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Evolution of Supply Chain Management Trends, Transformations, and Future Perspectives

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Abstract

Purpose*: The purpose of this study is to show the rapid evolution of supply chain management in the past few decades from 2010 to 2023 due to the coming up of AI and new edge technologies in Supply chain management. Also, to study the changing trends in the current complex globalized business world and to analyze the new concepts of Supply Chain Management.*

Design/Methodology/Approach: *Critically reviewing all the journal articles on Supply chain management from 2010 to 2023, a theoretical and a practical framework is developed for the research study analyzing the utility and evolution of Supply Chain Management.*

Findings: *The study shows how the companies are transitioning towards a carbon-neutral model that benefits all stakeholders through strategic alterations in supply chain management.*

Research Limitations/ Implications: *This study is based on a critical review of past research, providing directions for future studies and conceptual model development. It explores a sustainable business approach and how companies are transitioning to a carbon-neutral model. Strategic supply chain alterations benefiting all stakeholders are also examined.*

Originality/Value*: This Study is not prejudiced in nature and is authenticated and includes information published in recent issues*

Keywords: *Optimization of Supply Chain management, Efficiency, sustainable Supply Chain Management*

Paper Type: *Literature Review*

1. INTRODUCTION

Supply chain management (SCM) has evolved significantly over the past few decades, revolutionizing from classical logistics operations to a strategic, knowledge-driven approach that integrates latest technology in various business functions. The rising difficulties of global markets, technological advancements, and sustainability concerns have played an important role in shaping latest generation supply chains. Lee and Billington (1995) have put a light on how companies like HP (Hewlett Packard) made drastic changes to their supply chain to incorporate effectiveness and efficiency. The adoption of innovative technologies such as AI, machine learning, business analytics, and the Internet of Things have helped in giving the right direction to the modern-day supply chain in order to get live tracking on the electronic devices focusing on predictive analytics (Vyas, 2016) in order to save cost. Moreover, sustainability has become an important agenda with companies trying to build a supply chain which is good for the nature. Carter and Easton (2011) emphasized the noteworthiness of integrating sustainability into supply chain management, while Rajeev et al. (2018) explored its evolution and impact on business transformation. The COVID-19 outbreak also highlighted various gaps in supply chains, prevailing firms to develop innovative and consumer centric strategies (Craighead, Ketchen, & Darby, 2020). The increasing globalization and connectivity add further complexity, companies are moving towards adopting virtual solutions such as cloud-based digital look alike to enhance transparency and efficiency (Liu et al., 2022). The ongoing shift towards net zero and sustainable business models has further accelerated supply chain evolution, putting supply chain management into spotlight as the most important driving factor of business resilience and contributing to the GDP. Future research should focus on integrating emerging technologies and sustainable practices to develop innovative SCM models that benefit all stakeholders. By integrating the above supply chain elements, it helps in transforming the raw materials to finished goods which are manufactured and delivered to the customers at the right place, at the right time and in the right quantity. This study is very much relevant nowadays because with the coming up of AI and internet of things (IOT) there is a particular algorithm of doing the things which has revolutionized the way of doing business and it is in the driving position which means it is leading the digital marketing space which lead to its success in the international trade supply chain management With the continuous development of Artificial intelligence/ algorithms and Internet of Things(IOT) technology, the research on cost control of enterprises is getting more and more in-depth. By taking this information as a sample/ reference, enterprises can realize real-time decision-making, accurate forecasting, optimize cost management, realize rational allocation of resources, improve the productivity and usefulness of the operation and

management, to reduce the cost of each link in the supply chain and improve the overall competitiveness.

Firms and businesses provide basis and a model/ pattern for thinking and decision-making in supply chain cost management, thereby promoting the development of digital marketing leading to optimum utilization of resources. It helps in tracking and analyzing the global changes in the supply chain management (SCOPUS). It was observed in the USA and Japan for combustion engine vehicles

manufacturing and for industry factories produce in the European Union. Considering the growing demand for one component, different supply chains, and innovative methods and strategies are required in order to succeed in the business environment. It is very useful for the audience and is an important topic because it helps to know the changes which have been happening in the VUCA (Volatile, uncertain, complex and ambiguous) business environment and what will be its impact politically, economically, socially, technologically, ethically and legally (PESTEL Analysis). It helps to burst into the public eye regarding the various changes like there is a new change for sustainable supply chain and how it is transforming the business and the lives of customers like for example in the time period between 2010-2013 all the customers had to go physically to the market to get their goods and services then came the western players like Amazon who started delivering the goods of the choice of customers to their homes this was a brand new concept for Indians but still many people used to get their goods by themselves and then by 2017-2018 there was a change in the scenario and many goods were delivered to the home of the customers and then came companies like Blinkit , Zepto during the pandemic who connected with the retail shopkeepers and the customers in the current scenario can get each and every thing delivered to their doorstep so hence it shows that how the customers have been able to save their time and work on their important work and all this has been made possible due to the rapid evolution in the supply chain management in the past few decades.

2. REVIEW OF LITERATURE

2.1 Evolution of Supply Chain Management:

Supply chain management (SCM) has undergone a significant transformation over the past few decades, from its traditional logistics-based approach to a strategic function that drives business growth, competitive advantage, and operational efficiency. As global competition intensifies and new technologies emerge, SCM has evolved into a complex, dynamic process that involves managing not just the flow of goods but also the flow of information, finances, and services across an interconnected network of partners. Supply chain management now incorporates an entire system that includes sourcing of raw materials, manufacturing, transportation, distribution, and managing demand (Lambert, 2008). In the old times, supply chain management was concerned with operational efficiency, focusing on reducing costs of warehousing, and distributing goods, which led to the beginning of inventory management (Christopher, 2016). However, the business scenario has changed with the best-in-class technologies and the increasing focus on sustainability. For example, it is the law of Germany to sell products which are made through recycling otherwise they do not allow sale of goods. The traditional view of supply chain is far more sophisticated, encompassing various strategies such as

just-in-time in which the factory and the showroom have to be nearby the warehouse in order to reduce the ordering costs, lean manufacturing, and more recently, digital and green supply chain management (Chopra & Meindl, 2016).

2.2 Early Supply Chain Models and the Push-Pull Dilemma:

In the beginning when concept of supply chain was introduced in 1990s then it operated in a simple environment where products were produced in a "push" system under which the goods were made by the manufacturers and based on the demand forecasts they were pushed to the consumer through intermediaries such as wholesalers and retailers. Unfortunately, the traditional systems led to excess inventory, stockouts, and mismatches between supply and demand due to which the inventory didn't match in the online inventory management systems and the stores and led to a big gap in the industry and due to this a big chunk of inventory didn't sell and was accumulated in the inventory warehouses leading to huge losses. (Heizer et al., 2017). In the early stages, the result derived the limitations of this push-based approach and proposed the introduction of a more demand-driven "pull" system, where production and distribution are triggered by the demand of the consumers (Lee, 2004). The push-pull dichotomy, introduced by Fisher (1997), remains a foundational concept in Supply Chain Management. It refers to the challenge of determining the right mix of push-based and pull-based strategies depending on the nature of the product and the market which means a hybrid strategy is adopted consisting of push and pull system based on the demand of consumers. Products that have stable and predictable demand, like raw materials or basic consumer goods, are often pushed through the supply chain, whereas products with unpredictable demand, like fashion items or seasonal goods, are better suited for a pull-based model.

2.3 The Rise of Digital Technologies and Automation:

The advent of latest technologies has revolutionized the supply chains. During the initial phases in 1990s and 2000s when supply chain was introduced Enterprise Resource Planning (ERP) systems were taken into account to integrate the various functions of supply chains, creating an ideal flow of information across the entire value chain. Technologies such as RFID (radio frequency identification) under which the barcode was scanned of various items, and GPS (Global positioning systems) enabled real time tracking and management of inventory, orders, and shipments, marking the first major shift from manual to automated supply chain processes as all the orders were now located on the computers which helped to automatically track the inventory and maintain the sales records. Further the next step was that digitalization and automation was in the driving force by the adoption of the Internet and cloud computing, which allowed various MNCs to share important information and collaborate with manufacturers, wholesalers and retailers in real time, regardless of location. Organizations such as Wal-Mart innovated the digital networks to create massive supplier collaboration ecosystems. With the passage of time, brand new consumer centric technologies such as Artificial Intelligence (AI), machine learning (ML), and the Internet of Things (IoT) have enhanced decision-making capabilities by providing predictive analytics, optimizing inventory management, and

improving demand forecasting by improving the decision making of various consumers (Saghafian & Van Oyen, 2020). These became the most important factor which is moving the supply chain globally in all the countries in the 21st century. It helps companies to optimize various aspects of supply chains, from demand forecasting to inventory management, and even route optimization in transportation (Agarwal et al., 2020). AI-based predictive models enable real-time decision-making and adaptive strategies, allowing supply chains to become more resilient and transformative in the VUCA (volatile, Uncertain, complex, ambiguous) world (Saghafian & Van Oyen, 2020).

The Internet of Things (IoT), which connects all the devices and sensors through the internet, plays an important role in enhancing visibility and real-time tracking of goods throughout the supply chain by creating the warehouses which are automated and have a central warehouse located in Frankfurt from where all the goods are delivered in Europe and the entire world in general (DHL, 2018). For example, RFID tags and GPS-enabled devices allow companies to track the condition of goods in transit as in Europe the goods are delivered overnight through overnight trucks and to rest of the world through overnight flights, ensuring timely delivery, and manage inventory levels more effectively (Christopher, 2016). Grid supply chain is used which is in the spotlight in the current scenario in which the information is stored in the form of grids and large transformers are used to create energy sustainably and it tracks the demand of the consumers. It has found particular use in sectors such as food, pharmaceuticals and electronic companies, where safety and quality control are critical (Kamble et al., 2020).

2.4 Sustainability and Green Supply Chains:

Over the recent years, sustainability has become a central focus in supply chain management, driven by both consumer demand and the need of the hour as the entire world is shifting towards a sustainable supply chain management. Green supply chain practices include minimizing carbon footprints, optimum utilization of resources and moving towards sustainable transportation and sustainable packaging of products like the bio paper plates which includes the bagasse paper plate which is made up of sugarcane residue (FOILS, 2025). In particular, the entire global businesses are transitioning towards circular supply chains in a circular economy in which everything is interconnected, which aim to minimize waste by reducing, reusing and recycling materials (García-Arca et al., 2020). Organizations such as Volvo, Ikea, Tata and Reliance have incorporated sustainability in their supply chains, focusing on sourcing raw materials ethically in the introduction phase and ensuring that their products can be recycled at the end of the product lifecycle which is used by companies like BMW and Apple which recycle the parts from their cars and other products in order to create a new one which minimizes the pollution and they aim to become carbon neutral by 2030. This focus on environmental sustainability has been integrated with virtual technologies, such as sustainable management techniques to provide a check on the sustainable practices adopted by the companies (Goswami et al., 2020).

COVID-19 pandemic in 2020 highlighted the gaps in global supply chains, emphasizing the need for business resilience, transparency and emotional intelligence. Researchers are moving towards building inclusive and versatile supply chains capable of

withstanding global disruptions, whether due to natural disasters, geopolitical tensions, or pandemics (Ivanov, 2020). Resilient supply chains are designed to quickly adapt to unforeseen changes by diversifying sources, leveraging the focus on sustainable development goals (SDGs) which includes the 17 sustainable development goals set by the United nations which is a mandatory requirement for all the industries and they have to incorporate it in their business production and dealing with consumers otherwise they will be put out of business (Ponis & Koronis, 2012).During the COVID outbreak, supply chain disruptions caused factory shutdowns, transportation delays, and shift in consumer demand which required businesses to rethink their supply chain methodologies and incorporate sustainability in that. Many companies moved towards finding the suppliers and producers who produce goods sustainably without harming the environment and to make it green by producing goods in house instead of offshoring it to different companies like for example in Germany it's a legal requirement that their goods which are being sold are green and sustainable otherwise they can't be sold there, another important example is of Electric vehicles(EVs) which is in the spotlight and there is a push from the governments globally to switch to green mobility.

2.5 The Future of Supply Chain Management: Trends and Innovations:

Looking ahead, there are going to be number of new innovations which are going to shape the supply chain and will change our pattern of working. Automatic vehicles centrally controlled by a computer are going to be come which is driven by a person from their own simulator which has been established, drones will be used instead of humans to deliver products which will help by reducing costs, improve delivery times, and enhance effectiveness and efficiency (Klaus, 2019). The continuous evolution of Artificial Intelligence and machine learning will help in elevating the automatic decision-making processes as every business will either make their own AI tool or there can be use of standardized tool like chat GPT which will help in reducing human error and allocating right person and tool for the job. (Cecere, 2018). Moreover, the increasing importance of integrating sustainability and circular supply chain management will drive companies to adopt more environment friendly practices and enhance the visibility of products (Goswami et al., 2020). Furthermore, supply chains are expected to become more decentralized, with latest virtual technologies enabling companies to create their own digital universe which is a new business models where they are creating their own digital twins to interact with customers leading to smooth and effective communication between all the parties involved. With the passage of time as supply chains evolve to integrate digitization and interconnectedness, businesses will need to develop robust cybersecurity measures to protect their operations from potential threats of hackers as there are various financial frauds and scams happening in the global markets which impacts the supply chain. (Kamble et al., 2020).

The future of supply chain will be driven by technological advancements, globalization, collaboration and the increasing focus on sustainability. As latest technologies continue to transform how companies work, supply chains will become more versatile, transparent, and sustainable. To remain competitive in a rapidly changing business environment, companies must continue to find strategic partners to work, adapt to emerging trends,

and prioritize business resilience and technological advancement in their growth.

2.6 Research Gap:

After reviewing the existing literature on the evolution of supply chain management (SCM), various key research gaps were identified which have to be reduced and eliminated. First and foremost, while the usage of latest technologies such as Artificial Intelligence, internet of things and blockchain in supply chains has been widely studied, there is limited research on how these technologies can be seamlessly integrated into old business models who are still dependent on their traditional classic supply chain management systems across diverse industries. Moreover, despite growing attention to green supply chains, there remains a lack of in-depth research on how MSMEs, particularly in emerging markets, are adopting sustainability practices and how these practices are aligned with digital supply chain strategies. Another gap is the insufficient exploration of supply chain resilience, particularly in the context of global disruptions like the COVID-19, global wars impacting trade and business like war in Ukraine, Israel Palestine war and how virtual goods will work hand in hand to implement digitalization in supply chain and a proper road map which is the plan of action still needs to be made like for example in the electric vehicle industry(EVs) are being used globally but there has to be a lot of research which needs to be done for installing the EV chargers globally which are very less and potential collaborations need to be done for the same like for example= tesla and coca cola collaborated in USA to install charging stations of tesla wherever coke is sold. Furthermore, while AI has proven effective in supply chain optimization, research on its role in enhancing decision-making processes across all stages of the supply chain is still underdeveloped. Finally, there is a dearth of cross-industry comparative studies on SCM strategies, which could provide valuable insights into broader trends, challenges, and best practices in the adoption of new models and technologies. These gaps highlight the need for future research that can address these critical issues and contribute to the ongoing transformation of supply chain management in the digital age.

2.7 Research Objectives:

1. Investigate how AI, IoT, and blockchain are transforming supply chain and the challenges of their adoption.
2. Examine how SMEs combine sustainability with digital solutions for efficient supply chains.
3. Study how industries use digital tools to build resilient supply chains in response to global disruption.

3. RESEARCH METHODOLOGY:

This study employs a qualitative and exploratory research approach to analyze the transformation of supply chain management through emerging technologies, sustainability integration, and resilience strategies. A comprehensive literature review has been conducted, drawing insights from scholarly articles, industry reports, and case studies, with a key reference to SCOPUS Supply Chain Management 4.0, which highlights the impact of advanced technologies on supply chain evolution. The study examines how AI, IoT, and blockchain are reshaping supply chain models, particularly within SMEs and industries responding to global disruptions. By analyzing secondary data, industry trends, and expert insights, the research identifies the key challenges and opportunities businesses face in adopting digital

solutions. Additionally, it explores the role of customer-driven supply chain innovations and evaluates future technological advancements predicted to impact supply chain efficiency and sustainability. This structured methodology ensures a holistic understanding of supply chain transformation, integrating sustainability practices and digital advancements to create adaptive, efficient, and resilient business ecosystems.

3.1 CURRENT TRENDS IN SUPPLY CHAIN MANAGEMENT:

In today's VUCA (Volatile, uncertain, complex, ambiguous) world all the business units need to focus on sustainable supply chain management such that they are able to establish a good name for themselves in the market/ goodwill in the market such that they are able to establish a good image for themselves in the eyes of the consumers which in turn leads to a positive ripple effect on their profits in terms of high sales and improved cash flow. The changes and the factors which they need to keep in mind while incorporating these changes are that they need to incorporate green marketing in their products as well as also in their operations, finance , HR so that they are able to establish a green and sustainable supply chain by following the SDGs (Sustainable Development Goals). In the business environment which is highly competitive and complex many new viewpoints have emerged in this topic which analyses the consequences and view points in the field of green supply chain management which will be useful for the present as well as future generations. It has been done by focusing on the KRIs (Key Result Indicators), KRAs (Key result areas) and KPIs (key performance indicator) in order to reach a feasible and optimal solution by focusing on the judicious use of resources.

As companies are looking forward in optimizing their supply chains and finding innovative ways in making the products available to the consumers in today's fast paced competitive environment where manufacturers have to provide unique solutions. Many organizations spend their time and money which is the biggest currency of an organization and it is their greatest investment in forecasting the demand i.e., trends in the market and the companies are making efficient use of business Analytics and the IT department is also very alert so that the cost incurred is low.

3.2 How Customers Impact Supply Chain Management:

Supply Chain management in the recent times has evolved around the customers and is incomplete without considering their requirements and it is an important part of the entire process. Unlike the days before, customers have come to become a major voice in shaping the supply management process due to their increased impact in the competitive business markets. As markets continue to become competitive, customers increasingly become the determinant force on whether a business supply chain would succeed or fail. In fact, the customers in the global market in the current scenario are in the driving position due to their demand generation as their taste and preferences are rapidly changing due to which accordingly the products are supplied through various distributors in the global supply chain. The companies are constantly innovating their products and are reengineering themselves to create a high demand in the competitive market due to which they are

continuously doing their market research both domestically and internationally. The main thing to note here is that customer is king/ customer is God and the companies have to constantly learn and unlearn in order to modify their products and services and incorporate the changes suggested by them which the companies and businesses get through customer feedback.

Earlier in the past decade or 10/20 years ago customers were not that aware about the products they were consuming and they didn't have much knowledge about the supply chain of products that where are they kept i.e. in warehouses or cold storage near them but now in the current scenario, they are very much alert about it due to the influence of social media and people entering into more and more businesses. In the current scenario, management, there would be need to address these issues before the consumer switches to another company. This approach is so critical considering the fact that companied would need the customer. The company will have to work on ways to meet the needs of the customers or lose business to a competing firm (Haque & Islam, 2013). Customers are an asset in the supply chain management process due to their contribution towards sustainable practices. The recent past has seen increased demand by consumer for better and sustainable practices that may have significant impacts on business. Consumer factors musty are put into consideration if the supply chain management process has to bear fruit. A good example is the case of mobile phone manufacturers. The focus of the manufacturers in the supply chain process has been to use it in a productive and a judicious manner such that it leads to optimum utilization of resources and the requirements of every individual is met according to the required standards.

3.3 Innovative Technologies and Strategies in Supply Chain Management:

Supply chain management revolves around innovation and it is the most important component which helps in the transfer of goods in any business and helps in increasing the productivity by leveraging technology in its day-to-day activities and it has increased its growth and reach to the target customers. The major technologies which are revolutionizing the supply chain management processes are AR (Artificial Reality), VR (Virtual Reality) and AI (Artificial reality) which has been a game changer in the supply chain management process. Some of the innovations in supply chain management are as follows: -

Radio Technology: It works through the signals which are emitted by the radio and helps to track our products when they are in transit like it has been used by Dominos for a long time to track delivery of pizzas and all the delivery apps like Amazon, Flipkart, DHFL to track the location of the goods of the customers.

Advanced Weighing Technology: It helps to automatically track the weight of the products which are available and helps to adjust according to the needs of that particular container and helps to get in the limit of its maximum adjusting capacity.

Social Media Revolution: It is one of the major source for transmitting the information to the customers and it is the most important tool for the businesses because all the customers have been active on social media so it is the utmost duty of the businesses to

ensure that the correct information is given and the ratings of the companies are good so that it helps to maintain the Goodwill and if the goodwill is good which will further increase the sales and then there will be high dependence on the supply chain leading to good business practices.

Transport management Software: As the researcher has analyzed the data from 2010 to 2023 so back in the early 2000s the businesses were dependent on their personal contacts in order to transport their goods but now the coming up of new apps which are specially designed for the distribution of goods like Porter and many more in the recent years in 2023 so it has helped in the ease of doing business.

Data Analytics: Use of data is very important for the businesses supply chain management because it is the oil of the business machinery which keeps it running because back in 2010 the accountants had to write their accounting books manually which was very complicated and there was a scope for mistakes but now in 2023 everything is transparent and accounting software are used like Tally, Busy which are efficient and helps in providing the correct information to the users and hence the supply chain management process is employed in a right manner as there are no mistakes in the entire process and goods are delivered to the customers at right place, at right time and in right quantity.

3.4 Technologies predicted to impact supply chain management in the future:

Some of the disruptive innovation in the field of supply chain management process are as follows: -

Automatic robots: Many robots have been used employed by tech giants like Amazon, Google for delivery of products but they are very expensive and do a lot of faults so that is why it is not employed by the industries although some companies like Hyundai have developed them which is used by the industries and is very productive creating a good network of supply chain management.

Drones: Drones are used by some companies to deliver the products in the USA which is based on a computer program and the supply chain is based on it to deliver the products to the homes of the customers.

Blockchain.: Blockchain is based on the use of certain algorithms and a way of designing a code is used in the supply chain process and it is completely computerized and is very quick in delivering the products making it the most feasible and the preferred option in the supply chain process.

4.FINDINGS:

The rapid innovations in supply chain management have led to transformative changes that benefit both present and future generations. The integration of Generative AI must be strategically leveraged to ensure that its advantages outweigh its costs, fostering efficiency and productivity across industries. Strategic partnerships and collaborations with different companies have resulted in disruptive innovation, enhancing overall supply chain integration and providing the adequate resources.

The adoption of emerging technologies such as grid computing, digital twins giving companies their own digital tools to innovate and develop their competitive

advantage in the market has completely transformed the supply chain by which companies deliver their products to the consumers. These innovative technologies have revolutionized the way of doing business, and the way we interact with our clients leading to more transparency and a clear vision with which the 2 parties interact with each other and there is no hindrance in between. Customers are the driving factors behind these innovative and disruptive findings as they continue to use the latest products and give feedback to the companies to integrate the latest features accordingly in the products and to their personal level as they identify the gaps/ problems while using the same.

The main driving factor behind the consumer demand as well as the need to innovate has been due to sustainability which is the key aspect due to which the companies are striving hard each and every day to integrate new solutions in their way of dealing with customers such that it is green and does not harm the environment which has been integrated in their customer relationship management as well as supplier relationship management too. Between 2012 and 2024, companies have rebranded and remarketed themselves to the customers as well as venture capitalists such that the latest features of supply chain consisting of lean manufacturing, grid SCM and green supply chain is there to create a good image in the minds of customers. A notable example is of BMW Motorsport, who has invested billions of euros in their manufacturing plants such that they are able to source components from older vehicles of BMW and recycle it in their circular vision labs created by them and then they create the liquids of paints, body of the car which is put in the new car which has rolled off the production line and in this way BMW is successful in implementing a flawless green supply chain consisting of producing new cars but also take into account the lifecycle of their older models which come to their junkyards in Munich, Germany which is in turn transformed to new car by recycling the old parts in the production line.

BMW being a market leader in terms of sustainably producing their cars in the factories all across Germany and Asia other car brands are trying to imitate their business strategies of sustainable supply chains in their car production which is becoming very expensive in Germany due to high electricity costs and is in turn putting a very bad impact on the supply chains of the auto car giant like Volkswagen who is the biggest employer in Germany as their workers went on strike in 2024 due to plant closures, layoffs and wage cut.

5. Conclusion:

The supply chain landscape has revolutionized the way of doing business and will continue to do so due to innovative and ground breaking transformations changing the way in which the goods are delivered from point A to point B with the help of evolving supply chains integrated in the business environment. In this dog-eat-dog rat eat rat stiff and tough competition business landscape our supply chains have to be created in such a way to handle the global disruptions as well as also focusing on strategic collaborations and partnerships to sell the products. Firms like FANG companies (Facebook, amazon, Netflix, Google) are trying to focus on optimum utilization of resources in their supply chains such that the benefits are greater than the costs and appropriately make their financial budgets and do the

fund allocation to the new projects as well as their operations.The ultimate goal of supply chain management is to help in transformation of business with a focus on ease of doing business such that all the parties which are the stakeholders who are involved are satisfied and generate good faith and trust in these supply chains being developed keeping all the factors in mind.

5.1 Future Implications:

The ever evolving and transformative supply chain landscape requires future managers who are having skills like business resilience, emotional intelligence and good communication skills in order to interact with various parties involved in this VUCA (Volatile, uncertain, complex and ambiguous) world. Businesses must focus on SMART (specific, measurable, achievable, relevant and time bound) goals in order to succeed and they should also try to focus on STAR (situation, task, action and result) method in order to communicate with all the supply chain managers with whom they are contacting with as it helps to ensure transparency and efficiency in the supply chain.

5.2 Social Implications:

With tremendous transformations in the supply chain all around the world globally has led to an increase in the mental pressures of the employees as they have to work more than 12 hours due to working with international clients with MNCs in other countries which leads to exhaustion, burn out and a bad mental health due to sleep deprivation. Hence, the supply chain has to be designed in such a way that it takes into account all these factors so that the workers are healthy and their productivity is high and it should not be like that to drive innovations and transformations employees are neglected and it should never happen as the employees are the biggest asset of any successful organization. Transparency and accountability must guide innovations to ensure a balanced, responsible, and impactful supply chain evolution.

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