arrangements (Gereffi et al., 2005). This imbalance may limit the participation of suppliers in more value-added actions. Open data transparency can also help to enhance the coordination of actors and make decisions more informed by making supply chain information more visible, accessible, and comparable (Egels-Zandén & Hansson, 2016).

Open data transparency operationalisation is closely connected with the creation and utilisation of digital platforms. Such platforms usually include some important features that can facilitate a successful operation of transparency mechanisms. Among those are the data standardisation, where information provided by various sources is integrated, structured, and compared. Standardisation minimises variations and helps stakeholders to understand data with less difficulty in various settings. The other significant characteristic is the incorporation of verification procedures that increases the reliability and credibility of data by making sure that the information is verified either technically or procedurally. Moreover, participation policies establish the contribution of various actors to the data and their access to the data, which determines the governance model of the platform and affects the information circulation of the supply chain.

Other examples of open data transparency platforms include efforts to aggregate and standardise supplier level data in global supply chains. These platforms are supposed to minimize data duplication, enhance traceability, and offer a holistic picture of supply chain relationships through the connection of datasets across various contributors (Open Supply Hub, n.d.). The platforms enable mapping the production networks and enhancing the transparency of supplier relations at different levels by using common identifiers and systematic data systems.

There are significant governance implications of the policy of open data transparency platforms. By enabling the access to shared and standardised data, they can help in coordinating the participants in the supply chain, improving the efficiency of monitoring and compliance processes. In addition, they are able to make supply chains more accountable, allowing third-party stakeholders, including the civil society organisations and regulators, to examine the data and identify what risks or loopholes might be created. Nevertheless, the success of these platforms is determined by a number of factors such as the degree of involvement of firms, the quality and completeness of the data involved and the ability of users to effectively interpret and use the data that is available.

Nevertheless, there are still some issues in the implementation of open data transparency despite these potential benefits especially in the case of developing countries. The smaller suppliers might not be able to take part because of the lack of digital infrastructure, lack of resources, and data confidentiality issues. As a result, larger companies can easier access transparency initiatives, which might continue the status quo of inequalities within the supply chain. In general, open data transparency is a change of individual corporate disclosure approaches to more integrated and collaborative information systems. This view offers a conceptual basis in understanding the effect of transparency mechanisms on coordination, information flows, and supplier involvement in Global Value Chains, as well as outlining the prerequisites under which transparency mechanisms can be successful exploited.

## **2.5 Synthesis and Conceptual Framework**

Three connected insights presented in the literature reviewed in this chapter are the foundation of the analysis of the operationalisation of transparency in the context of buyer-driven Global Value Chains (GVCs). Such insights bridge GVC governance frameworks, transparency, and their possible implications and provide a conceptual basis of the empirical analysis of Open Supply Hub in this research.

First, GVC governance designs stipulate the allocation of roles, coordination schemes, and responsibilities between buyers and suppliers. Lead firms in the buyer-driven value chains are usually retaining control of design, production standards, and compliance requirements, and are suppliers with limited access to market information. This brings about information asymmetries which influence participation and decision-making processes (Gereffi et al., 2005). In this sense, transparency can be perceived as a mechanism that can facilitate more informed coordination by enhancing access to pertinent information, but without the inherent changes in the existing power structures.

Second, transparency mechanisms include data collection procedures, data verification procedures, open data access procedures, and stakeholder engagement processes, which are supported by open source software such as OSH. Such mechanisms

standardise and render supply chain information available and traceable to aid informed decision-making processes by buyers and suppliers among other stakeholders (Mol, 2015; Egels-Zandén & Hansson, 2016). The fact that OSH is a voluntary and non profit platform, encompassing information sharing and coordination without exercising any authoritative power over the actors of the supply chain, make it a facilitative infrastructure.

Third, the outcomes and implications dimension presents the possible consequences of transparency mechanisms such as visibility of suppliers, credibility, informed participation as well as functional upgrading opportunities. Although this thesis does not empirically quantify their results in Bangladesh, OSH documentation offers a rich illustration of how the process of transparency can facilitate the coordination and participation process in an environment of developing countries where supply chain information has been historically disintegrated.

The three dimensions: GVC governance structures, transparency mechanisms and the possible outcomes are conceptually interconnected as a process due to which the flow of information affects both the coordination and participation in the value chains. This relationship could be represented as a scheme where the transparency mechanisms depend on the governance structures, which, in their turn, can affect the results regarding the coordination and the role of suppliers. In this context, Open Supply Hub can be interpreted as an empowering platform that can mediate information streams, instead of acting directly by controlling actors.

This can be graphically illustrated as a flow between GVC Governance Structure and Transparency Mechanisms to Results and Implications with OSH being an enabling platform to facilitate information flow and coordination, but not a direct buyer or supplier controller. This structure informs the empirical research on Chapter 4 that offers a prism through which OSH documentation is to be interpreted and through which the processes of operationalisation of transparency and association with governance ideas in the buyer

driven GVCs are understood. The figure displays the correlation between GVC governance structures implemented by transparency mechanisms implemented by Open Supply Hub (OSH) and the anticipated outcomes as far as credibility of suppliers, policy impacts, and possible upgrading are concerned. The framework illustrates the role of transparency as a facilitative instrument in the processes of buyer-driven value chains that allow the improved flow of information and better-informed engagement without direct control of actors.

### Conceptual Framework

GVC Governance Structure	Transparency Mechanisms (OSH)	Outcome And Implications
<ul style="list-style-type: none"> <li>• Buyer-Supplier Roles and Coordination</li> <li>• Areas of Information Asymmetry</li> </ul>	<ul style="list-style-type: none"> <li>• Open-Data Documentation</li> <li>• Data Verification Process</li> <li>• Accessible Information Sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Supplier Visibility and Credibility</li> <li>• Informed Participation</li> <li>• Potential Upgrading Opportunities</li> </ul>

**Open Supply Hub Supports information flow and coordination but does not control or enforce Supply chain relationships**

**Figure 2.1: Conceptual Framework of the Study**

## 2.6 Summary

This chapter has examined both theoretical and empirical literature on GVC governance and transparency in supply chain and its applicability in buyer led industry like apparel. The literature has indicated the contribution of GVC structures of governance to the emergence of information asymmetry, the promise of transparency mechanisms enabled by information technologies such as OSH and the potential results in terms of

supplier engagement, visibility, and credibility. These understandings are synthesised into the conceptual framework through linking GVC governance forms, transparency, and possible outcomes. It makes OSH a voluntary, facilitative platform that helps the coordination and information exchange without having direct control over buyers or suppliers. It is this framework that will inform the empirical inquiry in the following chapter where OSH documentation will be reviewed to gain an insight into how transparency is operationalised and construed in relation to the context of the Bangladesh RMG industry.

### 3. Research Methodology

In this chapter, the methodology of the research questions of the study will be outlined. It is the research that revolves around Open Supply Hub (OSH) as the unit of analysis and empirical context is the Bangladesh ready-made garment (RMG) sector. Instead of exploring the reality of transparency practices being adopted or realised by the firms, the research question is how the concept of supply chain transparency is conceptualised and operationalised based on the documentation and data practices of OSH and how the processes could be construed in terms of Global Value Chain (GVC) governance and coordination (Gereffi et al., 2005). The study objectives and research questions are consistent with the research design that is a qualitative, document-based study. This structure allows conducting a systematic review of the publicly available resources, such as OSH documentation, including governance resources, case studies, technical guidelines, and platform descriptions. Secondly, OSH datasets were analyzed to learn about the format and nature of supply chain information; but not quantitatively.

The work is based on the interpretivist research perspective, which presupposes that the concepts of transparency and governance are socially constructed and institutionalized in terms of institutional and technological practices (Mol, 2015). This outlook fits the study since it aims to understand the form of transparency and how it is framed and embodied on a digital platform and not the results of transparency. Data analysis is done using thematic analysis approach as described by Braun and Clarke (2006). This is done through the identification, coding and interpretation of recurrent patterns of transparency mechanisms such as data standardisation, data verification procedures and stakeholder involvement. These are then examined using the GVC theory to determine their consequences on governance and coordination. Quality criteria, including credibility, dependability, and transparency of analysis as some of the established qualitative criteria, were taken into account to guarantee the quality of the research (Creswell and Poth, 2018). Ethical aspects were considered as well, as the only data used was publicly available and all sources were cited.

### 3.1 Research Philosophy and Approach

The research is informed by an interpretivist research philosophy, which presupposes that such social phenomena like transparency and governance are not objective realities but are socially constructed in terms of institutional practices, interactions, and shared meanings (Creswell & Poth, 2018). In this approach, transparency is not considered as a technical or quantifiable result, but as a process that is defined and expressed via organisational structures, digital networks and collaborative practices between various actors.

This study is specially appropriate using the interpretivist approach since the objective of the research is to comprehend the conceptualisation and operationalisation of transparency in the Open Supply Hub platform. The study does not focus on quantifying the efficacy or effect of transparency, but rather on the meaning of the description, structure and communication of transparency through OSH documentation and data practices. This would entail a thorough analysis of meanings inscribed in documents like governance resources, technical specifications, and description of platforms.

The research is based on the inductive research method in which the insights are made based on the analysis of the empirical materials and not by tests of a hypothesis that has been previously defined. This methodology enables themes and trends involving transparency to be generated out of the data itself. Since there is little scholarly literature that specifically deals with OSH as a transparency platform, an inductive approach is suitable to investigate the role of such digital infrastructures in governance of the supply chain (Gereffi et al., 2005).

Based on the systematic reading and coding of the selected documents, some major themes are identified, such as the data standardisation, verification mechanisms, and stakeholder involvement. The conceptual lens of Global Value Chain (GVC) theory is then used to interpret these themes, especially in terms of the governance structures, the processes of coordination, and information asymmetry (Gereffi et al., 2005; Humphrey & Schmitz, 2002).

In general, this methodological and philosophical approach allows the study to examine transparency as a practice that is related to governance and is embedded in digital platforms, as opposed to a technical or quantitative phenomenon.

### **3.2 Research Design**

This research is based on a single-case study design, where Open Supply Hub is the case study. Case study design fits best to investigate modern phenomena in their context of life especially when the domain of knowledge of the phenomenon and the context is unclear (Yin, 2018; Stake, 1995). Transparency in this research is deeply integrated into digital platforms, governance systems, and institutional practices, and thus a case-based method is appropriate to delve into this issue. The choice of OSH as a case that can be relevant is based on the fact that it is a global open data platform that aims to enhance the transparency of supply chains by sharing information systems. The study does not examine a number of cases, but instead uses OSH as an informative and exemplary case which can shed light on how transparency is organised and implemented within buyer-driven Global Value Chains (GVCs) (Gereffi et al., 2005).

The interpretivist and qualitative orientation of the research is in line with the research design. It allows a more precise analysis of documents, data practices, and processes at the platform level without trying to achieve statistical generalisation. Rather, it is aimed at the analytical comprehension of the functioning of transparency mechanisms in a particular situation. The research combines both theoretical and empirical approach. In theory, Global Value Chain (GVC) governance offers the theoretical framework to examine power relations, coordination processes and information asymmetry in supply chains (Gereffi et al., 2005).

The empirical aspect of the study is the analysis of OSH documentation practices and data, which involve data collection, verification and stakeholder involvement processes (Mol, 2015). With the synthesis of these viewpoints, the research design enables us to understand transparency as a practice that is related to governance, but is inherent in

digital infrastructures. By doing so, it is possible to understand how transparency is operationalised by using OSH, but also how such practices can be connected to governance and coordination in the Bangladesh ready-made garment sector.

### **3.3 Data Collection**

The research is conducted on the basis of the secondary data that is publicly available. The main data source is Open Supply Hub (OSH), which offers open access documentation and data on global supply chains. The content of OSH is provided by brands, manufacturers and multi-stakeholder projects and as such is data that has been gathered and collated by third parties. The data used is listed in Appendix 1.

Various documents were chosen among the OSH official resources, such as documentation of governance, technical regulations, case study, platform specifications, and blog posts. These documents give a comprehensive understanding of the structure, communication and implementation of transparency in the platform.

Moreover, OSH-supplied datasets on facility level were examined to learn the structure and nature of supply chain data, including the names of factories, geographic locations, OSH unique identifiers, source of data, and whether the data is verified or not. These data sets were not quantitatively analysed but were employed to aid the qualitative interpretation of data practices.

The specific focus was on the materials that are pertinent to the Bangladesh ready-made garment (RMG) industry since it is an important component of global apparel supply chains. These documents served to put in context the practices of transparency in a developing country context.

To provide more context and aid in triangulating the results, other secondary sources were referred to, such as reports on the industry and institutional data of Bangladesh Garment Manufacturers and Exporters Association (BGMEA, 2024), Bangladesh

Knitwear Manufacturers and Exporters Association (BKMEA, 2024), and the project Mapped in Bangladesh (MiB) initiative.

Relevancy to the research objectives was used to select the data. The analysis only included materials, which contained information on transparency mechanisms, including data standardisation, verification mechanisms, and stakeholder participation. This strategy maintained parity to the qualitative research design to enable the study to investigate the operationalisation of transparency in terms of documentation and data practices, as opposed to quantitative measurement.

### **3.4 Overview of Data Analysed**

The empirical resources that were analysed were publicly accessible Open Supply Hub (OSH) materials gathered in 2018-2025 (see Table 1). The materials analysed comprised annual reports, technical guidelines, resources on governance, blog articles, multimedia contents, and open datasets on the supply chain transparency and the Bangladesh ready-made garment (RMG) industry. In the materials collected, there were references to thousands of facilities found using distinctive OSH facility identifiers and geolocation information.

Additional focus was placed on resources associated with Bangladesh RMG factories as the country has a great representation on the platform. The resources analysed showed details about the transparency practices, data standardisation, stakeholder involvement, facility verification, and supplier visibility in global supply chain. In addition, the materials evidenced collaboration of brands, suppliers, non-governmental organisations and verification programs within the OSH ecosystem.

The platform documentation and facility-level datasets combination helped in a qualitative interpretation of how transparency mechanisms are operationalised by digital infrastructure and the practices related to governance

Materials Used	Sources	Purpose of the Study
Open Supply Hub governance and policy documents	Data Safety Policy for Trade Unions and Civil Society Organizations, Safeguarding Policy, Conflict of Interest Policy, Whistleblower Policy, Responsible Fundraising Policy	To analyse governance structures, accountability mechanisms, ethical frameworks, and stakeholder protection practices within OSH
Open Supply Hub Technical and Moderation Documents	Verified Sources Policy, Moderation Policy, Policy for Marking Facilities as Closed, Contributor and Data Management Resources	To examine data verification, facility matching, moderation processes, and transparency-related digital infrastructure
Open Supply Hub Reports and Publication	Beyond Transparency, Beyond Transparency Summary, Times Have Changed: The Benefits of Transparency Outweigh the Risks	To understand transparency mechanisms, stakeholder collaboration, accountability practices, and supply chain governance
Open Supply Hub multimedia and Webinar Materials	Webinar for Brands Spring 2024, Advancing Supply Chain Transparency Webinar, OSH YouTube resources	To examine operational practices, stakeholder engagement, and practical implementation of transparency initiatives
Facility Datasets	Bangladesh facility export datasets, apparel and textile sector datasets, verified facility lists	To qualitatively examine supplier visibility, facility identifiers, geolocation practices, contributor records, and data structure
Industry and External	KnowTheChain Apparel and Footwear Benchmark Report, BGMEA reports, BKMEA reports, Mapped in Bangladesh resources	To contextualise transparency challenges and governance issues within the Bangladesh ready-made garment sector

**Table 1.** List of Documents and Materials Used and Analysed

### 3.5 Data Analysis

Data analysis in this research was done in a qualitative and interpretive methodology, which involved systematic review of Open Supply Hub (OSH) documents. The aim of the analysis was to gain insight into the way supply chain transparency is realised in

documentation and data practices, and not to determine the numerical patterns and statistical associations. The data were organised and interpreted using thematic analysis approach. The analytical procedure comprised repeated readings, categorisation and interpretation of the selected OSH material, to uncover patterns of transparency as well as governance and coordination practices. This measure allowed determining the pertinent areas connected with transparency, governance and coordination. The second stage was to identify key concepts and recurring ideas in the documents. These were, data verification, data standardisation, identification of the supplier and involvement of stakeholders. These concepts were based on the data directly and were related to the description of transparency practices in the OSH platform. The third step was to group the identified concepts in broader themes of analysis. The three important themes included transparency mechanisms, governance processes and coordination practices. The step enabled the analysis to be past the descriptive observations and come up with a more systematic interpretation of the data. Lastly, the themes were understood with the help of Global Value Chain (GVC). The relationship between the identified transparency practices and buyer-supplier relationships and global value chain structure was analysed by the use of concepts like governance, information asymmetry, and coordination (Gereffi et al., 2005; Humphrey & Schmitz, 2002). This method will make the analysis transparent, systematic and consistent with the research questions and still keep in line with the nature of the research being qualitative.

### **3.6 Trustworthiness and Ethical considerations**

This section outlines how the trustworthiness, research quality and ethical integrity of the study were ensured. Because this research is qualitative, based on documents and their source, the researcher focused on the research process's transparency, consistency, and reliability. Traditional guidelines for qualitative research were utilized and ethical standards for the use of secondary data and academic research were adhered to.

### **3.6.1 Research Quality and Trustworthiness**

In order to make this study trustworthy, qualitative research criteria (credibility, transferability, dependability and confirmability) were used in the entire process of the research. These criteria helped to ensure the quality, consistency, and reliability of data collection and data analysis process. Use of multiple data sources enhanced the credibility. The academic literature, official documentation from Open Supply Hub (OSH), publicly available platform documents and reports related to the industry were consulted to promote a coherent understanding of transparency practices of the Bangladesh ready-made garment (RMG) industry. Data was gathered from various sources to allow peer checking and corroboration of the data with empirical evidence and theoretical frameworks (Creswell & Poth, 2018). Furthermore, the interpretations were regularly compared with the existing literature and theory to support the in-depth analysis of the study and to minimize subjective interpretation. Transferability was facilitated by providing detailed descriptions of the research context, such as role of OSH, structure of Bangladesh RMG industry, and relevance of transparency practices in buyer-driven GVC. The contextual explanation enables readers to speculate on whether the findings can apply to other supply chain settings and industrial contexts. A systematic and easy-to-follow research method was used to ensure dependability. In the study the consistency was maintained between research questions, data sources and analytical methods throughout the research process. The process of selecting documents, data collection, coding and theming were elaborately described to ensure transparency and logical flow in the process of analysis. In order to simplify the interpretation of the findings, major concepts that were discovered in the documents were categorized according to themes. A research audit trail was also kept during the research process to keep track of the selection of sources, analytical procedures, theme development, and interpretation process. This transparency helps readers to grasp how conclusions were arrived at and helps in the overall trustworthiness of the research process. To keep confirmability, a close connection between data collection and study results was maintained. Researcher bias was minimised and the analysis was kept neutral by comparing interpretations regularly with the original documents and supporting literature. During the analysis, special focus was on the

documentation of OSH and publicly available documentation to ensure the conclusions were made basing on the information and did not rely on personal assumptions. Overall, the authors were successful in maintaining consistency in research design, theory, data selection and analysis, which facilitated the assurance of the research credibility and the overall quality of the study.

### **3.6.2 Ethical Considerations**

The ethical aspects were thoroughly considered while conducting the study. The study was based entirely on readily available secondary information and did not engage in interviewing, surveying, collecting personal information or personal data of individuals. Hence, there was no informed consent or any problem of personal data protection in this study. The content of documents and datasets from Open Supply Hub was used under the data usage policies and licensing terms of those documents. Only publicly available information was analysed and there was no confidential or restricted information in the research. University of Vaasa research ethics principles and APA 7th edition guidelines were adhered to in proper academic referencing/citation. All sources were properly cited to ensure clarity, honesty and non-plagiarism. The study was also carried out responsibly with regard to the handling of data. Copied materials and paperwork were kept in a secure manner and were only employed for academic purposes. The data were not changed, misrepresented, or misused in any way. The measures helped to ensure that the study was carried out in an ethical, responsible and academically sound way.

### **3.7 Limitations of the Methodology**

Although it has strengths, there are a number of limitations to the methodology used in this study. To begin with, secondary data restricts the possibility of checking the validity and thoroughness of information presented in Open Supply Hub (OSH) records independently (Creswell and Poth, 2018). Since the data are gathered and published by third-party organisations, the researcher lacks data quality and validation control. Second, OSH reports and documents can be presented with transparency practices favorably or

with an intended purpose, which can lead to possible bias in findings interpretation. Consequently, the analysis can be indicative of the description of transparency rather than its application in practice. Third, the research is grounded on single case study on Open Supply Hub. Although this enables one to have an in-depth appreciation of the transparency mechanisms, the results cannot be generalised to the entire industries or geographical locations. Lastly, because of the dynamic character of digital platforms, OSH data are constantly being updated. Consequently, results of this study are a time-limited study and indicate transparency practices at the data collection time frame.

### **3.8 Summary**

This chapter has outlined the research methodology used in the study, including the interpretivist research philosophy, qualitative case study design, and the processes of data collection and analysis (Creswell and Poth, 2018). The study aimed at examining the publicly available Open Supply Hub (OSH) documents about the need to comprehend the ways in which supply chain transparency is realised in the Bangladesh ready-made garment industry. The chapter also explained the measures required to guarantee the credibility, quality and integrity of the research. Through the systematic approach of qualitative study and the consistency between the research questions, data and analysis, the study offers a systematized foundation of studying transparency practices within a Global Value Chain setting. The following chapter presents the empirical findings derived from the analysis and discusses how transparency is operationalised through OSH documentation and data practices.

## 4. Findings and Analysis

The chapter is a reflection of the empirical results of the qualitative analysis of Open Supply Hub (OSH) materials of the Bangladesh ready-made garment (RMG) industry. The publicly available OSH materials used in the analysis process include the materials that were gathered during the research process such as the governance documentation, instructions on how to contribute to the project, technical documentation, descriptions of the platforms and multimedia documents, and facility level data related to the practice of supplier mapping and transparency. The chapter explores the operationalisation of transparency based on digital infrastructure, data standardisation practices and stakeholder involvement in the OSH platform. The findings are informed by a qualitative and document-based methodological approach. The reviewed materials offered an insight into the supply chain information communication by OSH structures, organisations, and the communication in global production networks. Besides governance and platform documentation, the facility-level datasets provided real-life examples of how the information about suppliers is presented in the form of standardised digital systems. Data sets analyzed included information about facility identifiers, contributor records, geolocation information, processing categories, and supplier visibility in the Bangladesh RMG industry (Open Supply Hub, 2025).

The process of thematic analysis was aimed at determining the common patterns, concepts and practices within the materials that were analysed. Special focus was put on the themes relating to the transparency mechanisms, accessibility of information, data standardisation, verification process and collaborative involvement of stakeholders. It also analyzed the maintenance and distribution of supplier-related information by the platform and how digital transparency practices help to bring the production networks visible in the Bangladesh garment industry. Instead of offering a mere descriptive overview of the platform, this chapter examines the operationalisation and the institutionalised nature of transparency in terms of OSH. The results depict that transparency in the platform is facilitated by a set of governance-related processes, digital infrastructure, standardised data systems, and jointly-contributed practices. The analysed sources also

reveal how supplier datasets and platform resources can facilitate the organisation and availability of supply chain information.

The results are categorised into four broad themes discovered during the analysis process. Such themes are institutionalising transparency, technological mechanisms and data structure, stakeholder collaboration and participatory governance and transparency implications to the Bangladesh RMG sector. Individual sections explain the results of the analysed OSH documents, datasets and platform materials as part of exploring how transparency can be a functional and working process of global supply chains.

#### **4.1 Transparency: Institutionalising Transparency**

As the analysed OSH governance materials suggest, transparency in the platform is arranged by means of organised institutional and procedural practices instead of disclosing information. The documentation shows that transparency is encouraged by rules of participation by contributors, verification processes of the facilities, data-sharing, and standardised reporting mechanisms. The governance materials examined, including the contributors guidelines, platform policies and materials pertaining to participation, suggest that OSH is organised and provides and shares supply chain information in a common and participatory way (Open Supply Hub, 2024a; Open Supply Hub, 2024b; Open Supply Hub, 2024c).

The concept of transparency in the platform is thus operationalised as a structured process where various parties would be involved in shaping up and updating the supplier information. The consulted resources also show that OSH enhances the accessibility of supplier-related information by using data systems that are open and publicly available. The descriptions of platforms and resources to participate in always focus on the visibility of suppliers, the availability of information at the facility level, and sharing information across platforms (Open Supply Hub, 2024b; Open Supply Hub, 2024c). This implies that transparency is viewed as a process involving collaboration and support of platforms instead of an individual buyer-supplier information sharing. It can also be seen

in the analysed materials that OSH includes the procedural mechanisms that are meant to promote the consistency and reliability of information. They are facility matching, contributor records, geolocation and standardised data structures (Open Supply Hub, 2025). These mechanisms help in organising information about suppliers into a more searchable format. Moreover, the documents under analysis show that transparency in the OSH is not only limited to direct commercial relations.

The platform allows access to information to various stakeholders, such as brands, suppliers, researchers, non-governmental organisations, and verification initiatives. The assessed participation resources indicate that the platform helps to enhance wider visibility of supply chain information among various participants in the apparel industry (Open Supply Hub, 2024b; Open Supply Hub, 2024c). The results also show that the practices of transparency are institutionalized in the platform structure itself. Instead of it being a reporting mechanism, OSH seems to be a digital infrastructure by which the supplier information is gathered, organized, updated and shared. The materials analysed thus indicate that the institutionalisation of transparency in OSH is realised by organisational processes and digital information systems.

## **4.2 Technology Mechanisms and Data structure**

The review of OSH technical documentation and data on the level of facilities shows that the technological infrastructure is one of the key elements of operationalisation of transparency in the platform. The reviewed sources reveal that the standardisation of data, identification of the facilities, geolocation solutions, and records of contributors can be listed among the most important technological tools that facilitate transparency practices (Open Supply Hub, 2025). The datasets reviewed indicate that one of the facilities of the platform is a unique OSH facility identifier (Open Supply Hub, 2025).

The datasets of analysed Bangladesh facilities prove that these identifiers are applied to identify facilities and eliminate a duplication among multiple records of contributors. Standardised identifiers enable various contributors to use a common reference

structure to refer to the same production facility. The datasets also suggest that the facilities are structured using standardised metadata structures. The entries analysed include variables that involve the names of the facilities, geolocation data, records of contributors, processing types and descriptions of operation. The common data fields help to provide a more uniform structure of supplier-related data.

The other meaningful result has to do with the utilisation of geolocation data in the datasets being analysed. The facility-level records have the geographic coordinates and location-based data that are related to production facilities (Open Supply Hub, 2025). The data analysed reveal the concentration of facilities in the largest industrial areas of Bangladesh, including the areas related to garment production clusters. Geolocation systems are also used to enhance the visibility and traceability of facilities in the platform. The technical materials reviewed also show that OSH uses facility matching and verification processes, which aim at enhancing consistency of the supply chain data.

The documentation reviewed describes the procedures in accordance with which the contributions made by the contributors are identified and linked to the records that are already present in the facility (Open Supply Hub, 2024a; Open Supply Hub, 2024c). Those processes help to remove duplicating records and increase the comparability of datasets provided by different contributors. The data sets also indicate that information about suppliers is structured with standardised categories and description of processing. Associations between variables of production activity, contributor and facility properties are categorized with shared terms among records. This helps to create an even more consistent representation of supplier information in the platform.

The datasets analysed also indicate a difference in the completeness of information about suppliers (Open Supply Hub, 2025). Other entries have limited information whereas some of them have recordings of the contributors, processing and description of the operation in the facilities. This indicates that the quality and fullness of the data concerned with transparency might differ among facilities and contributors. In general,

the results show that digital infrastructure and organized data practices offer strong support in enhancing transparency in OSH. All the above-mentioned facility identifiers, geolocation systems, contributor records, and standardised metadata help enhance the organisation and visibility of supplier information in the Bangladesh RMG sector.

### **4.3 Stakeholder Collaboration and Participatory Governance**

Another theme that was identified in the analysis of the stakeholder collaboration in the operationalisation of transparency practices in OSH is stakeholder collaboration. As evidenced by the reviewed governance materials, resources on participation, records on contributors, and datasets of the facilities, the platform engages various actors in the development, updating, and validation of information on the supply chain. The reviewed sources reveal that brands, manufacturers, non-governmental organisations, mapping projects, and other stakeholders are involved in the submission and management of supplier-related information (Open Supply Hub, 2024b; Open Supply Hub, 2024c). The records of contributors in the facility datasets indicate that data about a single facility can be provided by more than one organisation at a given time (Open Supply Hub, 2025). Analysis of participation materials shows that OSH is not a system that depends on one central authority having supply chain information, but rather a process of collaborative contribution (Open Supply Hub, 2024b; Open Supply Hub, 2024c). Various stakeholders share data depending on their operational interests, verification, or mapping interests. This forms a multi-source information structure in the platform. The datasets analysed also reveal that contributor records make a significant part of the transparency practices. Facility level entries contain data on the contributors that determines organisations that have to do with supplier reporting or facility verification.

In a number of instances, the identical facility is represented in a number of records of contributors, which means that they are participating in the reporting process in more than one way. The analyzed governance sources also show that stakeholder involvement helps to update and sustain the supply chain information in the long term. The materials analysed indicate that continuity of supplier records is supported by the contribution

history and updates of facilities even when there is a change in the relationship between the supply chain. The results also suggest that cooperation in the platform is not limited to commercial actors. The materials reviewed indicate the involvement of non-governmental organisations, mapping projects and verification initiatives in supply chain monitoring and transparency efforts. This extends the information sharing beyond direct buyer-supplier relationships. The reviewed OSH resources also indicate that the involvement of collaboration can be used to enhance the credibility and visibility of the supplier information. Multiple contributor records and verification processes facilitate cross-checking of facility-level data between various sources (Open Supply Hub, 2024a; Open Supply Hub, 2025). Simultaneously, the data reviewed show that the level of participation is different among suppliers and contributors. There are those facilities which have a lot of the records contributed by a number of contributors and there are those which have less information. This implies that not all suppliers might take part in digital transparency systems.

Overall, the findings reveal that participatory and collaborative decision making that includes many stakeholders facilitates transparency in OSH. The involvement of contributors, verification processes, and common reporting practices also help to maintain and organise the data concerning suppliers in the platform.

#### **4.4 Transparency Results and Implications to Bangladesh**

The materials analysed suggest that OSH usage leads to a greater availability of supplier information in the Bangladesh ready-made garment industry. The evaluated facility datasets, governance materials, and platform documents prove that information related to suppliers is structured and ordered to a more convenient and understandable format (Open Supply Hub, 2024a; Open Supply Hub, 2025). Among the key discoveries is the visibility of suppliers. The datasets analysed indicate that the facilities in the Bangladesh RMG industry are presented in the form of structured entries, which include facility identifiers, the contributor information, geolocation data, and operational categories (Open

Supply Hub, 2025). This helps in the increased availability of the supplier related information in global supply chains.

The results also suggest that the commercial actors are not the only ones collaborating in the platform. The common identifiers and metadata structure enable supplier data to be arranged in a more consistent way than fragmented and separated reporting systems (Open Supply Hub, 2025). The analysed materials also suggest that transparency practices can also lead to better availability of supply chain information to various stakeholders. Structured supplier information may facilitate monitoring, mapping, and coordination activities in the apparel sector and platform resources and governance materials would indicate that this is possible. The datasets analyzed further reveal that OSH is able to capture data at various production processes in the Bangladesh garment industry. The entries that are analysed include facilities that relate to sewing, assembly, washing, dyeing, and other processes used in production (Open Supply Hub, 2025). This helps in a more comprehensive coverage of production processes in the platform.

Meanwhile, the results suggest a deficiency in the fullness and uniformity of information on transparency. Different levels of detailed operation are found in the various facilities. There are large and small entries that include a lot and a little contribution and operation information respectively. The analysed materials also imply that engagement in digital transparency schemes can be different based on supplier potential and involvement by different contributors. It seems that larger supplier groups and facilities that have more international ties tend to have greater detail in their records as opposed to smaller or less visible suppliers.

The other key discovery relates to voluntary nature of participation in the platform. The analyzed governance resources point to the fact that the information on suppliers relies heavily on the practice of engagement and data submission by the contributors (Open Supply Hub, 2024a; Open Supply Hub, 2024c). As a result visibility in the platform might not be a full depiction of the garment industry. The results also indicate that well-

organized transparency mechanisms may enable the wider monitoring and coordination in the Bangladesh RMG sector. The utilisation of geolocated and standardised supplier data can play a role in supply chain mapping, visibility of production network, and availability of supplier-related information.

Comprehensively, the reviewed resources reveal that OSH has a role in creating a more structured and accessible presentation of supplier information in the Bangladesh garment industry as well as demonstrating inconsistency in the number of involved, data completeness, and visibility between the facilities.

#### **4.5 Cross Theme Discussion and Theoretical Integration**

The results of the four themes, on the whole, indicate that Open Supply Hub (OSH) is an institutional mechanism and technological infrastructure, which operationalises transparency in global value chains. The platform is not a passive data storage, but rather a structure of the process of information standardisation, verification, and distribution between two or more actors. In all the themes, the issue of transparency as a governance-based practice affecting coordination, information flows, and participation of suppliers is seen.

Analysis shows that OSH helps to lessen information asymmetry by making supply chain data more easily accessible and comparable. As it is postulated by Global Value Chain (GVC) theory, this points out the focal place of information in the formation of governance structure and power relationship (Gereffi et al., 2005). In the sense of governance, it can be argued based on the findings that there is a gradual change in the coordination mechanisms. Although buyer-driven value chains are usually marked by a hierarchical form of control, the shared and standardised data systems bring in some aspects of more modular and relational forms of coordination. This does not remove power asymmetries, but might encourage more distributed forms of interaction by allowing better access to information.

The results also suggest that the transparency mechanisms have the potential to promote supplier visibility and involvement in the global value chains. Suppliers can get more recognition and engagement opportunities being part of open data systems. Nevertheless, these results are conditional and are contingent on larger institutional, organisational, and technological aspects. In general, the discussion indicates that an open data transparency can transform the governance practices by enhancing information circulation and coordination with no initial alterations in the ownership models. To this end, OSH can be conceptualized as an enabling infrastructure that enables more informed and transparent relationships in buyer-led global value chains.

#### **4.6 Bangladesh implications**

The results suggest that the growing adoption of Open Supply Hub (OSH) situates the Bangladesh ready-made garment (RMG) industry in the emerging digital transparency and supply chain visibility. Access to structured and accessible supplier information can play a role in enhancing supplier visibility and alignment to global production networks with international transparency expectations. The materials analysed indicate that geo-located and standardised supplier data can facilitate more extensive coordination in the garment industry in Bangladesh (Open Supply Hub, 2025). Systematic facility level data can be used to help firms, industry associations, development organisations, and other stakeholders to map supply chains, monitor activities, and information sharing practices. The analyzed platform materials also show that digital transparency systems could help to enhance access to information related to suppliers among various actors in the industry (Open Supply Hub, 2024b; Open Supply Hub, 2024c). Its results also indicate that engagement in transparency measures like OSH can aid in the formation of digital documentation and data management activities among suppliers. The standardisation of supplier information systems can also help in the more organised methods of information management and reporting practices in the supply chains. Moreover, the reviewed materials suggest that open and accessible supply chain data can help to plan, coordinate, and see the production networks on the industry level. Meanwhile, the analysis revealed that there are a number of restrictions that are related to the transparency

implementation in the Bangladesh RMG industry. Participation in OSH is mostly voluntary, and not every supplier can have an equal technological capacity, resources, and motivation to take part in digital transparency systems (Open Supply Hub, 2024a; Open Supply Hub, 2024c). Consequently, there is a difference in the completeness, visibility and accessibility of information relating to suppliers among different facilities and contributors. The results also show that the success of transparency efforts is subject to the larger institutional and organisational circumstances. Although digital transparency platforms can enhance access to information about suppliers, the ultimate outcome of this type of system could be contingent on supporting governance processes, institutionalization, technological ability, and stakeholder involvement in the broader context of the supply chain.

In general, the results indicate that OSH helps to scale digital transparency practices in the Bangladesh garment industry through the enhanced accessibility and organisation of supplier information. But the results of implementing transparency are still uneven and based on the participation rates, involvement of contributors, and the entire governance environment where the platform is being implemented.

#### **4.7 Summary**

This chapter gave the empirical evidence of the qualitative study on the Open Supply Hub (OSH) materials on the Bangladesh ready-made garment (RMG) industry. The analysis of governance documents, technical resources, platform description, multimedia resources, facility level datasets pertaining to supplier mapping, transparency practices and supply chain visibility informed the results. The chapter investigated the operationalisation of transparency using institutional processes, digital infrastructure, and stakeholder involvement in the OSH platform using thematic analysis to address the research question. The results suggest that transparency in OSH pertains not just to the revelation of supplier data, but is organised into formalised organisational and technological practices. The reviewed governance documents showed that transparency is encouraged by contributor rules, checks and balances, standard procedures of reporting and shared

involvement of various actors. Resources reviewed indicate that OSH is a designed digital space within which supply chain information is structured, sustained and shared within global production networks.

The other major problem of analysis was how technological infrastructure could be used to promote transparency practices. The analysed datasets at the facility level revealed that the information about the suppliers is structured based on standard metadata, facility identifiers, geolocation solutions, and records of contributors. These processes help to enhance the consistency, traceability, and availability of information in the supplier-related sector in Bangladesh RMG. Meanwhile, the results showed that the completeness and quality of facility-level data differed, which means that the transparency practices depend on the involvement of contributors and access to the data. The other significant outcome is related to the collaborative spirit of transparency production in OSH. The materials under analysis proved that the development and revision of supply chain information are conducted by brands, manufacturers, non-governmental organisations and other actors. Participation material and contributor records showed that transparency in the platform is fostered by multi-actor engagement and collective reporting as opposed to being powered by a single central authority. This cooperative framework helps to increase the exposure of the supplier information among the various stakeholders in the apparel industry. The results also indicate that there are wider implications of operationalisation of transparency by use of OSH to the Bangladesh garment industry. Structured and accessible supplier information could be used to help increase supplier visibility, increase accessibility of information related to production and improve structured practices of mapping the supply chain.

Nevertheless, the analysis also revealed constraints associated with the non-uniform participation, missing records of data, and voluntary nature of the platform use, which can impact the overall regularity of transparency results among suppliers and facilities. Altogether, it was shown in the chapter that OSH operationalises transparency by a mixture of governance-related processes, digital infrastructure, standardised data systems,

and collaboration among the stakeholders. The reviewed resources indicate that digital transparency systems have the potential to add to more organised and accessible supply chain data in the global production networks. These findings are discussed the following chapter in the context of Global Value Chain governance, processes of coordination, and literature on transparency.

## **5. Discussion and Conclusions**

### **5.1 Introduction**

The chapter points out the key findings of the study, the theoretical implications, and the practical implications of transparency and governance in the ready-made garment (RMG) industry of Bangladesh. This thesis has dwelled upon the presence of Open Supply Hub (OSH) as an online space that realises transparency by its data practices and documentation (Open Supply Hub, n.d.). The study has analyzed the structure and implementation of transparency at OSH, and the processes of transparency and the relationships to governance, coordination, and upgrading in buyer-led global value chains based on a qualitative analysis of documents (Gereffi et al., 2005). This chapter summarises the findings with regards to the research questions and explains the implications of the findings in a wider context.

### **5.2 Summary of Key Findings**

The initial research question explored how supply chain transparency is realised using the documentation and data practices of Open Supply Hub in the context of the Bangladesh ready-made garment industry. The results show that transparency is operationalised by a mixture of institutional, technological and collaborative processes. First, OSH offers an institutional framework where the contribution, verification, and sharing of data are defined. The platform creates a framework whereby supply chain information is made accessible and standardised among various actors through governance guidelines and participation standards. Second, the technological mechanisms are important in facilitating transparency. The standardisation and comparability of supply chain data is supported by the features like unique facility identifiers, geolocation, and data verification processes. Such systems enable integration of information provided by various contributors into a single structure enhancing traceability and accessibility. Third, support on transparency is enabled by participation of multi-stakeholders. Involvement of

brands, suppliers, NGOs and industry organisations helps to develop and sustain common data systems.

This collaborative design allows the generation and validation of information in many sources. These mechanisms assist in the Bangladesh context to help promote greater visibility of suppliers and access to structured information on factories and production networks. Nevertheless, the results also indicate that the participation is still uneven, and the success of transparency is determined by the level of involvement of various actors on the platform. In general, transparency in OSH is not a one-sided process but a set of institutional regulations, technological frameworks and participatory procedures which combined allow structuring and sharing the supply chain information.

The second research question was how transparency practices demonstrate Global Value Chain concepts of governance and coordination of buyer-led apparel value chains. The results imply that transparency has a key role in governance by affecting the information flow and coordination. OSH helps to alleviate information asymmetry between buyers and suppliers and other stakeholders by increasing the availability and standardisation of supply chain data. This indicates the significance of information in the determination of governance structures in relation to GVC theory (Gereffi et al., 2005). The results suggest that transparency provides a better means of coordination because choices can be made using common and verifiable data and not on restricted or skewed information.

At the same time, the results demonstrate that transparency does not fundamentally alter the existing systems of governance. The processes of buyer-driven dynamics have not changed, and leading firms still dominate in establishing standards and requirements. Nevertheless, the existence of shared data systems ushers in aspects of more modular and relational coordination, with interaction facilitated by shared data standards and information exchange. Moreover, the results demonstrate that the transparency practices can facilitate supplier participation through greater visibility and information access. This

may enable participation in global value chains, but this impact will vary according to wider institutional and organisational circumstances. In general, transparency can be perceived as a facilitative process of GVC governance. It also affects coordination and interaction by actors by enhancing access to information, rather than by direct changes in power structures.

### **5.3 Global Value Chain (GVC) Theory Integration**

This research finding can be explained concerning the Global Value Chain (GVC) theory, especially the governance, information asymmetry, and upgrading processes (Gereffi et al., 2005). The analysis indicates that transparency, which is operationalised in the form of Open Supply Hub (OSH), is a governance-related mechanism that has an impact on coordination and information flows in buyer-driven value chains.

First, the findings suggest that OSH helps to decrease the information asymmetry by making supply chain information more available and standardised between various actors. As per GVC theory, information access is important in establishing governance relations between suppliers and buyers (Humphrey & Schmitz, 2002). Nonetheless, instead of radically changing the way governance structures, the results indicate that OSH promotes aspects of more modular and relational coordination through facilitating access to data that is shared, and the buyer-driven dynamics are still present.

Second, the results can be associated with the notion of upgrading that, in the context of GVC literature, is defined as the capability of firms to upgrade their processes, functions, or positions in the value chain (Humphrey & Schmitz, 2002). The transparency practices that are evident in OSH documentation in this study imply that it can contribute to various types of upgrading. The process upgrading can be facilitated by enhanced data standardisation and traceability that can be used to increase efficiency and compliance practices. Functional upgrading can be enabled by better documentation and reporting facilities, which will enable suppliers to participate more actively in the information sharing. Moreover, the higher exposure in open data systems could also be part of

reputational upgrading, as suppliers can indicate credibility and transparency to international consumers (Gereffi and Fernandez-Stark, 2016). Nevertheless, it should be mentioned that these upgrading effects are not predetermined and require more general institutional and organisational circumstances.

Lastly, the results imply that transparency via OSH can be interpreted to mean digital form of governance. In this case, the governance is turned not through direct control and power but through the organization of information flows, data guidelines, and rules of participation, which are incorporated into the platform. Instead of hierarchical control, OSH allows coordination among actors with the aid of a common data infrastructure that fosters transparency and interaction instead of hierarchical control. In this regard, transparency is a facilitative process under GVC governance, which influences the manner in which actors can gain access to information and utilize it without necessarily reallocating power.

#### **5.4 Theoretical Contributions**

This study adds to the body of literature on Global Value Chains (GVCs) and supply chain transparency in a number of ways. First, it expands GVC theory by making transparency a governance-related mechanism, which functions not based on a direct hierarchical control, but based on the information flows. Although the conventional GVC literature argues buyer-based governance and power asymmetry, the results of this thesis indicate that digital transparency networks like Open Supply Hub (OSH) can facilitate coordination based on data standardisation and access to information. On this basis, transparency is a facilitative process that is used to supplement, and not to substitute, existing governance systems. Second, the study elaborates the notion of institutionalised transparency by showing how transparency is institutionalised in a set of formal rules, technological infrastructures, and multi-stakeholder involvement. This view goes beyond considering transparency in terms of voluntary practice of disclosure but rather places it as an organised and structured procedure in digital platforms. Third, the research findings add to the literature on upgrading by indicating that the transparency practices can

positively affect some types of supplier upgrading, specifically visibility, access to information and relational engagement. Upgrading according to the theory of GVC simply refers to the process, functional, or positional additions to the value chain (Humphrey & Schmitz, 2002). The results indicate that transparency may result in process and relational upgrading, but these are conditional and contingent on the greater institutional contexts. Lastly, the study, in terms of methodology, illustrates the usefulness of qualitative, document-based analysis to study digital platforms and governance mechanisms. Through the discussion of publicly accessible documentation, the study will offer knowledge in how transparency is conceptualised and operationalised in new digital infrastructures.

## **5.5 Practical and policy implications**

This study has a number of policy and practical implications on various stakeholders in the Bangladesh ready-made garment (RMG) industry. Being a member of transparency programs like OSH can also increase visibility, credibility, and access to international supply chains networks to manufacturers. Firms can be stronger in buyer-driven value chains by becoming more data-driven and enhancing the systems of documentation and reporting. To Engaging in more effective interaction with international buyers could thus be aided by investing in digital capabilities and transparency practices. In the case of industry associations like BGMEA and BKMEA, OSH data can be used to give useful insights in cluster mapping, resource planning, and strategies of development of the industry. Access to systematic and geolocated data can facilitate enhanced integration throughout the industry and become part of the efforts to enhance competitiveness and compliance (BGMEA, 2024).

To Open Supply Hub as a platform, the results imply that it is necessary to enhance local interaction and accessibility. To facilitate the degree of trust and utility of the platform, it can be enhanced by enhancing its cooperation with local stakeholders, offering support in multiple languages, and reviewing the information on a regular basis. Evidence-based decision-making is one of the potential tools that can be used by policymakers

using open data resources like OSH. Industrial planning, monitoring, and regulatory processes can be supported using supply chain data. Nonetheless, the efficient exploitation of this data is conditional on the correspondence with the current policy frameworks and investments in the digital infrastructure and capacity building. On the whole, these implications indicate that transparency programs can facilitate better coordination and access to information but their effects are conditional upon the wider institutional and technological factors.

## **5.6 Recommendations**

The results of this study can be used to develop future research in a number of ways. To begin with, a comparative study among various countries or even industries in the suppliers would give a wider picture of the functionality of transparency platforms in a different environment. Second, quantitative research may investigate the association between the transparency participation and some quantifiable results in terms of the supplier performance, compliance, or upgrading. This would be an additional qualitative input on this study. Third, longitudinal research can be done related to the development of transparency practices and digital governance mechanisms over time, particularly as platforms such as OSH continue to grow. In addition, the future study could be based on the perspectives of other interest groups, suppliers, buyers and policy makers to learn more about how transparency is being actualised and put into practice. Finally, the role of transparency in conjunction with other facets of sustainability, such as environmental and social upgrading, and the influence of new technologies, such as artificial intelligence, on the definition of data governance in global supply chains could be considered in future studies.

## **5.7 Limitations**

There are a few limitations of this study that are to be noted. To start with, this study relies purely on secondary data, preventing the possibility of checking the accuracy and completeness of the information presented in Open Supply Hub on its own. Since the

data will be gathered and kept by the other organisations the researcher has less control over the reliability of the data. Second, this thesis investigates one instance, i.e., Open Supply Hub, in the environment of the Bangladesh ready-made garment industry. Although this enables a detailed analysis, the results might not be easily applicable to other industries or geographical situations. Third, the qualitative and interpretive study character can bring in subjectivity in the analysis to some extent. Though this was done to create consistency and transparency in the research process, interpretations are subject to the viewpoint of the researcher. Lastly, the continuously dynamic nature of digital platforms implies that OSH data and practices are constantly changing. Consequently, the results of this study are the time-bound analysis of transparency practices during the time of data collection.

## **5.8 Future Research Recommendations**

Future studies can compare the influence of OSH on supplier countries, quantitatively investigate the adoption of transparency, develop longitudinal research on digital governance, investigate perceptions of stakeholders of transparency, and combine transparency and environmental and social upgrading. Algorithms governance analysis would give further information on how AI and automated verification may be used in international supply chains.

## **5.9 Concluding Reflections**

This thesis has delved into what the operationalisation of supply chain transparency involves through the use of Open Supply Hub and how these practices relate to the governance and coordination in Global Value Chains. The findings indicate that transparency is incorporated in institutional structures, technology and collaboration processes, which interconnect to determine how information is shared and consumed by actors. Transparency is a facilitative mechanism instead of trying to drastically change the system of governance, and it improves coordination, reduces information asymmetry, and enhances supplier visibility. This may be included in the improved participation in global

supply chains in the case of the Bangladesh ready-made garment industry, but the outcomes are liable to reliance on the broader institutional and technological milieu. Overall, the research highlights the growing role of digital infrastructures in world production systems development. When applied as open data platforms, transparency becomes a more and more significant element in the organization of information flows and coordination of the actors of global value chains.

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## Appendices

### Appendix 1. List of Documents for Data Analysis

1. Open Supply Hub. (2025). Beyond Transparency: Building Safe, Accessible Digital Tools for Supply Chain Accountability.
2. Open Supply Hub. (2025). Summary: Beyond Transparency – Building Safe, Accessible Digital Tools for Supply Chain Accountability.
3. Open Supply Hub. (2026). Data Safety Policy for Trade Unions and Civil Society Organizations.
4. Open Supply Hub. (2025). Open Supply Hub Bylaws.
5. Open Supply Hub. (2024). Responsible Fundraising Policy.
6. Open Supply Hub. (2024). Safeguarding Policy.
7. Open Supply Hub. (2024). Conflict of Interest and Compensation Approval Policies.
8. Open Supply Hub. (2022). Moderation Policy: Names, Addresses and GPS Coordinates.
9. Open Supply Hub. (2022). Verified Sources and Attributable Data Policy.
10. Open Supply Hub. (2022). Policy: Marking Facilities as Closed.
11. Open Supply Hub. (2025). Policy: Free/Discounted Access to Premium Features.
12. Open Supply Hub. (2024). Times Have Changed: The Benefits of Transparency Outweigh the Risks.
13. Open Supply Hub. (2024). Governance and policies.
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17. Open Supply Hub. (2024). A free universal ID matching algorithm.
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22. Open Supply Hub. (2024). Data Upload Tutorial for Brands [Video].
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## **AI Declaration**

In the writing of the thesis, limited use was made of the artificial intelligence (AI) tools to assist in brainstorming, structuring the organisations, improving language and clarifying concepts when necessary. All of the research decisions, analysis, interpretation, arguments and final written product were made, developed and completed by myself.