

White Paper

Supply Chain Transparency in the Era of E-commerce and Globalization

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Introduction

E-commerce and globalization have revolutionized how goods and services are produced, distributed, and consumed around the globe. Digital communication technologies, logistics networks and international trade have enabled businesses to engage with suppliers, customers, partners more quickly and effectively than ever. But this global interdependence has also presented companies and consumers alike with new challenges and risks, particularly regarding transparency and accountability within modern supply chains. As supply chains become ever more global and complex, organizations find it more and more challenging to monitor the sources and impacts of raw materials, labor, and environmental impacts sourced within. Supply chain transparency has thus become increasingly crucial for organizations aiming to mitigate risks, build trust with consumers, and meet social responsibility mandates.

Definition of Supply Chain Transparency

Supply chain transparency refers to customers, stakeholders, and regulators being able to track every stage of a supply chain from raw material procurement all the way through production and final shipment of finished goods. With globalized trade becoming ever more complex and multinational supply chains have become more challenging to oversee and control effectively. E-commerce has fundamentally altered the retail industry, encouraging an expansion of online marketplaces and cross-border trade. Supply chain transparency has quickly become an indispensable tenet of success for companies who aim to ensure ethical and environmentally responsible practices from their suppliers, mitigate supply disruption risks, and build their brand's image. Companies seeking supply chain transparency must engage all relevant parties by communicating and cooperating effectively, using technology to monitor operations, and adopting best practices that enhance transparency--such as sharing relevant data and information with all relevant parties.



Importance of Transparency for Globalisation and E-commerce

Transparency also plays a pivotal role in an age of globalization and e-commerce, helping build trust between buyers and sellers and creating loyalty between both. Consumers want to know where their products come from and whether or not they were produced ethically and sustainably, leading them to trust businesses with transparent operations that demonstrate they source products ethically and sustainably thus driving increased sales and profitability for themselves. Transparency also plays an essential role in optimizing supply chain management and mitigating risks for businesses. By making supply chain data more readily accessible and transparent, organizations can identify any risks or gaps within their supply chains that need attention, ultimately creating more resilient and robust supply chains. Transparency allows organizations to reduce risks, boost efficiency and make better-informed decisions, as well as promote ethical practices while simultaneously increasing profits. Thus, in an age of globalization and e-commerce, transparency can have a tremendously positive effect on buyers and sellers helping to uphold ethical practices while simultaneously increasing profitability.

Purpose of this White Paper

This white paper's goal is to emphasize the need for supply chain transparency in an age of globalization and e-commerce, by informing readers about its complexity as well as any associated risks. This white paper seeks to emphasize that transparency is vital in order to mitigate risks and preempt any mishaps which might occur along the supply chain. Furthermore, this white paper intends to discuss factors which affect supply chain transparency as well as ways to increase it. This white paper proposes solutions to increase transparency within supply chains and stresses their significance as part of society as a whole. By increasing transparency between businesses and their stakeholders, trust can be built between all involved

E-commerce and globalization have transformed supply chain transparency while revolutionizing how consumers engage with brands and make purchasing decisions.



Consumers now possess more informed, empowered decisions thanks to online shopping's convenience. Nowadays, consumers tend to do extensive research before purchasing any product, which may include investigating its production and supply chain practices. As consumers become more socially aware, companies must become transparent with regards to where and how their products are manufactured, including how employees working there are treated and the conditions under which production occurs. Supply chain transparency has thus become essential to building and upholding brand reputation and success companies which prioritize ethics over secrecy will attract consumers with ethical concerns while simultaneously preventing legal hassles down the line.



Impact of Globalization and E-commerce on Supply Chain Transparency

E-commerce and globalization have dramatically transformed supply chain operations. Their integration has significantly expanded their scale and complexity; now spread geographically throughout multiple levels with numerous stakeholders involved at every point in time. Decreased transparency within supply chains due to an increasing number of intermediaries is another challenge; making it harder to track goods and information flows efficiently. As systems become more complicated, more advanced tools and technologies must be utilized to track and evaluate supply chains. E-commerce platforms offer greater transparency for transactions; suppliers can track where their products have moved from point to point. Blockchain technology provides an accessible and transparent method of tracking transactions and managing supply chain systems. However, supply chain transparency remains an area for improvement as globalization increases in scale, so stakeholders must remain united to meet its challenges head on.

How e-commerce and globalization have altered supply chain management

E-commerce and globalization have revolutionized traditional supply chain management practices, simplifying them significantly in recent times. Before, supply chain management involved an intricate web of middlemen, retailers, and transportation providers that required constant monitoring. Due to globalization and e-commerce, businesses have seen less need for intermediaries; instead, adopting leaner supply chain models. Digitalizing supply chains has enabled companies to streamline operations, enhance communication between suppliers and customers, and respond more swiftly to changing market needs. Globalization has helped businesses take advantage of new markets, source products from around the globe and take advantage of low-cost labor sources. While using multiple suppliers and adopting just-in-time inventory management practices has left businesses more susceptible to supply chain disruptions, businesses must focus on increasing supply



chain transparency and creating resilient supply networks in order to mitigate associated risks associated with globalization and ecommerce.

Overcoming Challenges of Supply Chain Transparency in Global Environment

Reaching transparency within global supply chains presents another difficulty due to its vast network of participants suppliers, manufacturers, distributors, and retailers all play important parts. Coordinating efforts to maintain transparency among such a complex web of players may prove to be difficult. Due to competitive concerns or fear of negative press, some participants may not wish to disclose certain information such as supplier identities and labor practices. Maintaining transparency over time can be challenging given how dynamic supply chains can be; consumer preferences shift rapidly, natural disasters occur frequently, and economic shifts exacerbate existing inequities. Implementing monitoring systems and communicating effectively with all participants within the value chain are necessary components to sustaining transparency over time.

Lack of transparency has an adverse impact on both businesses and customers, negatively affecting both. Lack of transparency can have negative repercussions for businesses and customers. For instance, companies which don't disclose details regarding their supply chain operations risk alienating both customers and markets. Customers tend to become suspicious of businesses when information regarding production, sourcing and distribution are withheld from them, which could ultimately reduce customer confidence in them and ultimately affect the bottom line. Business that fail to maintain supply chain transparency may run the risk of engaging in unethical practices that compromise supply chains, including exploiting child labor, engaging in corruption or polluting the environment activities which may expose them to legal actions, reputational damage and reduced market share. Supply chain transparency remains crucial in encouraging ethical business practices while building positive customer-business relations.

As globalization expands and e-commerce grows, supply chain transparency becomes ever-more critical to consumer awareness of their purchases and ethical considerations



involved in production processes. Consumers now more frequently inquire about where their goods originate as well as ethical production issues associated with producing them. Companies have recognized this demand and are taking various approaches to increase transparency within their supply chains. Blockchain technology with its secure tracking capability for transactions and information is often considered as one possible solution. Firms are increasingly turning to third-party auditors and conducting regular audits as an effort to provide their customers with greater transparency. However, supply chain transparency for online commerce can be more challenging due to multiple parties involved and cross-border transactions. Effectively tackling this issue requires collaboration among suppliers, governments and retailers in setting clear standards and monitoring compliance with them. Improved transparency benefits both consumers making more informed choices as well as companies by building rapport with their customer base.



Benefits of Supply Chain Transparency

Thirdly, supply chain transparency helps establish brand credibility and build consumer trust while mitigating risks. By giving customers access to information regarding product origin, production processes and environmental impacts of goods sold, firms can foster customer confidence and create loyal clientele. Disclosure of suppliers can help firms reduce risks related to unlawful suppliers who violate human rights or environmental regulations, thus mitigating potential liability issues associated with unethical suppliers. Transparency is especially crucial in an online commerce era where negative news travels quickly across social media channels and other digital outlets. By being open about their practices, firms can demonstrate their dedication to ethical business conduct while setting themselves apart from competitors who don't do the same. Therefore, the advantages of supply chain transparency go well beyond legal compliance and ethical considerations and include strategic benefits like operational efficiency gains, supply chain resilience enhancement and customer retention.

Improved efficiency and effectiveness

Greater efficiency and effectiveness are integral to maintaining a sustainable supply chain and realizing business success. One method to do so is through technology; specifically, e-commerce has proven crucial in making supply chains efficient and effective. By harnessing technology, businesses can automate their supply chains, reduce costs, manage inventory more easily, streamline communication channels and enhance customer experiences. RFID (Radio Frequency Identification) technology makes inventory tracking and management simpler than ever. Businesses using this technology to track their products in real-time can quickly identify any issues, reduce wastefulness, and ensure product availability is increased. Technology has greatly enhanced communication among vendors, suppliers and customers creating an atmosphere for businesses to collaborate effectively together. By harnessing its potential, businesses can improve efficiency and effectiveness to meet



customer requirements while increasing profitability while remaining competitive within their market space.

Consumer trust and loyalty improvement

Consumer trust and loyalty are cornerstones of sustainable growth and success in today's e-commerce and globalized environment. Supply chain transparency helps organizations ensure that the products and services they produce meet ethical, legal, and security criteria in terms of procurement, production and distribution to their customers in an expedient and safe fashion. By providing consumers with information regarding their suppliers, manufacturers, and distributors they can build up trust among an increasingly conscientious population who place high importance on ethics and the environment. Supply chain transparency helps businesses identify and mitigate potential risks like product defects, counterfeit goods and environmental violations before they harm customers or damage brand images. In turn, investing in supply chain transparency increases customer satisfaction, loyalty, advocacy as well as competitive edge within global markets.

Reduce risk and costs associated with supply chain disruptions

Transparent and visible supply chain operations offer many significant advantages, chief among them reduced risks and costs associated with disruptions to operations. Proactive measures taken with real-time information allow managers to avert disruptions. Companies using this approach can quickly recognize bottlenecks, inventory shortages and quality problems and address them before they develop into larger-scale issues. Visibility provides businesses with the insight to make informed decisions based on reliable data and adjust inventory and production schedules accordingly. Companies should ensure their supply chains are optimized and balanced, eliminating excess inventory while cutting holding costs. Cost savings go beyond operational expenses and cover areas such as mitigating lost sales, shortening lead times and decreasing emergency shipments. Greater



supply chain transparency enables companies to use critical data, decrease exposure risks and enhance agility; ultimately driving growth and overall business success.

Responding to the increasing need for responsible and ethical business practices

With globalization and the internet accelerating business practices, the demand for responsible and ethical business practices is quickly on the rise. With consumers becoming more conscious of the harmful impacts that unethical business practices can have on society and the environment, businesses are coming under increasing pressure to adopt more ethical business practices. Government regulation and industry standards have also helped drive this increased interest in responsible business practices; many countries are passing new laws designed to make sure companies account for their actions. To meet this increasing consumer expectation, businesses must prioritize transparency and make public their sustainability initiatives, including fair labor practices, environmental-friendly initiatives and ethical materials sourcing practices. By doing this, businesses can build trust with consumers while simultaneously positioning themselves as socially responsible businesses whose actions contribute towards creating a more sustainable world for everyone.

Companies should put greater focus on strengthening traceability and accountability measures to increase supply chain transparency. Tracing goods and materials from their point of origin to final destination involves tracking every step along their journey while being aware of any possible ethical concerns or potential hazards along the way. Due to globalization and e-commerce, supply chains have become more complex, making transparency difficult to achieve. Therefore, companies must utilize technological solutions like blockchain that enable them to record and share data securely across their supply chains. Working closely with suppliers, customers and other stakeholders not only allows companies to identify any potential problems but also fosters partnerships which increase transparency in supply chains. By prioritizing supply chain transparency companies will be



able to minimize risks, boost reputations and meet market demands for sustainable products.



Current Initiatives Aiming at Supply Chain Transparency

Recently, numerous initiatives to increase supply chain transparency have been undertaken by large companies like Nike, Intel, and McDonald's. Their initiatives focus on increasing responsibility in their supply chains while keeping costs under control. Independent organizations such as the Responsible Business Alliance, Fair Labor Association and Ethical Trading Initiative have also provided companies with guidelines they can adopt in order to increase transparency within their supply chains. The United Nations Global Compact initiative seeks to promote supply chain transparency by encouraging companies to adopt sustainable and socially responsible business practices. Governments around the world have also implemented mandatory disclosure requirements, requiring companies to publicly report on their supply chain practices; examples include the UK Modern Slavery Act and California Transparency in Supply Chains Act. Such efforts have proven instrumental in increasing supply chain transparency while simultaneously upholding accountability on social and environmental matters.

Regulations and laws set by government bodies to promote transparency

Regulations and laws instituted by governments to compel supply chains to adhere to transparency have taken on increasing significance in today's globalized and digitalized economy. Governments around the globe are realizing the significance of passing legislation that promotes greater transparency as consumers, civil society organizations and investors increasingly demand increased accountability from companies operating. Domestic and international regulations such as the Dodd-Frank Act in the US and Modern Slavery Act in the UK have required companies to disclose information regarding their supply chains to demonstrate that they do not engage in human rights abuses and environmental degradation. Furthermore, regulatory bodies are developing mechanisms to detect and punish companies that violate these laws.



Finally, an increase in regulations and enforcement actions taken by governments illustrates that supply chain transparency no longer constitutes voluntary practice but an essential requirement of responsible business conduct.

Technology plays a pivotal role in providing transparency. Such technologies include blockchains and tracking systems. Blockchain and tracking systems have revolutionized how organizations monitor their supply chains. Blockchain's immutable ledger provides a secure and transparent means for recording and sharing information between stakeholders. Technology allows stakeholders to quickly establish a shared database for tracking and auditing movements of goods and information along the supply chain. Tracking systems such as Radio Frequency Identification (RFID), Global Positioning System (GPS), and barcodes can also be integrated into supply chains to monitor movement of goods more closely, helping organizations ensure suppliers adhere to ethical and environmentally friendly standards while also identifying any bottlenecks in their supply chains.

Companies' initiatives taken to implement transparency

Businesses have come to understand the advantages of adopting transparency into their operations, from publishing sustainability reports and disclosing supplier details, to adhering to fair labor practices and disclosing sourcing information. Sustainable sourcing has quickly become a top priority among numerous businesses, which have implemented ethical sourcing policies and started monitoring their carbon footprint and adopting green initiatives to minimize environmental damage. Companies have used technology to foster greater transparency within their supply chains and ensure compliance with labor and environmental standards by suppliers. Consumers increasingly value companies that exhibit this practice. Companies also take great strides toward building trust by being transparent with consumers who increasingly demand transparency from businesses. Through the implementation of such initiatives, businesses have also been able to mitigate risks and ensure compliance with international regulations.



Transparency has not only helped business practices evolve; it's been the catalyst behind social and environmental progress as well.

Consumer interest has led to an ever-increasing need for transparency within supply chain operations. Consumers increasingly wish to know about the source and production methods behind products they consume. With the increasing globalization and online shopping, supply chains have become more complex, involving numerous parties across different time zones and geographic locations. Complexity has opened the doors for unscrupulous actors to engage in practices harmful to workers and the environment. Companies should proactively ensure transparency throughout their supply chains to mitigate consumer fears and guard against reputational harm, and lower risks of unethical practices and human rights violations. Supply chain transparency can lead to greater efficiencies, improved supplier relationships, and enhanced product quality; companies should prioritize it as an integral component of their business practices.



Barriers and Challenges to Supply Chain Transparency

Lack of uniform transparency requirements and reporting mechanisms across industries and geographies poses one of the main roadblocks to supply chain transparency. As such, companies find it challenging to understand and fulfill the expectations of their stakeholders as well as benchmark their performance against that of peers. Supply chains often involve several tiers, making it hard to trace each component's source and conditions of manufacture. Complex matters may further compound themselves owing to supplier hesitation to share vital details like their sourcing practices or labor standards information which might put them at an unfair advantage against rival suppliers. Supply chain transparency requires significant investments of both technology and personnel that may not be achievable for every company, especially those operating in emerging markets with limited resources and infrastructure.

Lack of standard regulations

An additional challenge associated with providing supply chain transparency arises from lack of standard regulations. With globalization and e-commerce expanding at such a rapid rate, countries have found it increasingly challenging to create and enforce unifying laws and regulations across borders. Due to this disparate regulatory landscape, where different countries and regions adhere to differing sets of standards and rules for compliance purposes, businesses can find it challenging to achieve complete transparency across their supply chains. Manufacturers and suppliers must often abide by multiple regulations and standards in different regions, leading to confusion and potential compliance issues. As weak regulatory regimes can allow unethical or illegal practices to go undetected, this poses another hurdle to maintaining ethical supply chains. There has therefore been an increasing push for greater international cooperation and standard regulation to guarantee accountability throughout global supply chains.



Implementation costs associated with transparency measures

Implementation costs should not be underestimated: according to Deloitte research, transparency measures could increase an organization's operating expenses by up to 20%. Companies will have to invest in technologies, systems and staff members in order to collect, analyze and communicate data to stakeholders these costs being particularly prohibitive for small and medium-sized enterprises (SMEs) which lack sufficient funds available for such efforts. Transparency measures require larger financial investments into improving supply chain infrastructure and supplier relations, which in turn increase operational expenses further. However, failing to abide by transparency initiatives can result in reputational risks, legal ramifications and economic losses for companies. Therefore, companies must weigh the benefits against costs before determining whether these initiatives can add long-term sustainability and profitability for themselves.

Lack of Collaboration in Supply Chain Operations

Cooperation among stakeholders within a supply chain poses one of the primary barriers to transparency. When you have multiple players all with individual interests and agendas involved, getting everyone working towards one common goal may prove to be challenging. Suppliers might hesitate to share information about their sourcing practices out of fear that competitors could use this knowledge against them; while distributors might prioritize meeting deadlines and targets over ensuring product safety or ethics standards are upheld. Retailers may prioritize price over quality. Without cooperation between all stakeholders involved, it becomes challenging to trace products back to their origin and identify where improvements may be necessary. To overcome this obstacle, clear communication channels must be established between all involved and incentives given for sharing information freely among each stakeholder group.



Resistance from businesses who benefit from non-transparent practices

Driving forces behind supply chain transparency include ethics, social responsibility and accountability principles. Unfortunately, however, businesses who benefit from less transparent practices have been resistant to adopting them fully. Reasons for such resistance could range from fear of disclosing proprietary information, the complexity of supply chains, protecting brand reputation or losing competitive edge as well as concerns of losing competitive advantage. Global supply chains lacking transparency allow businesses to maintain low prices and high profits by exploiting labor resources, violating ethics and social responsibility principles and thus hindering progress towards transparency and accountability. Therefore, until businesses adopt ethically sound practices the supply chain transparency movement will likely face resistance which threatens its progress toward transparency and accountability.

Recent trends in supply chain transparency involve using technology to increase visibility and traceability of materials throughout their supply chains, such as RFID tags, blockchain or IoT sensors that track products or materials at every step. Technology provides companies with greater risk management, faster identification of any supply chain issues and transparent communications with their customers about where their product was made. However, challenges still lie ahead such as cost and complexity of implementation of such technologies as well as standardization across an industry. Privacy and data security must also be carefully addressed to build consumer trust in these technologies, so as to maximize supply chain transparency. Technology offers great promise but careful thought must go into its implementation to ensure ethical usage and maximum efficacy.



Conclusion

Supply chain transparency has taken on increasing importance as online commerce and globalization continue to advance, as consumers become more informed of and concerned about ethical sourcing and production for the products they buy. Due to advances in technology, consumers now demand greater transparency from companies regarding their supply chain practices and hold them more accountable than ever. It has made providing transparency easier for businesses. However, much work remains before full transparency and sustainability in supply chains can be attained. Governments, NGOs, consumers all play an integral part in driving transparency forward while holding companies accountable. Companies who prioritize supply chain transparency and sustainability will more likely gain consumer trust leading them towards socially responsible business future.

Recap of the Importance of Transparent Supply Chains in E-commerce and Globalisation

As supply chain transparency has become an essential aspect of globalization and e-commerce, companies must implement clear and transparent supply chains which can be monitored for ethical and legal compliance purposes. Failing to comply can present companies with significant risks in terms of reputational harm as well as legal and financial ramifications. Transparency can provide businesses with a competitive edge as consumers demand more details regarding the products and companies they support. Transparency within supply chains requires companies to commit themselves to identifying and mitigating potential risks, developing clear governance structures and investing in tools and technologies for tracking supply chain activities. By doing this, not only are operations improved but companies can contribute towards improving global sustainability and social responsibility efforts through supply chains worldwide.



Strategies and Solutions Available for Overcoming Obstacles and Barriers

Implementation of blockchain technology could provide one way of overcoming supply chain obstacles and improving transparency by recording transactions securely and transparently and tracking movements of goods through supply chains. Data analytics and artificial intelligence tools can also assist with the early identification of issues and instant solutions, while collaborative efforts and partnerships among stakeholders can further ensure transparency and accountability across supply chains. regulations and policies which mandate companies to release more details about their supply chains may help increase transparency. Consumer education about ethical and sustainable sourcing practices can create demand for transparency among companies, encouraging them to adopt more transparent practices. Overall, technological developments, collaboration agreements, and policy modifications all play a part in helping overcome challenges associated with supply chain transparency.

Future Directions for Enhancing Supply Chain Transparency.

Going forward, several potential avenues exist for increasing supply chain transparency. Blockchain technology may present one promising approach. Tracking products from their source to destination offers yet another potential improvement area. It would also increase transparency and accountability throughout the supply chain while strengthening trust between stakeholders. One potential method for increasing transparency involves employing predictive analytics and artificial intelligence technologies in order to detect any possible disruptions to supply chains before they take place. Companies could then become more proactive in responding to issues and mitigating negative impacts on customers and suppliers, while increased collaboration and information sharing between firms in the supply chain could reduce information asymmetry while creating greater transparency possibly via standards, platforms or adopting more open business practices.

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