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## **EDITORIAL**

The editorial board of Int. J. TOP are pleased to introduce the second volume and first issue to the year 2022 of the “International Journal of Theory of Organization and Practice” (IJTOP). The Int. J. TOP is published by GAF-TIM, the Global Academic Forum on Technology, Innovation and Management.

We are delighted to present the latest issue of TOP journal, which brings together a diverse range of articles from researchers in the discipline of organizational and business management. In this issue, we have included work that cover a wide range of topics within this discipline, each one has been carefully chosen for its contribution to the development of knowledge in its particular field. We are particularly excited about the inclusion of a number of thought-provoking and innovative articles that explore new directions in research and offer new insights into longstanding questions. We hope that these articles will stimulate further discussions and debates, and encourage further research in these areas. We would like to express our gratitude to each and every author who has contributed to this issue, as well as to the reviewers who have offered insightful criticism on the submissions. We are appreciative of their efforts and dedications, which made this issue possible. We hope that you will find this issue to be a valuable resource and that it will inspire you to continue exploring the exciting and ever-evolving field of business management and organizational theory and practice..

The inaugural of issue1, volume1, of IJTOP includes ten articles. In this issue, the opening with transportation elasticity on supply chain efficiency. Moreover, discusses the business intelligence in social media marketing and its impact on firm performance. More emphasis on transportation safety on economic growth. Another stress given to organizational leadership on organizational performnace during covid-19 pandemic. While highlighting supply chain efficiency on economic growth. On the other hand, a demonstration over covid-19 pandemic and students’ life: the impact on employment opportunities. Also, service quality on supply chain efficiency. Area of leadership styles on work from home (WFH) during the covid-19 situation has been discussed. Then service competence on supply chain efficiency. Finally, distance learning technology on online education performance has been discussed.

Int. J. TOP appreciates all the support that it is receiving from its members as well as from its readers.

### **Editor(s)-in-Chief**

***Prof. Haitham M. Alzoubi and Dr. Taher M. Ghazal***

## **IMPACT OF TRANSPORTATION ELASTICITY ON SUPPLY CHAIN EFFICIENCY AT MARITIME INDUSTRY IN THE UAE**

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### **ABSTRACT**

This research aims to identify the factors affecting transportation elasticity and its impact on supply chain efficiency. Transportation sector requires specific attention to contribute in developing economies. The research from various resources helped to gather theoretical evidences which support our research model. In order to do deep review of prior researches transportation provides significant benefits to supply chains and logistics companies. To remain competitive in this sector, businesses rely on technological means and methods, as well as supply chain operations efficiently.

***Keywords:*** *Transportation Elasticity, Supply Chain Efficiency, Maritime Industry UAE.*

### **1. INTRODUCTION**

Over the past ten years, supply chain disruptions have drawn a lot of attention since they can negatively impact the operation of the supply chain [1]. Transportation creates significant role in economic growth of the countries in which all kind of transportation create the basic need of the business moving and get low investments on the people and goods [2], [3]. Transportation for trade and business goods helps to increase the easy and accessible transportation rather it can be used

for human potential [4], [5]. The ease of transportation increases the less timing and excessive growth of the economy [6], [7]. The transportation in more advance methods such as air and shipment increases the business productivity with more profitability. The cost of the per item movement decreases the chances of the margins [8]–[11].

The role of transportation in supply chain operations increases the sustainability of various sectors of industries and businesses where the moving of goods is essential for business provision [12]–[15]. Transportation is an advance mode of communication that helps to integrate the sectors and import export of the goods through several communication and transportation channels [16], [17]. The entire business and industrial infrastructure stability are depending on strong transportation methods that are increasing the stable economic growth through providing the goods and items that are essential for business and trade [18]–[21]. The transportation investment helps to industries to generate more opportunities to increase the business efficiency through less time taking option and increase the visibility of the import and export of the business. The entire business success is depending on transportation investment that create the economic growth in more progressive manners[22].

## **2. LITERATURE REVIEW**

### *2.1. Transportation Elasticity and Maritime Industry*

This is obvious, where entire global population is increasing, the role of shipment of the accessories is essential to fulfill the local and global trade and business [23]–[25]. The shipment is a process of business management that create the entire success [26], [27]. The manufacturing from the raw material is possible when on- time delivery of the goods placed for further business measures [28]–[30]. The benefits of the shipping of parcels and couriers in all kind of sizes and measures cannot be denied and the reason is that the entire global product shipment of food [31], electronics, vehicles, automotive parts, textile, medicine [32], consumer goods and memories the shipment has significant place in transportation method for global business objectives in maritime shipment is one of the basic strategies to move object from one place to other [7], [33]–[35].

Furthermore, the growth of sustainable business operations and low -cost efficient trading objectives is depending on maritime shipment where the huge items and goods delivery possible within the time limit in huge size of the couriers [36]–[38]. The safest mode of maritime shipment creates the importance of reliable shipment and low -cost effective transportation method increase

the economic growth through various channels [39], [40]. The maritime shipment in business industry increases the product availability for its further manufacturing processes that improves the sustainable growth of the businesses [41], [42]. The access of business and trade measures required huge responsibilities to maintain its shipment [43]–[45] and supply chain through strong mode of transportation and maritime industry is the only solution that increase the possibility of the trade in different and reliable manners [46], [47].

## *2.2. Economic Growth at Maritime Transportation Industry*

[48], [49] evaluated that transportation head of maritime industry increases the business productivity and efficiency in less time taking procedures [50], [51]. The maritime transportation industry in which various ships are involved for transportation in all sizes according to courier or parcel requirements of the business industries [52], [53]. the role of maritime shipment in business productivity can be seen in various areas [54]. There are number of goods and items movements is possible only with sea shipment due to their size and volume and the sensitivity of the quality and its emerging delivery at the destination [55]–[57]. The role of maritime transportation in business world placing aggressively its position due to current period of trade and business [58]–[60]. The sea ports providing the best trading facilities to its customers rather business firms chose the air mail and road transportation heads for their hoods [61]–[63]. The air transportation has limited account of the product delivery while road transportation takes huge time-consuming method to delivery of the objects that cannot meet the required time frame limit [64], [65]. The maritime transportation is the only method that create the sufficient movement of the huge volume of the goods in specific time period within the low cost [66], [67]. There are number of industries like automotive, textile and medicine and food goods [68] and items that always consist in huge bulk for the export and import purposes and the shipment of the goods only possible through maritime transportation rather the industries chose the other transportation methods [69], [70]. The rapid growth of the industries is possible through their effective trade communication channels in which maritime industry creating the effective and active part of its presence [71]–[73]. The maritime transportation is one of the effective business parts of the industries that create the innovative business strategies for economic sustainability [74]and growth of the firms and countries at all levels [75]. it also helps to introduces the nation’s presence in business and trade formation [76].

### *2.3. Transportation Elasticity and Supply Chain*

[77], [78] estimated that the supply chain is one of the essential parts of the business industries in which there is no working efficiency of the business is possible without supply chain and distribution channels [79]–[82]. The successful economic growth also relays on countries trade that is increased through supply chain management [83], [84]. The supply chain management is only possible when transportation modes are effective associated with the trade of the business [85], [86]. The transportation industry of the business world creates the best business management solution to fulfill the needs [87], [88]. The supply chain has significant presence on business productivity and profitability at the same time [89][90]. The aim of effective growth of the supply chain to increase the growth of the business provision [91]. The transportation reliability in supply chain management is essential to manipulate the business tasks that is related to trade and moving the objects of the essentials for businesses [92]–[94]. The reliable supply chain helps to business firms to focus on their mandate with reliable and efficient manners [95], [96]. Supply chain and transportation are correlated to each other [97]. The global business industry increasing day by day thorough transportations especially it is enhancing due to maritime transport industry that has huge margin to manage the trade of the essentials on big level [98]–[100].

### *2.5. Transportation Elasticity and Maritime Industry*

[101], [102] estimated that the maritime industry in global business trade management is the essential part of the entire business solutions around the world [103], [104]. there are number of local and global companies are providing the best logistics and supply chain movement services to business firms and domestic customers but when we talk about the biggest role of shipment in business and trade [105]–[107], the maritime transport is one of the solutions where everything is possible [108], [109]. The maritime transport has great margin to manage the huge volume and quantity of the goods and items delivery with safety measures [110], [111]. The reliable transportation method of the maritime industry is organized by the management of the country's sea ports where all decisions and strategic policies helps to create the strong infrastructure of the trade of global industry [112]–[114]. The maritime industry has strong contribution to build the effective supply chain of the business industries between the countries [115], [116]. the effective supply chain through maritime hold the entire efficiency of the business within the time limit [117]. The reliable transportation has significant role to create the business success in all kind of fields

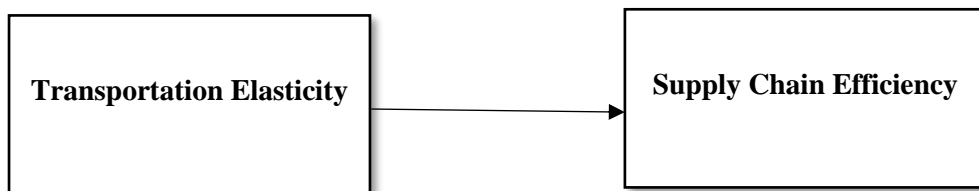


of consumer, textile, automotive and medicine industries and for their reliable shipment towards the countries [118], [119].

### *2.6. Transportation Elasticity on Supply Chain Efficiency at Maritime Industry*

[120], [121] evaluated that the role of supply chain is one of the essential tasks of business success that helps to industries to create the best potential of trade and business goods through transportation modes [122], [123]. The transportation is one of the essential and core part of the business where entire manufacturing [114], [124], [125], distribution is depending on supply chain and supply chain is possible through online delivery of the items through different transportation channels [126], [127]. The role of maritime transport industry in business needs is quite excessive in supply chain management [128]. The supply chain network completes when distribution of the goods and product safely delivered to their destinations and maritime playing important role in this respect [129]–[131]. The transportation is an easy and important part of the business supply chain that increase its efficiency through maritime transport industry through various sea ports of the countries [132]–[134]. the country’s economic growth highly depending on the maritime industrial and transportation where countries gain huge trade benefits along with strategic policies of the business and sustainable growth [135]–[137]. Maritime industry increases the efficiency of the supply chain through transportation reliability and trust of the business organizations and become the first choice for their goods and items delivery [138], [139].

### *3.1. General Research Model*



*Figure 1: Conceptual Research Model*

### **3. DISCUSSION**

On the basis of prior literature and researches, we can say utilizing elastic logistics in supply chain management entails cutting back on supply chain activities to maximize cost savings. This is accomplished by being able to scale back workload, delivery, and transportation operations to match the new level of demand, which results in no financial loss and actual cost savings. One of the key responsibilities of the supply chain is to assist businesses in maximizing the potential for commerce and the flow of commodities through transportation channels. The supply chain, which underpins all aspects of manufacturing and distribution and is made possible by online delivery of the goods via various transportation routes, is one of the most crucial and fundamental aspects of the business. In supply chain management, the maritime transport sector plays an excessively large part in meeting company needs. When products are distributed safely to their final locations, the supply chain network is complete, and shipping plays a significant role in overall business operations.

### **4. CONCLUSION**

Businesses are compelled to keep up with technology improvements by the need to be competitive. Drivers must employ the most modern security measures and software due to the recent increase in vehicle technology (including automation and internet-connected sensors), which has made the industry more susceptible to new dangers like hacker cyberattacks. Therefore, global business requires more provisions for transportation since transportation modes are the only key for supporting business trade and maintaining the materials flow from upstream to downstream. Transportation elasticity is crucial; it can be said that supply chain managers should investigate transportation within their supply chains.

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## **THE ROLE OF BUSINESS INTELLIGENCE IN SOCIAL MEDIA MARKETING AND ITS IMPACT ON FIRM PERFORMANCE**

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### **ABSTRACT**

Social media business intelligence assists business owners achieve more accurate data and assessments of existing and potential customers. Today, the COVID-19 pandemic has disrupted business operations globally, and various governments have implemented policies and grants to facilitate business recovery; however, the initiatives have brought limited success. Therefore, it is essential to adopt social media business intelligence tools that help predict potential sales and analyze key performance indicators through effective virtual data collection. By generating such data, a business will be better equipped to plan on past, present, and future marketing and consumer trends. In addition, business owners can design a personalized dashboard that integrates consumer data from diverse sources to counter competition and understand overall performance. Subsequently, business intelligence tools can facilitate organizing the data into clear visualizations that are easy to understand and interpret. Therefore, a business can respond swiftly to changes, understand the cause of the changes, and mitigate adverse impacts in time.

***Keywords:*** *Social Media Marketing, Business Intelligence, Organizational Performance.*

## 1. INTRODUCTION

The coronavirus (COVID-19) pandemic has proved that the existing business approaches might not sufficiently handle unprecedented and fast-moving business variables. In addition to the devastating effects on healthcare services and people's health, the coronavirus pandemic has seriously impacted national economies individual businesses [1], [2]. For this case, social media marketers need to develop business management plans and intelligent business initiatives that are specific to the COVID-19 setting to overcome business disruptions posed by the pandemic [3]. A smart business and management plan will help social media marketers to communicate effectively with the consumers and other stakeholders within the marketing community [4]. Besides, social media marketers will be able to collect, interpret, and benefit from factual data to create practical business strategies that can beat the odds of COVID-19. The goal is to design and integrate working business intelligence strategies to enhance social media marketing operations and efficiency to maximize returns and enhance consumer satisfaction [5].

Additionally, social media marketing is the application of social networks and social media sites to advertise business products. Social media provides an effective channel to engage with existing and potential customers [6], [7]. A business can also promote its vision, mission, culture, and brand through social media. Business intelligence tools have advanced business experience on social media by facilitating up-to-date consumer data collection, evaluation, and interpretation. Social media and business intelligence sustain brand awareness [8]. By consistently deploying virtual messages, businesses can maintain and support customer interests and preferences for the brand in the marketplace. Therefore, social media business intelligence offers a powerful instrument for business product promotion and brand exposure. According to [9], 93% of business enterprises in the US utilize social media platforms such as LinkedIn, Twitter, Instagram, and Facebook to market their products, enhancing consumer-to-consumer connections. Moreover, social media platforms offer a panel for real-time reviews and product feedbacks that promotes sales. Consumers can also enquire details from a wide range of customers achieving a comprehensive perspective on a product. For instance, product posts by opinion leaders and consumer peers can expand the number of customers. Therefore, social media avenues and business intelligence generate considerable virtual brand awareness to maximize returns during the COVID-19 pandemic.

## **2. THEORETICAL FRAMEWORK**

### *2.1. Consumer Decision-Making Model*

The consumer decision-making framework effectively explains social media consumer behavior and current marketing trends following the COVID-19 pandemic. [10] conducted a survey to evaluate social media consumer behavior of 327 US buyers. The study's outcomes indicate that, from the early days of the COVID-19 pandemic, US buyers have expanded individual utilization of social media sites to select, collect, and decide on the nature of products to purchase. Besides, the study showed that consumers have increasingly turned to social media to evaluate and make decisions on online goods and services [11], [12]. Therefore, the results suggest an increasing demand for social media marketing, and consumers have to decide on the best alternative strategies to physical shopping. Since the COVID-19 pandemic is a global crisis, the outcomes of this study on changing consumer habits can be generalized to a global perspective [13], [14]. However, the challenge remains for business operators to devise and adopt effective business intelligence strategies to adapt to the changing consumer behavior on social media [15].

### *2.2. The S-O-R Theory*

According to [16], the S-O-R concept illustrates how external factors (stimuli) influence consumer behavior during the COVID-19 pandemic. According to [17], an external stimulus (S) impacts an organism (O), eliciting a behavioral response (R). Therefore, the S-O-R theory effectively explains the current consumer shifts to social media shopping following the physical constraints of the pandemic. In this case, the pandemic has influenced consumers' cognitive and affective processes, leading to a change in purchase perceptions and habits.

## **3. LITERATURE REVIEW**

[18] observe that social media platforms help users chat, share information, documents, and create a community. According to [19], users can integrate several data mining methods into social media marketing to facilitate efficient decision-making processes to benefit consumers and businesses. The study recommends the creation of a business intelligence dashboard that can help enterprises observe social media information in real-time [20]. In addition, [21] conducted research to determine the changes in consumer shopping behavior at the onset of the COVID-19 pandemic

using the S-O-R model. The outcomes indicate that the COVID-19 pandemic has influenced the emotional and cognitive behavior of social media consumers. However, do not offer a detailed perspective on online consumer behavior; instead, the research focuses on human behavior for preventive public healthcare. [22] suggest that social media marketing has gained significant importance following the COVID-19 pandemic. According to the COVID-19 pandemic has expanded customer behavior on social media. further observe that the COVID-19 pandemic offers a favorable chance to understand online consumer buying trends, especially social media, and devise practical strategies to overcome marketing and consumer limitations [23]. Moreover, posit that social media has become a podium to communicate, campaign, and promote products to a large consumer base [24]. [25] stated, social media requires monitoring and regular evaluation to comprehend the effects of social media campaigns on brand awareness. To create a productive social media marketing campaign, the researchers recommend observing customer needs, brand-adjacent terms, brand terms, competitors, and customer sentiments [26]. According to [27], social media monitoring can be done directly through the analytics section or by integrating business intelligence tools.

### *3.1. Government Influence in Business Operations during the COVID-19 Pandemic*

The effect of the COVID-19 pandemic on business operations requires a global perspective and strategy since the pandemic has had a near-similar impact globally. [28] point out that the COVID-19 pandemic has led to a growth in social media marketing in the US- the most significant consumer spending economy globally. According to [29], at the beginning of 2020, the US encountered a massive healthcare crisis following the COVID-19 pandemic. The US government created the Coronavirus Aid, Relief, and Economic Security (CARES) Act with a \$2.2 trillion consumer and business stimulus package in response to the COVID-19 pandemic's effect on businesses (Mason et al., 2021). However, many companies have not benefited from the grant, and most small, medium, and large enterprises have not recovered from the COVID-19 crisis [30]. Consequently, [31] state that the COVID-19 pandemic has transformed customer shopping experiences, product needs, and purchasing behavior in the US. In addition, the pandemic has influenced consumers' post-purchase satisfaction levels. With the rise in public healthcare issues, the US government issued various mitigation policies such as social distancing measures and lockdowns to control the spread of the coronavirus [29], [32]. Therefore, with most Americans confined to their homes, they turned to social media to interact and conduct online shopping [33].

As a result, consumers have extensively explored online avenues of accessing goods and services, leading to a substantial shift towards social media marketing strategies [34]. Therefore, innovative business operators can find profitable and viable opportunities on social media to gain a competitive advantage in the market and maximize profits during the pandemic [35].

Additionally, the COVID-19 pandemic has restricted business operations in diverse geographical locations. There is a need for an integrated strategy and business intelligence models to account for changing consumer needs and business trends [36], [37]. The Organization for Economic Co-operation and Development (OECD) analyzed the effects of the COVID-19 pandemic across 60 countries in diverse geographic locations globally. According to [38], the COVID-19 pandemic is the most prevalent public health emergency in living memory, resulting in significant financial crises in multiple countries [38]. After the onset of the pandemic, many businesses worldwide halted production, and product consumption reduced significantly [39]. While containment and lockdown measures continue to be lifted, most businesses still face the dilapidating effects of the pandemic. According to [40], the global economic recession triggered by the pandemic requires more innovative strategies to overcome business failures. On SMEs, OECD reports that the pandemic has led to changes in supply and demand, limiting business operations during the pandemic [41], [42]. Today, most companies have experienced a considerable reduction in labor supply due to government measures such as quarantines and lockdowns. Besides, the supply chain has been interrupted, leading to shortages in intermediate goods [43], [44]. On demand, the COVID-19 pandemic has caused a dramatic decrease in product demand, and most businesses have been affected significantly [45], [46]. Moreover, various enterprises face significant liquidity shortages since consumers have little income to maintain surplus purchases.

The World Economic Forum (WEF) reports that Hong Kong faced massive business disruptions following the COVID-19 pandemic [47]. WEF and HKEX contributed to the revival of Hong Kong businesses and financial markets by offering insights on building sustainable business operations in Hong Kong. HKEX contributed emergency relief donations to help firms and consumers plan on recovery strategies [40], [48]. In addition, [49] stated that a Swiss company, The Adecco Group, a WEF partner, supported workers and businesses from various countries to alleviate the effects of the COVID-19 pandemic. According to [50], [51], the company carried out a study to compare macroeconomic indicators in twelve countries: Spain, Sweden, Switzerland, Netherlands, France,



Germany, Italy, Japan, UK, USA, Austria, and Belgium [52]. The goal was to assess COVID-19 mitigation measures by the governments. The research indicates that the governments that have successfully mitigated the economic effects of the coronavirus pandemic and the labor market responded swiftly with financial and business grants and supported employees stay in the workplace as best as possible [53], [54]. However, the study indicates that most businesses have not received the promised government grants and stimulus packages [55], [56]. Therefore, most business operations have not recovered; thus, there is a need for a more innovative business intelligence strategy to facilitate business recovery processes [57].

### *3.2. Business Intelligence in Social Media Marketing*

The growth and development of social media sites has revolutionized the dynamics of the virtual market. Today, social media platforms integrate consumer social networks, a field of marketing experts, and opinion leaders [58], [59]. The digital and customized marketing promotional messages that pop up whenever a social media user accesses a site effectively attract and influence consumer perception about a particular service or product [60], [61]. The result has been a rapid change in consumer habits favoring social media purchases, especially during the COVID-19 pandemic [62]. However, most businesses have not yet taken full advantage of digital tools and other business intelligence strategies to benefit from social media platforms [63]. Therefore, it is essential to describe effective business intelligence strategies to help modern business operators reap better returns and overcome the constraints of the COVID-19 pandemic.

### *3.3. Sample Business Intelligence tools*

Business intelligence (BI) tools are social media analytics tools to track social presence. Such tools include Sisense, SproutSocial, HubSpot, TapInfluence, SAP Business Objects, Datapine, BuzzSumo, Snaplytics, Curalate, Keyhole, Google Analytics, ShortStack, and SHIELDApp. A user can utilize a single or a combination to achieve more generalizable results [64], [65]. Businesses intelligence tools offer crucial business data on key metrics and performance indicators such as the response rate, post reach, post engagement, mentions, comments, shares, likes, retweets, active followers, location, demographics, and the traffic generated. Such metrics can generate crucial insights enhancing business operations [66], [67].

#### *3.3.1. SAP Business Objects*

According to [68], [69], SAP Business Objects is a business intelligence (BI) software that facilitates a comprehensive collection, analysis, interpretation, and reporting of interactive visualization data. SAP Business Objects analyzes customer experience, digital supply chain, and other key performance indicators [70]–[73]. In addition, SAP Business Objects offers a role-based and self-service structure that can help digital business owners to create personalized applications and dashboards.

### *3.3.2. Datapine*

Datapine is a social media business intelligence tool that offers an all-in-one BI structure that promotes the collection and analysis of complex data [74]. As a self-service platform, Datapine helps users integrate different functionalities and data to perform advanced analyses to generate real-time and actionable business insights [75], [76].

### *3.3.3. Sisense*

Sisense is a user-friendly business intelligence software that facilitates data analytics by all users regardless of their technical capabilities [77], [78]. Therefore, a business owner does not have to rely on the IT department to conduct online data analytics. Sisense promotes faster integration of data from Google Analytics, AdWords, social media, and Salesforce. The software uses an in-chip technology that enhances data processing in comparison to other tools [79]. G2, Gartner, and Dresner recognize Sisense as a leading cloud analytics tool [80].

### *3.3.4. SproutSocial*

The software facilitates cross-channel social media analytics. It also analyzes performance on a single platform and compares business performance across multiple social media channels. SproutSocial can assess LinkedIn engagement, tally Twitter link clicks, track Facebook impressions, measure Instagram follower growth, and evaluate content performance on Pinterest, among other platforms [81], [82]. A user can easily organize the collected data in an easy-to-understand visualization structure [83], [84]. The Premium Analytics option can help users create a custom report that reflects the set key performance indicators. In addition, the platform offers customizable, and templates report structure options to allow the user to personalize social media metrics [85].

### *3.3.5. HubSpot*

HubSpot helps link social media performance with business and revenue growth. Besides, it assists users in comparing business performance across multiple social media channels [86], [87].

HubSpot offers expansive visuals and graphs that break data depending on the session, length, impressions, and audience.

### *3.4. The Role of Business Intelligence in Promoting Social Media Marketing*

As outlined [88], [89], various business intelligence (BI) tools can facilitate effective business operations during the COVID-19 pandemic [90]. Business intelligence tools effectively analyze market trends to keep up with competition and demand [91]. Besides, business intelligence tools help business owners collect and evaluate consumer data to derive crucial marketing insights. The goal is to facilitate strategic and tactical business decisions to overcome the constraints of the COVID-19 pandemic. According to [92], [93], business intelligence tools offer a pool of big data that helps small, medium, and large companies to discover growth strategies and opportunities. Data discovery strategies are also essential in resolving urgent issues such as the crisis posed by the present pandemic [94]. Therefore, a business can collect volumes of data in a single place, evaluate it, and forecast future opportunities and outcomes [95].

Social media can do much more than spread the word [96]. Social media business intelligence tools have the capacity to change the business course for the better by boosting proceed [97], [98]. According to [99], social media platforms contribute 33% of global internet usage. also establishes that social media users generate four million Facebook likes, 49,000 Instagram posts, and 473,400 tweets each minute. [100] further stated that, currently, there are 3.48 billion social media users globally, with over 2.5 quintillion bytes of data generated daily. In addition, [101] suggests that an average business spends about 26% of its total expenditure on social media marketing [102]. Therefore, by adopting a virtual business strategy, a business owner can collect extensive data from online users who interact with the business on social media [103].

Subsequently, a business owner can get data analytics such as demographics, how often a user views the page, location, and other vital details [104], [105]. Through this data, a business owner can generate crucial insights to understand up-to-date business trends and make data-driven predictions and practices that can alleviate COVID-19 setbacks [106], [107]. For instance, a business owner can make marketing changes to account for the generated demographics to align the brand with consumer needs [108]. According to [109], the analytics tab of a business social media page contains significant stats [110]. However, this can be a tedious and time-consuming process; therefore, business intelligence tools come in handy to directly and easily integrate social media data into the business intelligence platforms [111]. Therefore, a business owner can view

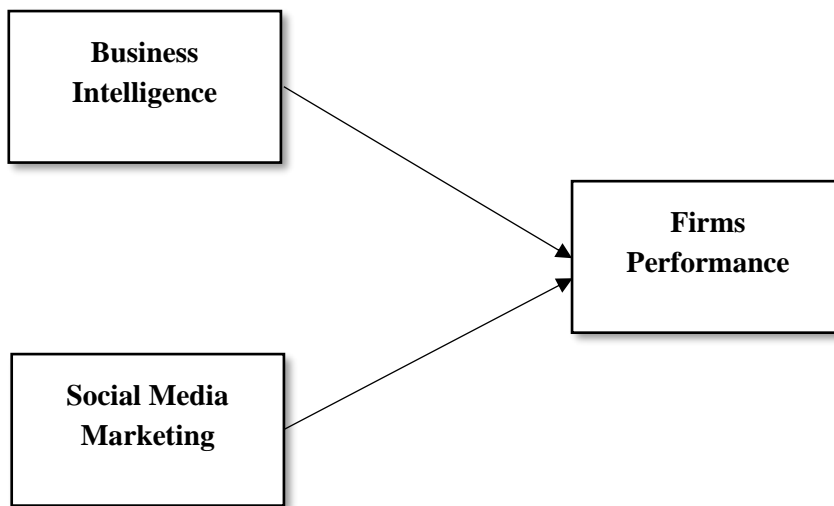
and analyze social media engagement analytics to understand business performance, sales, and leads generated within a particular period [112]. Social media gives insight into the existing competition by observing what others are doing or not doing. [113] suggested that social media allows businesses to follow competitors anonymously to understand the needed changes and opportunities [114]. A company can also learn from the mistakes of others to avoid pitfalls, develop efficient practices, and predict marketing shifts. Besides, social media offers insight into the customer's life; hence, understanding the community and followers to foster a loyal customer base [115], [116]. By understanding the existing followers, a business can conduct product trials and generate real-time feedback [117]. A business can also understand the demographics such as age, location, preference, and spending habits. Such insights are crucial in enhancing targeted marketing and improving customer service [118].

### *3.5. Solving COVID-19 Business Challenges Through Social Media Marketing BI*

With the growing COVID-19 concerns and physical restrictions on in-person contacts and other mitigation policies, consumers have changed their purchasing decision-making strategies. According to [119]–[121], social media users seek to satisfy their physical and mental needs through virtual channels. Social media platforms offer attractive ads, images, and videos that capture a social media savvy's attention [122]. A study on the Gratification Theory suggests that Facebook users derived immense pleasure and satisfaction from sharing photos and videos [123]. The user's goal is to seek attention, affection, disclosure, share information, social influence, or a personal habit [124], [125]. Therefore, users are mentally absorbed in attractive Facebook visuals. As such, social media marketers have to understand business intelligence tools to understand consumer habits [126]. As a result, business owners can adopt and develop the art of designing customized and outstanding visuals that capture the attention of a potential customer [127]. Additionally, social media marketers have to understand the cognitive absorption of the users. According to [128], mental absorption suggests that most social media enthusiasts are deeply engaged in information technology and current social media trends to overcome COVID-19 limitations [129]. Therefore, social media marketers have to understand the real drivers of social media users into these platforms [130]. To tap into the large online presence, marketers should realize that users want a temporal dissociation from the busy physical schedules. Users want to immerse themselves in something that offers an escape from unpleasant realities, such as the COVID-19 pandemic [131], [132]. They want enjoyment and a feeling of satisfaction by

interacting with curious and creative content. In addition, social media users want to have a sense of control and anonymity over their online behavior [133], [134]. As such, by understanding such perspectives of a user through business intelligence, business owners can customize content to meet the users' needs [135]. Unlike website content that offers largely formalized content and visuals, social media marketing requires the use of quick-to-grasp visuals and content to account for the decreased attention span of the users [136], [137]. The content should also be creative and imaginative enough to evoke a need for user sharing to reach a broad customer base [138], [139]. In essence, integrated social media businesses promotional ads effectively influence the brand and products, impacting the consumer behavior and perceptions.

*3.1. General Research Model*



*Figure 1: Conceptual Research Model*

**4. DISCUSSION**

While considering the significance of business intelligence and social media marketing it can be said that, the customer intention to buy products and decision making to retain with specific product. The first step in a consumer decision-making process is realizing the presence of a product need. As explained through the S-O-R concept, when a stimuli such as a brand packaging or a promotional advertisement flashes on the platform, the user notices and responds. Depending on the quality and attractiveness of the marketing material, a consumer can perceive an unmet need

and feel compelled to click on the advert. The goal is to search for further info to try to solve the supposed want. For instance, a health-conscious person on social media who comes across a message alleging the insufficiency of essential minerals and vitamins in daily diet can be motivated to click on the ad to seek additional information. The target is to satisfy the perceived feeling of insufficiency by improving health through the recommendations in the promotional message. Therefore, business experts can utilize business intelligence tools to understand and activate customer product needs during the COVID-19 pandemic. The strategy is to customize promotional messages to trigger brand discussions that enhance positive opinions about the idea, services, or products.

Social media encourages the use of macro-influencers. According to Mason et al. (2021), macro-influencers are consumers with a huge customer base who can help improve brand awareness since they have substantial experience from using the products. Macros-influencers also understand the needs of the customers and the right promotional message and visuals needed to capture user attention. Elite influencers, such as brand ambassadors, athletes, celebrities, opinion leaders, and website marketers, post favorable information or a peer product reviews, resulting in widespread reach and use of the product. Most macro-influencers have millions of social media followers who can change their followers' consumer decision-making process upon a single favorable post. As such, businesses should adopt a macro-influencer strategy to overcome the marketing constraints of the pandemic.

Social media influences consumer post-purchase satisfaction. Consumer satisfaction is a crucial element in business operations to retain available customers. A customer is more likely to repeat the purchase behavior if satisfied by the previous experience. In physical shopping, customers have few options of expressing their satisfaction or dissatisfaction with a product. However, social media consumers can express their satisfaction during shopping and upon using a particular product directly and openly. The feedback generated is vital in helping business owners rectify to prevent the customers from moving to other options. If satisfied, most social media buyers turn to the platform to promote the product or the company. Therefore, since the COVID-19 pandemic has challenged customer service, social media marketing can reduce dissatisfaction by gratifying consumer product and emotional needs.

## 5. CONCLUSION

This research can conclude with essential outcomes, following the COVID-19 pandemic, consumers have modified their decision-making strategies related to product acquisition, purchase, and shopping. Consequently, social media marketing strategies have shifted to match the growing need for online shopping, adopting business intelligence tools that help recognize and analyze up-to-date business patterns. The aim is to get a wholesome visualization of consumer habits to help governments and businesses respond more efficiently to business uncertainties. A social media business intelligence system can structure the raw data generated from the set key performance indicators to determine business patterns and trends during the pandemic. For instance, most business intelligence tools can generate and present user data in intuitive visualization structures that are easy to read and interpret. In addition, since social media business intelligence tools help understand what customers want, a business can respond by shifting content design to be more relevant to followers' needs. Therefore, business intelligence tools facilitate the collection of crucial social media marketing data to create targeted adverts to promote products to the customers who need the products, mitigating the setbacks of the COVID-19 pandemic.

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## **IMPACT OF TRANSPORTATION SAFETY ON ECONOMIC GROWTH AT MARITIME INDUSTRY IN THE UAE**

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### **ABSTRACT**

The sustainable growth of society is connected to the safety of transportation. The analysis of the impact of transportation safety on economic development is therefore presented in this research against the backdrop of coordinated development. The degree of combination between transportation safety and economy as well as their interaction are determined in accordance with the various stages of transportation safety development. Additionally, while supporting other important long-term transportation goals, such as enhancing safety, energy independence, and environmental sustainability, governments must prioritize productivity growth. Investments in safe, efficient transportation infrastructure increase connectivity and reduce cost, which benefits the economy.

***Keywords:*** *Transportation Safety, Economic Growth, Maritime Industry UAE.*

### **1. INTRODUCTION**

The transportation industry, which makes extensive use of infrastructure, is a vital part of the economy and an often employed tool for development [1]–[3]. This is especially true given the

global economy's increased dependence on the movement of people, goods, and information and communication technologies [4]–[6]. The amount and caliber of transportation infrastructure are directly tied to the level of economic development [7]–[9]. High rates of growth are frequently linked to densely inhabited infrastructure and transportation hubs [10], [11]. Effective transportation networks create chances and benefits for society and the economy, which have beneficial ripple effects including increased employment, market accessibility, and investment [12]–[15]. However, this research is mainly done to know the impact and significance of transportation safety on economic growth and what factors can assist the transportation sector to maintain safety and security.

## **2. THEORETICAL FRAMEWORK**

### *2.1. Transportation safety*

Transportation is a way to communicate or move from one place to another [16], [17]. Without an effective transportation system, the people of a country cannot easily make connections with each other [18]–[20]. In the current time and because of technological development the process of transportation has become so easy that saving the time of humans and opening many opportunities to the world [21]. Transportation safety is important and is significant in developing an economy [22]. In addition, transportation is the main way to communicate with local and international bodies to conduct business [23]–[25]. It can take place in three forms like road transportation, air transportation, and water transportation [26], [27]. In case a country has developed a high technology dependence transportation system then they provide their several industry lots of opportunities to conduct business [28]–[30]. In addition, especially to conduct global business, those countries play a significant role because of the safe and secure transportation system [31], [32]. In UAE the water transportation is highly developed to provide the maritime industry to be successful in their way [33], [34]. The importance of transportation safety is to protect the national interest of the country and ensure the citizens of the country are secure through their actions [35], [36]. Transportation safety provides not the only opportunity for economic growth in business but also provides safety to the passenger [37], [38]. In addition, in the case of transporter property, safety is essential to safely deliver the time from one place to another and make the deal successful [39]–[41]. The more the transportation of a country will be safe, the safety and innovative technology the people of the country will get advanced facilities [42]. Transportation safety plays an important role in the development of the economy of any country [43].

## 2.2. Economic growth

Economic growth refers to the increase in the amount of service and goods produced at a particular time per head in population [44]–[46]. It refers to the aggregate of economic production. An increase in economic growth measures the increase of the gross domestic product (GDP) of a country [47], [48]. It references the increase in the value of the national output, expenditure, and the country's income [49], [50]. The higher a country's economic growth, the higher will be the living standard of that country [51], [52]. Further, it also denotes an increase in real income and development in useful areas like health and education [53]. UAE has a strong economic infrastructure and in 2019 the growth of the UAE economic forecast was 3.7% which was a positive outlook of their economic performance [54]. In 2017 their growth of GDP was 0.80% and the annual GDP percentage was 8.20%. In the economic growth, the contribution of the transportation sector is 5.40%. The higher economic growth lowers the risk of unemployment [55], [56]. The firms in the economy start to expand and try to impose more employees for creating opportunity [57], [58]. In addition, the positive growth in economic development also reduces the borrowing from the government [25], [59]. Because economic growth creates higher tax review and so that less money needs to be paid on the benefits such as unemployment [60], [61]. The public service provided by the government can be improved because of the higher economic growth [62]–[64]. The higher tax revenues the government can spend on the welfare of health education and other projects provide better life opportunities [65]–[67]. The technological infrastructure of the country can be improved by spending money on research and development by firms [68]. It reduces the poverty of a country and provides a better life experience that will open up new ways to see their life and enjoy the facilities [69], [70]. Therefore, economic growth is a vital factor for a country to ensure an advantage in the market [71], [72].

The main idea of the theoretical framework is to identify the impact of transport safety and the infrastructure of power development on economic growth in the context of the maritime industry [73]. In addition, it will examine the main drivers of the maritime industry transport [9], [74]. It will analyze the relation of the dependent variable and the independent variable and how both influence each other [75]–[77]. It also focuses on innovative transportation policies that will enhance the change to ensure the growth of the economy in the context of the maritime industry.

## 3. LITERATURE REVIEW

Transportation, logistics, and this kind of infrastructure influence economic growth. Quality and secure transport provide access to the local and international market easily [78], [79]. In addition, efficient transport can provide cheaper service so that more service can be taken [80]. Large scale transport encourages the local and international economy to encourage the logistics business to grow [81], [82]. A sound and secure transportation system lower the cost of moving goods and people [83], [84]. Thus it increases the productivity of the economy [85]. These as early discussions an increase in the economy increases the living standard of the country [82], [86], [87]. The time of assessing the expenditure related to transportation safety the main concern needs to be produced as it is the central component of the economy's growth [88]–[90]. High productivity investment in the safety of transportation ensures the economic welfare of a country [91], [92]. Thus it also creates many job opportunities and contributes to long-term economic development [93].

### *3.1. Relation and Impact of transportation safety in economic development in the maritime industry of UAE*

The maritime industry is related to shipping, ocean, navigation, or any other activation in the sea surface [94], [95]. In the developing countries, the population is going faster, in that context the low cost effective maritime industry and transportation play a significant role in economic growth and sustainability [96]. In the current economic and global context of UAE, the maritime industry is the backbone of the global trade and economy [97]–[99]. The water transportation system of the UAE provides regional and international hubs for the purpose to provide opportunities for economic development [100]–[102]. In addition, it includes the development of the port, maintenance, and growth of dry docks, ship operation, maritime protection, and safety [103]. In the country UAE, they have more than 16 seaports and in the case of port terminal containers, they have more than 9 [104], [105]. As per the world's shipping council in UAE two of the world's 50 port containers are located [106].

In UAE there are some major seaports and waterways for example; seaport of Mina Rashid emirates and location in Dubai, Port of Jebel Ali emirate and location in Dubai, Port of Mina Khalid location and emirate in Sharjah, Port of Mina Zayed location, and emirate in Abu Dhabi, Port of Khorfakkan location in Khorfakkan and emirates in Sharjah, Khalifa Port location and emirates in Abu Dhabi and many others [107], [108]. Their water ports are reactive in handling logistics and cargo all over the world. It was estimated that almost 61% of cargo from the GCC

countries arrived via the port of UAE [109]. In the UAE the commercial port can consist of 310 breathe and have the capacity of cargo to cover 80 million tonnes [110], [111].

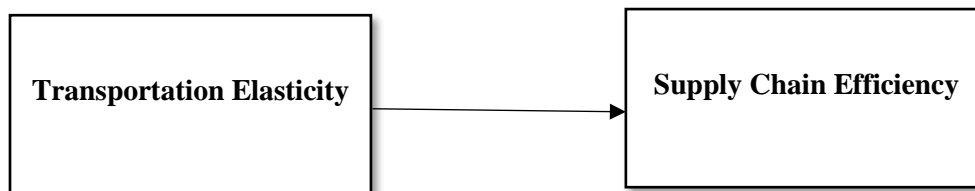
They also provide the ferry service all over the country [85], [112]. The transport and safety are so developed in the country that contributes overall economic development by 13.80% in the year 2016. In addition, it has a value of around 45,395 in 2017 and a percentage of contribution of 14.10 % in 2017. Thus it helps to develop the GDP of the country and provide a high value to the citizens' lives [106], [113]. In addition, UAE provides a high priority to developing their transportation infrastructure to ensure that people get attached to their system easily and invest in their business [114], [115]. Their higher GDP growth is an indication that their too much development in the transposition in terms of the maritime industry opens up the path to making connections with the outer world [116]–[118]. Again, the main source of their economy is oil that also exports with the help of their maritime industry and excellent transportation system [119].

For sustainable economic development transport and economy are linked with each other [120], [121]. The external dimension of the economy provides an economy to grow fast. In case transportation lagging behind then, it loses the international and global market potential and loses competitive facilities in the market [111], [122]. In order to provide diversification and share with a country, the influence of transportation and its safety is important [123], [124]. Based on that, one can tackle the initiative to be innovative and creative in other sectors that will open up new business paths for expansion and economic growth [125]–[127]. Boosting economic relations between the two countries is based on secure transportation and the cost-effective way by taking the help of the maritime industry. With the facilities of the waterway, one can straighten their supply chain distribution with other countries and ensure the quality transport on time [128]. Because of the navy safety, there is no risk of the theft or loss of the product that ensures the secure transaction. On the other hand with technological development with proper weather forecast the news related to seastorm, rain can gather and precaution and awareness can be spread [129], [130]. In other modes of transportation in the aviation industry or in road transport, the risks are high of theft or other cases like the accident, attack, or any natural calamity [131]–[133].

Compared to the maritime industry, transportation is easy and cost effective [134]. It also reduces the impact of environmental pollution and traffic on the road [48], [135]. Because of the influence of transport, economic growth is possible and it also creates job opportunities in the country in different categories and provides youths of the country to explore the passion and implement their

new innovative ideas to develop the transportation that will contribute to local and international development [136]–[138]. The job opportunities are also a type of influence in the economy that sincere the living standard of humans of the country and ensure the competitive position of the country worldwide [50], [134], [139]. The savings in cost can be invested in other areas of economic development such as education, research and development, and the health of the country that will create more engineers, doctors, scientists who will contribute to future secure transport and increase the standard of living [60].

### *3.2. General Research Model*



*Figure 1: Conceptual Research Model*

## **4. DISCUSSION**

Transport and the economy are intertwined for sustainable economic growth. If transportation is not kept up with, it will miss out on potential global and international markets as well as competitive facilities. The impact of transportation and its safety is crucial for sharing with a nation and offering diversification. Based on that, one might take the initiative to be inventive and creative in other fields, which will open up new business opportunities for growth and expansion.

Using the maritime sector's assistance will help to increase the two nations' economic ties by providing safe and economical transportation.

Moreover, the promotion of increased productivity, which results in the creation of higher-paying jobs throughout the entire economy, is one way that transportation policy can have a large and long-lasting impact on total economic growth. However, unless they increase long-term economic output, construction jobs and expenditures on steel and concrete are actually economic costs rather than advantages in the near run. Proposals to spend money on surface transportation and its safety measures with the primary goal of generating jobs pose a severe risk to the country that we will rush to complete projects that won't necessarily boost the economy. This research has provided several evidences to support the notion that transportation safety will result in the creation of more employment, lifesaving, technological development and growing economy.

## 5. CONCLUSION

Economic growth is made possible by the influence of transportation, which also generates employment opportunities in a variety of fields and gives young people in the nation the chance to follow their passions and put new, creative ideas into practice to develop the transportation that will aid in regional and global development. The availability of jobs is another factor in the economy that affects how well off people are in a nation and how competitive it is on the global stage. Moreover, transportation safety can help in protection of life through administration, technology development, and regulation of all modes of transportation.

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## **IMPACT OF ORGANIZATIONAL LEADERSHIP ON ORGANIZATIONAL PERFORMANCE DURING COVID-19 PANDEMIC**

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### **ABSTRACT**

There are many organizational leaders focused on developing the contingency roles which are significant for identifying any skill gaps of the employees and accelerate the training of the employees to overcome any negative situation that can hinder the performance. One of the fundamental decisions taken by the organizational leaders is splitting the teams and dividing into shifts. As a result, it is also beneficial for the employees while they are working remotely in the pandemic, flexible work arrangements developed by the organizational leaders are effective for the employees to stay motivated during the COVID-19 crisis and focus on the organizational goals.

**Keywords:** *Organizational Performance, Leadership, COVID-19.*

### **1. INTRODUCTION**

Values, culture, openness to change, and employee motivation are all determined by leaders. They influence institutional strategies' execution and efficacy. A direct cause and effect link exists between leadership and the performance of organizations [1]. During the COVID-19 epidemic, the



workers in the OECD countries experienced a multitude of pressures [2]. Many workers are concentrating on preventing the emotional distress brought on by the COVID-19 situation in order to preserve employment and wages [3]. The COVID-19 outbreak has exposed the workers to anxiety-related behaviors that have an influence on their ability to function at work. The majority of organizational executives looked at how the COVID-19 situation was affecting employees' motivation [4], [5]. It is important that the shared understanding goal of the performance management systems be connected to in order for the employees to function well.

The COVID-19 epidemic raised a number of pressures, which had an impact on the workers' mental health. The pandemic-related pressures have a detrimental effect on employees' motivation to work toward company goals [6], [7]. The COVID-19 epidemic puts a lot of employees at danger for panic and fear, which has a negative impact on their conduct [8]. The organizational leaders looked at how knowledge management must be implemented effectively for employee motivation to be sufficient to overcome the stressors that the employees have experienced [9], [10]. Therefore, the primary inquiry that will be addressed in this research is to explore the impact of organizational leadership and knowledge management on employee motivation and organizational performance.

## **2. THEORETICAL FRAMEWORK**

### *2.1. Problems faced by the employees during COVID-19*

There are various problems faced by the organizational employees during COVID-19 which affect the work performance and increase the stress. Those problems are as follows:

#### *2.1.1. Occupational role*

Due to the COVID-19, the working environment gets affected and it also impacts negatively on the occupational role. The mental health of the employees affected during this time. Most of the employees feel the insecurity of the jobs during this time which is considered as one of the factors or demotivation [11], [12]. The employees also faced the challenge of the restrictions of lockdown which hindered the routine activities [13], [14]. The employees also faced the challenge of getting the salary as many companies faced loss during this pandemic time [15], [16]. Therefore, the occupational role of the employees gets affected during the COVID-19 and it hinders the performance of the employees.

### *2.1.2. Mental health*

The mental health of the employees gets affected by the crisis of COVID-19 as the employees are working from remote locations which affects the stability [17], [18]. There are various employees faced with the risk of psychological disorders like stress, anxiety and depression during this time. It also became vulnerable to the mental health of the employees [19]. The employees also faced the lack of technological skills and experienced the problem to cope up with the change management [20]–[22].

### *2.1.3. Occupational safety*

It is important to note that one of the fundamental responsibilities of the employees is to protect the employees and ensure that the workplace is free from hazards. During COVID-19, the organizations remained closed and the employees faced the lack of a health plan to work adequately from the remote location [23], [24]. The organizational leaders also faced the challenge to educate properly by fostering knowledge management during this pandemic time.

### *2.1.4. Institutional factors*

The employees have examined that there is an absence of the well-trained mental health professionals within the organizations and it has increased the risk of psychological distress during the time of COVID-19 [25]. Most of the organizational leaders failed to provide the necessary support to the employees which are significant to get motivated during this time and work accordingly to achieve the business objectives. Those institutional factors also affected the employees during the COVID-19 pandemic [26].

## **3. LITERATURE REVIEW**

### *3.1. Impact of COVID-19 on the organizations*

The COVID-19 issue had a significant impact on the organizations, as a result of which the people involved struggled greatly and the organizations' performance suffered [27]. The majority of businesses have been compelled to operate in a nontraditional way by managing their workers from remote locations, which has hastened the adoption of change management [28]. The primary change is associated with the remote working of the employees which affects the technical and behavioral aspects of the employees [29], [30]. The high awareness of the need to change and reduction of resistance to understand the lockdown rules also forced the employees to adopt the behaviors, attitudes, beliefs and mindsets of the employees.

Another challenge created by the COVID-19 in the organizations is the lack of ability to utilize the technical equipment with the systems and tools to work productively from home [31]. During this time, the effective leadership of the organizational leaders focused on the enthusiasm of the employees that signifies that leadership has a clear goal to welcome the future. In the current era, the negative impact of the COVID-19 on the organizations influences the employees negatively regarding the feeling of job insecurity and it created many mental health problems [27], [32]. The majority of firms also struggled with performance by relying solely on output to gauge their efforts. The task for the organization's leaders was to implement a sound change management plan that would shield the staff from this disaster [33]. Therefore, it also impacted negatively on the decision making of the firms to sustain in the COVID-19 pandemic era [34]. It has been also found that the economic consequences of the cultural shift of remote working also impacted on the performance of the organizations as there is a lack of knowledge management during this time [35]. The lack of motivation among the employees also impacted the organizational productivity by which the organizations face many unanticipated circumstances [36], [37].

According to [38], in the era of COVID-19, it is necessary to focus more on the organizational leadership in the large, small or medium organizations to maintain the existence and performance of the employees by which the company can survive in the competitive market [39]. It is significant that the non-competing threats like COVID-19 can stop the performance of the organizations by affecting the employees and operation business. As opined by [40], it is necessary for the organizations to meet the requirements of effective leadership style by which the employees can be motivated during the COVID-19 crisis by enhancing the knowledge management [41]. Large MNCs in the global market focused on the effective leadership style by treating the employees with respect and dignity and listening to the concerns patiently and understanding the problems. The recognition and the needs are also necessary to be understood properly [42]. The organizational leaders tried to establish a crisis team to ensure the business continuity which is essential for the business to overcome the negative impact [43]–[45]. The leaders also focused on the future developments by which the negative impacts of the COVID-19 on the performance of the employees can be overcome [46]. The crisis response team developed by the organizational leaders are significant for safeguarding the employees from any kind of unanticipated situations which can hinder the performance [47], [48]. It is also helpful for ensuring the consistency among all of the functions with the organizations to improve the performance. The organizational leaders

also focused on improving the change management by which the employees can cope up with the situation [49].

As stated by [50], COVID-19 influenced the organizational leaders to focus more on the employee safety which is significant for reducing the health risks and maintaining the health status to work adequately [51]. The organizational leaders have tried to encourage the employees to monitor the health of the employees [48]. It is beneficial for the employees to get the necessary support from the leadership team and get motivated to work [52]. The positive support from the senior management of the organizations during the crisis of COVID-19 helped the employees to work from remote locations without any barrier. It helps to improve the organizational performance during the COVID-19 time [53], [54].

### *3.2. Impact of Covid-10 on Organizational Leadership*

It has been examined that various companies forced employees to work beyond the shift times in the crisis situation [55]. The employees faced the problem that there are untimely working hours which affect the motivation and lead to negative performance in the work [56]. According to , there are many employees faced with the problem of the technical resources to work properly from a remote location [57], [58]. It also affected the performance of the employees due to the long-stretched working hours. Most of the employees reported that the key performance indicators implied in the organizations during the work from home are unclear and it affected the overall performance of the companies [59], [60]. The ability of the leaders to empower the employees signifies that the management always tried to allow the employees to perform at their best [61]. Effective performance of the employees and the effective communication skills are significant for improving the situation of the employees [62], [63]. It has been examined that the knowledge workers are also instructed to share the knowledge during the time while the organization is facing various challenges [64]. As opined by , the unfamiliar situation faced by the employees during the COVID-19 affected the level of motivation and also hindered the organizational performance [65]. Therefore, the leaders of the organizations focused on improving knowledge management.

According to [66], the organizational leaders implemented knowledge management to address the issue and protect the employees from the effects of COVID-19. The three-step process of knowledge acquisition, integration, and reconfiguration has been put into place by organizational leaders, and it is crucial for addressing the problems of COVID-19. According to [67], the use of

the relevant knowledge management model is efficient in educating the workforce about motivational tools and measuring performance across industries [68]. The organizational leaders also concentrated on creating and implementing training and educational initiatives to protect staff members against the dangers of COVID-19 [69]. It has been discovered that organizational leaders have concentrated on improving effectiveness and efficiency, which are essential for effectively responding to market changes. Controlling organizational knowledge helps ensure that the needs of the market are addressed to a sufficient degree. The organization's leaders have determined that ensuring employee safety is one of their top priorities. Regular knowledge access helps to connect with knowledge sharing, which enables employees to properly investigate the value of corporate knowledge [70], [71]. Therefore, the leaders adopted knowledge management to improve the performance of the employees by which the organizational objectives during COVID-19 crisis can be achieved. Thus, the knowledge management helped to influence the employees to stay motivated and gain the clear accountabilities by which the business can move forward [72]. The knowledge management is significant for the employees to work accordingly by which the negative impacts of COVID-19 can be overcome.

### *3.2.1. Evidence based decision making*

Organizational leaders have been encouraged by COVID-19 to concentrate more on evidence-based decision making, which is essential for concentrating more on knowledge management. During the COVID-19, it is useful for the leaders to make the crucial choices that could have a favorable influence [73]. The executives of the business have determined that there is a connection between health and economy, thus it is essential to place greater emphasis on employee health in order to keep staff members motivated and boost organizational performance [74].

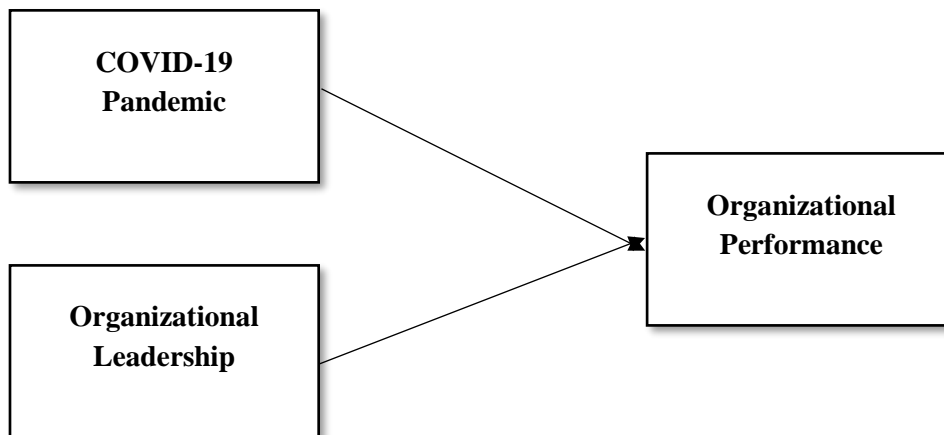
### *3.2.2. Clear communication*

The majority of firms have adopted virtual work because of COVID-19, which helps organizational leaders improve their communication abilities. Through the virtual network, it is crucial for enhancing departmental communication [75]. Maintaining contact with the organizational leadership and performing the work effectively were both made easier. Maintaining contact with the staff is another excellent strategy used by organizational leaders to help the business achieve its objectives [39], [76]. As a result, it is yet another benefit brought about by COVID-19's influence on organizational leaders' leadership traits [77].

### 3.2.3. *Global cooperation*

The organizational leaders also looked at the need for international collaboration because maintaining the health of employees is a shared duty [78], [79]. The organizational leaders are primarily concerned with obtaining the required worldwide support so that they may create training initiatives. Due to COVID-19, the workplace quickly changed, and the change management process enabled the corporate community come together globally [80]. It is also beneficial for the employees to remain competitive in the crisis time [81], [82]. Thus, the training regarding the employee wellbeing and employee safety are beneficial for the employees to get motivated and perform significantly.

### 3.1. *General Research Model*



*Figure 1: Conceptual Research Model*

## 4. DISCUSSION

In order to overcome the hurdles, there are various recommendations for the organizational leaders by which the employee motivation can be effective to improve the performance. Those recommendations are as follows:

- Firstly, the organizational leaders are recommended to focus more on the team management behaviors by which the motivation can be improved. The inclusion of the

discussions and the execution strategies are significant for understanding the capability of the employees by which the employees can overcome the situation.

- Secondly, organizational leaders must focus more on the planning and preparation by which the brainstorming actions through the strategies can be examined. It is helpful for the team to make the decisions by which the employees can get motivated during any crisis.
- Thirdly, the organizational leaders must provide the necessary training to the employees by which they can get motivated in the crisis situation. It is also necessary for the organizations to provide the necessary resources to the employees to overcome the technological challenges faced by the employees.
- Finally, the organizational leaders must provide the necessary healthcare support facilities to the employees which are significant to ensure the wellbeing of the health. It can also motivate the employees to focus more on the performance and achieve the professional goals.

## **5. CONCLUSION**

In conclusion, COVID-19 pandemic has changed the work procedure of the organizations. It has been found that most of the employees have faced issues in the work life balance after implementing the work from home strategy. It is significant that there are various stressors affecting the employees like anxiety, stress and depression. The organizational leaders played a pivotal role by implementing the knowledge management by which the employees get benefitted. The leadership programs in most of the organizations and the motivational aspects influenced the employees to focus more on the performance and meet the organizational goals.

In this study, various recommendations have been mentioned which are significant for the organizational leaders to adopt by which the limitations can be overcome. It is also necessary for the organizations to focus more on the employee benefits and safety through enhancing the knowledge management to overcome the situation. Providing the training and effective feedback to the employees can be helpful for improving the level of motivation by which the performance goals can be achieved within the organizations. Therefore, the study is significant for exploring the impacts of COVID-19 on the organizational leadership to manage employee motivation and performance by adopting knowledge management.

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## **IMPACT OF SUPPLY CHAIN EFFICIENCY ON ECONOMIC GROWTH AT MARITIME INDUSTRY IN THE UAE**

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### **ABSTRACT**

For the purpose to develop the economy and its workers to be productive, efficient supply chains are essential. The research findings demonstrate that better supply chain logistics performance generates favorable growth rewards. Additionally, the input and output aspects of supply chain efficiency have favorable effects on economic growth that is possible to use resources, technology, and knowledge to their fullest potential in order to lower logistical expenses and boost income through supply chain efficiency. An efficient supply chain helps to cut costs and free up time that can be used at other sources by streamlining the processes and phases of the supply chain.

**Keywords:** *Supply Chain Efficiency, Economic Growth, Maritime Industry UAE.*

### **1. INTRODUCTION**

Over the last decade, increases in material demand occur during economic development over a very short time [1]. Economic development is defined in economic theory as an average increase in the quantity of raw materials available, the rate of GDP growth, or the level of the national income. When the market does not experience growth, progress should be made [2]–[4]. Thus,

economic growth as a whole includes all socio-economic mechanisms and advancements brought about by the influence of economic forces, as well as more than just an increase in product demand [5]–[7].

In the majority of developed nations, supply chain productivity has a significant impact on a variety of areas, including distribution networks, distribution facilities [8], computer and communication infrastructure, manufacturing services, supply chain management, business and goods, exports and imports of commodities, etc [9], [10]. As a result, the development of the supply chain efficiency industry is crucial in providing incentives for growth and development, while the cost of logistics has an impact on how an organization and nations as a whole operate [11]–[13]. Therefore, supply chain efficiency and its impact on economic growth considered in this research to acquire theoretical evidences in the Maritime industry UAE, to strengthen literature and that may be beneficial for the corporations, scholars and researchers in order to attain more knowledge and practice.

## **2. THEORETICAL FRAMEWORK**

### *2.1. Supply Chain Efficiency*

According to [14], supply chain efficiency is an indicator of how good the calculation of how well the services spent are utilized [15], [16]. Supply chain productivity is how efficiently the supply chain manages the money or resources. According to [17], [18], the potential business winners would be the ones who have sought and attained these twin peaks of quality [19], [20]. They were expected to have won both the expense leadership and the operation leadership [21]. The goal of Supply Chain Management is to enable the business to make as much revenue as possible [22]–[24]. This ensures that it costs as least as possible and sells as much as possible at the same time. Low cost ensures that the cost of the supply chain is as low as practicable [25]. In order to reach a low supply chain expense [26], [27], the business must provide the absolute best internally and externally output [28]. For example, internal output may be yield, development lead time [29], [30]. Customers are influenced by external output [31], [32]. Examples of external output metrics include distribution accuracy, lead time, customer care and price [33]. In order to gain market leadership in the field of networks, rivals must concentrate on network management as well as on internal processes [34]. To be sustainable in the current global climate, businesses would continue to search at ways to reduce prices and expand services in line with Christopher [35], [36]. This

ensures that the reliability and productivity of the supply chain would become much more important [37].

Efficient supply chain management may minimize prices, optimize consumer satisfaction and maximize competitive advantage [38]–[40]. It requires successful coordination and monitoring of the relevant industries, agencies, processes and organizations [41]–[43]. They all promote the movement of output from conceptualization to the point of sale of the commodity to the customer. Corporations that are adept at handling the supply chain will be more liquid, agile and less dependent on banking and intermediaries for its cash flows and income [44], [45].

Supply chain productivity plays a significant role in the economies of the majority of developed countries, impacting different fields such as distribution networks, distribution facilities [46]–[48], computer and communication infrastructure, manufacturing services, supply chain management, business and goods, exports and imports of commodities, and so on [49], [50]. As a consequence, the advancement of the Supply Chain Efficiency sector plays a major part, delivering incentives in terms of growth and development [51], while logistics expenditure changes the working of the organization and countries in general [52], [53].

## *2.2. Economic growth*

In order to satisfy the ever-increasing needs of the people, human civilization is driven into a phase of continuous regeneration of the development of different material products and services [54]–[56]. This constant regeneration of the development method, which is related to delivery, trade and use, that is to say, as we have described these four stages of social reproduction, is the general legality and requirement of any mode of production [57]–[59]. We remember that there is a quick, scaled and extended social replication and that the amount of output can stay the same, decrease or increase from year to year [60], [61]. Keeping in mind that the reach of the needs of society continues to expand [62], [63].

Economic development involves increases in material demand over a very brief period of time, typically one year [64]–[66]. In economic theory, the idea of economic development means an average rise in the amount of material supply [67], the pace of GDP growth or national income [68]. Progress should be accomplished when the growth of the market is not achieved [69], [70]. Thus, the sum of economic growth entails not just a rise in commodity demand [71], but also all other socio-economic mechanisms and improvements triggered by the impact of economic forces

and beyond [72], [73]. The State of Dubai has put greater focus on the maritime sector throughout the last years and has been eager to point out its important contribution to economic growth in the Arab state [74], [75]. In recent years, the shipping sector of the UAE has been sailing easily, even though the foreign industry navigates clumsy seas [76]–[78]. As we travel into 2019, the sector has increased, port facilities have increased [79], new marinas have also been revealed and the nation has established itself as the International Centre for Nautical Arbitration [80].

### **3. LITERATURE REVIEW**

Practices of global supply chain management are single-handedly holding down inflation in the world [81]. For a while now, analysts have been wondering why inflation, through the usage of numerous policy instruments, stubbornly persists below ideal amounts [82]–[84]. There is some indication that the willingness of current worldwide supply chains to try to pursue fresh and cheaper forms of demand may be attributed to it. Coupled with old-fashioned administrative ingenuity, the influence of rivalry [85], [86].

Often medium and large organizations set internal targets to approach this ideal state in today's business environment; integrated enterprise resource planning (ERP) and internal networks will come near to this state within the context of a multi-divisional organization [53], [87]. However, this degree of complexity only exists when applied to the whole supply chain [88], [89]. A proper aim of convergence of the supply chain [90], then, will be to apply these principles to inter-firm relationships through the whole industry chain [91]–[93]. A piece of knowledge is entered at the root and is directly open to all supply chain participants that use it [94], information flows to points of usage without human interference and the need for translation is obviated by standard protocols [95], [96].

The emergence of GSCs is tied to the idea of competitive advantage from an economic perspective [97]–[99]. By relocating processing procedures, i.e. In different countries, transnational companies (TNCs) can reap the benefits of the best possible human or material resources in different countries in order to sustain their competitiveness by raising productivity and reducing costs R&D [100], [101], concept, architecture, development, packaging, marketing, distribution and retailing [102]–[104].



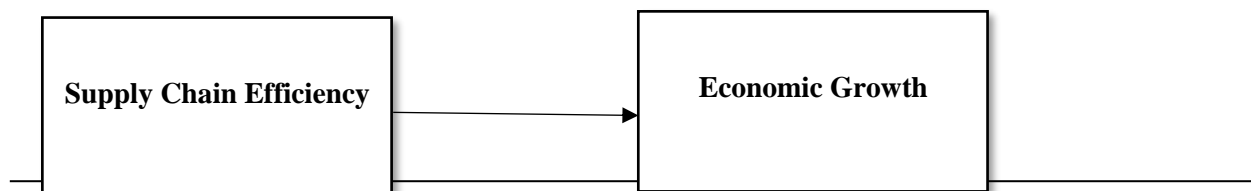
### *3.1. Relationship and impact of Supply Chain Efficiency on Economic Growth*

In order to keep companies going, the global financial crunch pushed banks and firms to find creative ways to collect capital [105], [106]. Many switched to supply chain finance, which is like a corporate pay-day loan [107], [108]. To get a low-interest loan from a creditor, vendors use the invoice for a shipment as leverage [109], [110]. Banks realize that regardless of the credit-worthiness of the company receiving the product, they can get charged [111]. The funding of the supply chain is extremely beneficial for small businesses [112], [113]. This offers an incentive to earn favorable conditions for funding [114]. Banks, also to one another, were hesitant to lend [115], [116]. But they were able to borrow from firms with a strong shipping record against authorized purchasing orders and invoices [117], [118].

In their activities, companies were more effective, which often helped to free up cash [119]. Furthermore, corporate treasurers became on concentrated on ensuring that the capital they had was spent in "safe havens, such as the United Arab Emirates [120]–[122]. Treasuries, government bonds, and even their own securities of stock buybacks [123]–[126]. They were savvier regarding foreign exchanged and interest rate risk. In other terms, because they couldn't rely on banks, good businesses drained capital out of their sales and cash management [127]–[129]. Next year, after good reports about the coronavirus vaccine that will help rebuild trust in the economy [130], analysts claim, world trade, shipping sector and the supply chain industry will return to growth [131]–[133].

During the first half of 2020, top managers in the logistics and shipping industries said the COVID-19 epidemic sent shockwaves across global maritime transport, but also laid the groundwork for a revamped market and relevant supply chains that would help restore global business activity [134]–[136]. Abu Dhabi is the rapidly emerging trans-shipment, logistics and aligned services regional maritime hub [137]–[139]. The Khalifa Port Container Terminal in Abu Dhabi, run by the ADT, has outpaced the regional maritime industry development trend and is strategically placed to promote trade and transport growth in the Middle East.

### *3.1. General Research Model*



*Figure 1: Conceptual Research Model*

#### **4. DISCUSSION**

The research model explored in Maritime industry in the UAE that incorporated the contemporary factors can be achieved if technological advancement made while shipping or delivering orders, technological adoption can save time, cost and energy that has a huge impact on a country's economic development. Therefore, to increase in material demand occur during economic development over a very short time, usually one year. Economic development is defined in economic theory as an average increase in the quantity of raw materials available, the rate of GDP growth, or the level of the national income. When the market does not experience growth, progress should be made. Because of this, economic growth encompasses all socio-economic mechanisms and advancements brought about by the influence of economic forces and beyond, in addition to an increase in commodity demand.

#### **5. CONCLUSION**

From the fact obtained of the above research, it can be concluded that under the heading of supply chain efficiency, and its impact on economic growth is critically analyzed through scientific review that revealed societies with highly developed supply chain infrastructure including an extensive train network, contemporary interstate highway systems, and several modern ports and airports are able to interchange various items between producers and consumers rapidly and affordably. Consequently, all these factors inherent to grow a nation's economy.

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## **COVID-19 PANDEMIC AND STUDENTS' LIFE: THE IMPACT ON EMPLOYMENT OPPORTUNITIES**

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### **ABSTRACT**

Global employment has been severely harmed by the Covid-19 pandemic, especially among youth seeking career opportunities. This research was aimed to determine how the epidemic affected student's life and their employment opportunities, as Covid-19 pandemic limited the work progression, direct communications and socialization. A systematic review of this research assisted to find the factors faced by students and how negatively this pandemic affected the career life of the students and professionals. Whereas, every student who works part-time while enrolled in college or a university have lost their jobs, that had a big impact on their academics and work life for students who rely on part-time financing.

**Keywords:** *Covid-19, Students Work life, Employment Opportunities.*

### **1. INTRODUCTION**

When the Covid-19 outbreak first began, everything changed instantly. The coronavirus was viewed as a formidable threat and had a significant negative influence on our lives on a social,

psychological, physical, and financial level [1], [2]. It all started back in December, 2019 when all the world start shares “rumors” about having a serious disease that cause death which is covid-19 in China Wuhan [3]–[5]. Then it started to spread country over country till it was spread all around the globe [6]. One of the major impacts that coronavirus cause, is education, which in this report we will discuss the main issues and challenges that corona has made on education [7]–[9]. In the beginning of the pandemic all countries around the world were not fully prepared to face something like this [10], [11]. Since the E-learning was already existed, ministries of education have decided to not stop the schools and universities and start to use distance learning [12]. At first, it was challenging for the teachers and students to be familiar with the new technology and how to use this in term of entering online lectures [13], [14]. Moreover, online learning has also affected the student’s families because not all families are having higher income to afford for their children’s computers or tablets to continue studying online, and some families has suspended their children from schools or universities just because they don’t believe in “online learning” which this had a huge effect on student’s mental health and the educational level [6], [15], [16]. Nevertheless, if we want to be realistic, online learning is not suitable for all levels because primary kids have to be face to face with teachers because they’re mentally programmed that they’re at home and they can do whatever they during the lecture time, so they will lose concertation [17], [18]. In addition, this negative effect is not only for primary students but also on higher school levels and university students which would also lead to lower GPA’s due the lack of concentration [19], [20]. On the other hand, distance learning has also shifted the students minds of traditional educations because it has made the students life easier in term of attendance that is can be accessible from anywhere and some students has enhanced their GPA’s due to plenty of time that they have during the pandemic [21], [22], so they don’t have anything to do but only focusing on their studies [23]–[25]. Some educational institutions are bargaining to continue online learning but not in all fields because some of them are required to be physically in a classroom to get better absorption for the information’s that they’re receiving.

## **2. THEORETICAL FRAMEWORK**

### *2.1. Future employment opportunities*

According to [26], coronavirus have influenced students' lives psychologically, but not only that, it also has a major impact on student's future employment opportunities after they graduated because covid-19 has impacted the economic health and the external employment labor market [27]. According to [28], [29], stated that there were more than 70% of universities students and students who are working and study at the same time are passively affected due to the closing of universities, schools and skills improvement centers [30]–[32]. Moreover, around 65% of postgraduate students stated that the quality of their education has been affected due the pandemic that made them go for online learning [33], [34]. postgraduate students are now concerning about their chances to get a job and build their future career due the uncertainty of the situation and how life is going to get back to normal after covid and how the general global economic situation will be [35]–[37]. As , it stated that around 38% of postgraduate students are uncertain about their destiny because of the pandemic [38], [39]. One out of six youth has already felt that the pandemic has a direct effect on them, and it prohibited them from working while others are employed in affected institutions but yet, they had a slight reduce in their incomes due the global crisis [40], [41]. Furthermore, due the high rate of unemployment students, they're heavily concerned about losing their skills and competences and this would lead to reduce their opportunities to be selected by employers [42]–[45]. In today's era, the international organizations have shifted their strategic planning of workforce by seeking unique candidates with premium abilities that will have a growth on their businesses by positioning themselves in their industries that they're competing by having a unique workforce [46]–[49]. Due to that, coronavirus has made the competition harder than ever because the world is shifting to be more technological advanced and made the organizations to put high standards for people to be accepted in a regular job [50], [51]. There is a study where after having covid 19, there are some sectors that the demand is exceeding the supply and there's a good chance for these areas to be more innovative and grow [52], such as health/care and nursing, business, and information technology [53]–[56]. The business field in project management, business strategies and business process and analysis are having a demand > supply by 21%. Which's still a good chance to be employed and enhance the efficiency of a particular business [57], [58]. It has investigated that corona virus has made the students career choices are uncertain and putting them under the pressure where they don't want to lose their skills due the high unemployment rate while they should also be unique with outstanding performance [59], [60].

## *2.2. Mental and Financial capacity... Are they stable?*

When this pandemic happened, a lot of dimensions in life went downhill. Mental and physical health, financial capacity, basically everyone's lives has gotten drawbacks [61], [62]. For students who already have mental health problems, it might have gotten worse for them [63], [64]. For example, if a student stays online for a long period of time, using apps like Blackboard, Zoom, Microsoft teams, it could lead to introversion [65]–[67]. Introversion is defined as “a person who enjoys spending time alone and shows more reservation than enthusiasm in social settings” [68], [69]. This causes students to be isolated from anyone and anything since they don't get to have physical interactions anymore [70], [71]. Online interaction feels odd because talking to a screen might give an awkward feeling [72], [73]. The lack of interacting in online learning gives a student the need to be lonely, distancing themselves from the world [74]–[76]. Therefore, lacking interaction will most probably develop social anxiety towards students, making it hard for them to present their work, raise their hand, or do anything that involves talking to the professor or other students [77], [78]. According to fenews.com, an average of 80% have been admitting that they have been feeling lonely due to social distancing [79]–[81]. This obviously occurs to many other people (students) who have been at home for too long with zero interaction. Moving onto the financial capacity, researchers have found that “74% of young adult students have been struggling financially after the covid-19 outbreak” [82], [83]. A lot of parents and adults have lost their jobs due to the Covid-19 pandemic, or have been getting low income, since no one anticipated an intense virus as Covid-19, and it was tough to adapt to the new work from home strategy [84], [85], this pandemic has damaged the economic status of many countries [86], [87]. When it comes to students, students are now struggling to pay tuition fees because their families have grocery shopping to do (including the panic buying that has occurred), the low income, and rent payment [88], [89]. Students not being able to pay tuition fees would ban them from studying in that semester, and of course, no person would want that happening to them in their educational year [90], the year where we must develop ourselves and educate [91]–[93]. Finances have been a burden to students and gives them the intent to start working so they don't rely much on their parents as well [94], [95]. If we want to relate these two together, financial issues also contribute to low mental health [96]. To prove this point, “91% are worried about someone in their family and financial insecurity is an unwanted added stress at this time of life”. Not having enough money

could cause a student to give up on their studies, sacrificing for their family's wellbeing, despite the risk of them not continuing their university life.

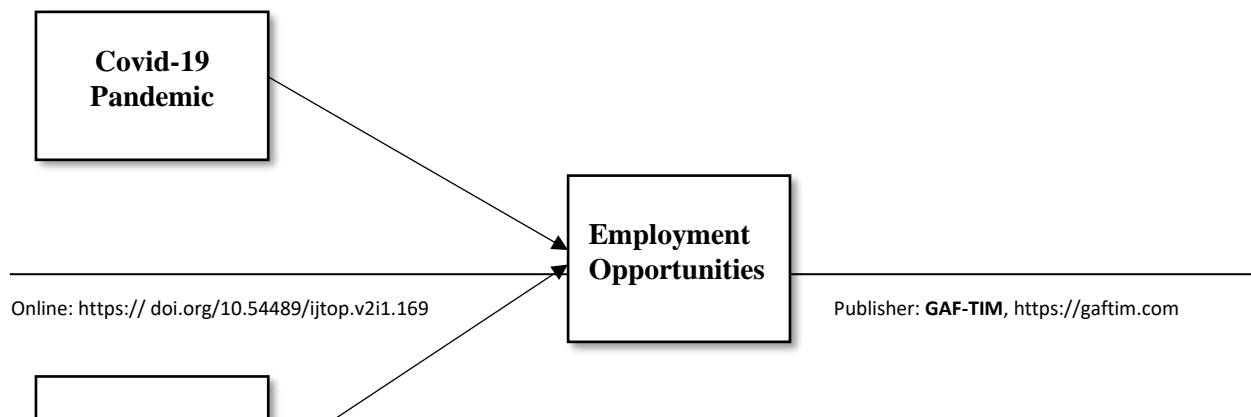
### **3. LITERATURE REVIEW**

Through the time form of education has been changed under their technical development. for example, from the beginning when mankind hasn't developed their language [97], they deliver their information through the paint on the wall or their verbal assumption [98], [99]. However, in here since late 2019 when Covid overwhelm our life we had no choice to continue our education system in the offline school [100], [101]. Hence, we been moved our education system through E-learning, and it result various difficulty with advantage under their circumstance. Before we enter effect of Covid basic educational system wasn't provide for general people around the world instead it was priority from rich perform countries [96], [102], [103]. According to World bank over review they demonstrate that About 70 percent of the global poor aged 15 and older have no schooling or only some basic education [104], [105]. Hence, from the beginning they been suffered to have their education. However, after Covid when basic technical requirement getting higher to have their proper education, they been suffering dark age of education since 2019 [106], [107]. According to UN (united nation) they demonstrate that there are several issue while they try to perform on E-learning for example, delay on budget due to financial crisis around the world [108], safety shortfall since they have lack of financial support to protect student from covid and lastly prioritize of E-learning even though they have lack of technical support general education sponsor they try to seek to have distance learning which is impossible to have [109], [110]. As a result, UN state that "We were worried about 'learning poverty' before the pandemic and also about the inequality in learning opportunities [111], [112]. Now the learning baseline is lower, but the increase in inequality of opportunities could be catastrophic [113], [114]. The task of reigniting the learning process is extremely urgent." With those word they been strongly state their need of financial support with actual educational help that they could proceed in poverty filed [115], [116]. However even as a user of E-learning student and teacher they been face various issue under their education procedure. For example, most of student or teachers are not familiar to have distance learning in technically [117], [118]. They been faced with difficulty to have clear connection, pre-education of E-learning, smart device application, assistance require on young generation and so



on [119], [120]. They been faced with various difficulty that they never been experience in their education field [121], [122]. Yet, with excellence of E-learning structure in UAE they demonstrate high satisfaction in their education. According to study of Ajman university, who demonstrate Advantages and Disadvantages of Using e-Learning in University Education they found that 81% students stated that e-learning provides scientific material in an interesting way [123], [124]. Similarly, 80% students have responded that e-learning increases the possibility of contact between students among themselves and between the students and the teacher which mean they experience stability in their study if they perform in well-structured educational system despite their inconvenience [125], [126]. However, to build such comfortability they require unusual cost [127]. Unlike traditional education they require some preparation such as to launch their beginning stage of educational filed from Blackboard, pre- education to DR and student and administrative people [128], and technical team who could give direct feedback and follow upcoming issue [129]. For those, cost would be required yet it might seem unnecessary cost but to being consider future metaverse culture they seem reasonable to adapt for pre-metavese [130], [131]. On the other hand, they also point out in terms of social isolation. In traditional education between student with teachers or student with student they build their social relation and learn social behavior that beyond education [118], [132]. Most people have been concern their basic social activities in the school yet with excellence of social media they could perform more freely [133], [134]. For example, according to Estimated U.S. social media usage increase due to coronavirus home isolation 2020 43.1 percent of respondents stated that if confined to their homes during the coronavirus, they would use Instagram more during that period [135]–[137]. Which mean they has been involved more on social media so they can expand their social relationship [138], [139]. Also, in study of Ajman university state that UAE student they state that with those isolations they feel it is more easy access to contact with people more than in real life.

*3.1. General Research Model*



*Figure 1: Conceptual Research Model*

## **4. DISCUSSION**

The proposed research model given above in the figure 1 assisted to demonstrate the relationship and impact of Covid-19 on student's life and their employment opportunities, with the help of literature, journals, research articles and "World Health Organization" website, we found several facts that have proven the negative impact of Covid-19 in employment opportunities and work life of the students. There are some factors defined below authenticating the model relationship.

### *4.1. Challenges faced with online learning*

When it comes to online learning, a lot of challenges are faced since we're all away from our campuses after all. The Covid-19 outbreak has basically forced all of us to convert to online learning, it was kind of tough to adjust to a learning style as this. "Recent polling in April 2020 has discovered that 77% of more than 700 college students said that distance learning is way worse than on campus classes". As for now, online learning has become an efficient learning style and it's considered as a good way to deliver course materials to students. However, below are some of the known challenges students still face when it comes to online learning.

#### *4.1.1. Staying Motivated, As well as Distractions*

Having the motivation to be attentive or do coursework has been a hassle to students, since their homes can't be somewhere to attend classes in. It is a good thing for students to just remain on their usual setting at home instead of getting ready to drive all the way to their campus, but it's also encouraging not paying attention to class because it's a struggle to keep in mind that students should start inducing their college lifestyle at home now, "students try to "put on a brave image" in class, then leave, feeling frustrated and confused, learned nothing from their course." (Meratas. A, 2020) This causes students to be left behind with their courses and start studying everything the

last minute. Moreover, distractions might occur at home which will drain the student from not doing anything related to their coursework, such as social media or online shopping. Social media can be such an easy distraction since the professor isn't visible in the student's setting and they're just talking on screen, right? Which makes it easier for students to surf through different websites and not paying a tad bit of attention to the ongoing course at all. Another distraction could be family members, family members could cause background noises that would interrupt a student, or they would rely a lot on them for minimal help. Distractions like these cause burn outs for students and give them the intent to not do anything productive anymore, and barely pay attention.

#### *4.1.2. Technical Issues*

Making use of modern technology might be both good and a bad idea, it's a good idea because everyone whether student or professor could get used to computers and other electronic devices, as well as learning different techniques on them. Although, the disadvantage here could be technical issues. Technical issues could be a core challenge for online learning since online learning consumes too much internet. Internet data load could cause lags which will make it hard for students to speak if they're trying to participate, or their screens would lag if a professor were explaining, and when exams occur. During exam times, all students are paranoid about sudden internet connection troubleshooting while taking the test, it gives a student immense stress and "what if" thoughts mid exam. Seeking consistent internet speed is a problem.

#### *4.1.3. Time Management and Screen Time*

Online learning sure lets students attend anywhere they can, and classes are recorded for students to watch them again if they need it. Students can plan their day if recordings exist and they're able to study at the time they want. But what if that takes a turn? The issue here is the amount of time a student spends on their screen, too much screen time could be hazardous for someone's vision. Also, "students develop physical problems such as bad posture or low stamina for staying on the screen for too long" which cause limited body energy. When students have workload, they'd be obliged to stay in screen to type reports and design presentations, it would give them a tough time on managing their priorities and physical issues.

#### *4.1.4. Recommendations for the Educational Institutions*

We have to agree that distractions are often accompanied by online learning. For instance, when you go online to get an information, your attention will be taken by an advert which will be

consuming a lot of time and end up not finding the information you went for. This is a problem to online classes. We are sure that online classes can be important to most students who cannot access the physical schools and using the available resources for online learning does have adds. Maybe if the educational facilities focused in funding a source online that is private to the school can help minimize the rate at which pop-up adds distract students. Also, the teachers should take note that students will always find a way to stay distracted in the class and calling names randomly to answer a specific task can help trigger their attention and help them concentrate in the lesson. The students will have to listen to what is being said to avoid being or feeling lost when asked a question.

The teachers should also be given prior training to such online classes. Unlike physical classes, most teachers find it hard to keep the students engaged. In addition, some teachers often mute their mics during lessons unknowingly and end up talking to themselves for sometimes unless told by the students which can be rare if the lesson is boring to most students. The facility should answer work on a way of providing students with tablets that can help those that cannot afford and have them return them when they are done with their studies. Previously, the institutions assumed that their students owned at least a smartphone and was in an area with internet network coverage. This assumption meant that some students had to miss the online classes and only take notes from other students who were able to attend such classes. This was devastating to those students that were not in possession of a smartphone or tablets which meant that disfavored.

## **5. CONCLUSION AND RECOMMENDATIONS**

The on-sight of Covid-19 saw many businesses and educational facilities struggling with the change. Schools are used to having students attend physical classes and the idea of engaging in online classes has been a new thing even for many schools and facilities excluding those that had embraced the importance of technology in their educational systems. Since the E-learning was already existed, ministries of education have decided to not stop the schools and universities and start to use distance learning. At first, it was challenging for the teachers and students to be familiar with the new technology and how we should use it in term of entering online lectures and how to interact virtually as well as doing online exams which was a bit shocking for us as a students and teachers/professors.

There is no doubt that Covid-19 had a significant impact on students' lives. There are various ways that could be implemented by the government and our institution to ensure a smoot transition. Like any other change, transitioning from online classes to virtual classes was hard for most students.

With the syllabus coverage rush and the government turning a blind eye to the importance of our education our online classes proved to be more challenging than enjoyable. The government and the institutions should have come up with a way to ensure that the change from physical classes to virtual classes was well handle and had the least adverse effects on the students.

Though online classes do prove important to solving issues brought by various crisis such as Covid-19, there are some classes that require physical attendance especially those that involve practical. Furthermore, there are some requirements of a class that might not be available to all the students at home and together with the inability to access the online classes it does prove challenging The schools should always ensure that every school is able to access the online classes and is engage in the lesson for their own benefits.

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## **THE IMPACT OF SERVICE QUALITY ON SUPPLY CHAIN EFFICIENCY AT TRANSPORTATION INDUSTRY**

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### **ABSTRACT**

A nation's economy often reposes on the expansion of its manufacturing, agricultural, and service industries. Quality of service is crucial to maintaining a country's economic prosperity because the service industry is growing rapidly. The loss resulting from low sales is extremely simple to compute, but the loss resulting from poor service quality is very challenging. Good customer service always increased the client's faith in the business. Therefore, the current research is based on a theoretical framework combining service quality, and supply chain efficiency in transportation industry to theoretically examine the influence of service quality on supply chain efficiency. The findings revealed supply chain efficiency can be improved if quality of service meet the requirements of customer.

**Keywords:** *Service Quality, Supply Chain Efficiency, Transportation Industry UAE.*

### **1. INTRODUCTION**

To promote sustainable economic development and competitiveness in emerging countries, it is increasingly acknowledged that efficient and effective transportation and storage of commodities,

information, and services are essential [1], [2]. Since sustainability is seen as a major future concern for many companies, it has been extensively studied in current research [3]–[5]. Consequently, businesses are beginning to implement sustainability policies when working with logistics service providers (LSPs), as effective logistics services are viewed as a competitive advantage due to their ability to lower overall costs and emissions while also improving the service quality of the buying company [6]–[9]. As a result, logistic service providers are under increasing pressure to integrate sustainable practices into their daily operations in order to deliver high-quality services [10], [11], make financial savings, and satisfy customers in transportation sector [12], [13]. It is crucial for transportation industry to improve service quality that in results with efficient supply chain and enhanced communication and business networking with the customer [14], [15]. Therefore, this research is focused to explore the service quality in transportation industry and its impact on supply chain efficiency.

## **2. THEORETICAL FRAMEWORK**

### *2.1. Service Quality*

The global business foundations are currently managing the highest standard of service quality in business especially when they are giving services and provider of the products in good manners [16]–[19]. The services quality meets the customer's expectation in industry where manufacturing of the quality goods and services highly keen to create the best competitiveness of the business organization in market [20]–[22]. The service quality goal would be achieved when business providing the quality of goods and items according to market needs and customer demands [23], [24].

The customer appreciation can be judge when product assume business beyond expectations [25], [26]. The service quality can be maintaining in transportation industry through quality service management transportation that is create the effective supply chain at every corner and destination [27]–[29]. Service quality of the supply chain industry thoroughly depending on the transportation mode of the organizations that they usually admired and used for their supply chain services at the time of delivery the objects [17], [30], [31]. The successful business orientation goals would be achieved when organizations have sufficient mode of transportation for their distribution and supply chain services for quality of the businesses [32]–[34].



## *2.2. Supply Chain Efficiency*

Supply chain is a network of the businesses in which the contract between business organizations and suppliers are held for better business progression [35], [36]. The supply chain is a systematic procedure of running the business at various corners in market [37], [38]. Without supply chain efficiency, the customers cannot get their required product from the shelves of the retail markets [39], [40]. The supply chain helps to businesses to improve their quality from raw material to effective product visibility and it's on time delivery towards the distributors who are waiting for availability of the product for market distribution [41]–[43].

The supply chain cannot be possible without transportation mode [44]–[46]. There are number of various transportation heads that are helping to businesses to decide the transportation for supply chain according to their product size and volume for its industrial safety and precautions [47]. Supply chain is a mode of communication and transportation is a tool of the communication among the businesses [48]–[50]. The transportation helps to supply chain to achieve its targets in effective ways [51], [52]. It is also helping to business organizations and their management to set their procurement and inventories management goals for further product design and development according to desires [53]–[55].

## *2.3. Transportation Industry*

The transportation industry is one of the goals of the businesses of global market that is continues placed its position in all kind of business sectors. Without transportation, there is no business activity would be happening even it is a mode of communication in business terms. The transportation creates the effective supply chain through manufacturing to distribution of the goods or items and create the future need of the products from suppliers. The suppliers have only transportation modes that helps them to achieve their target for business revenues through on- time delivery of the objects through various transportation modes. The transportation reserves in which roads, railway trains, maritime and air shipment is included. All kind of transportation create the effective supply chain management for businesses and the suppliers in very effective manners.

## **3. LITERATURE REVIEW**

### *3.1. Impact of Service Quality on Supply Chain Efficiency*

The service quality is a management tool that helps to business organizations to achieve their targets through quality of the products and services [56]–[58]. The service industry trying to create the production efficiency in sufficient manners that fulfill the required desire of the retail market for consumer goods [59]–[61]. The service industry creates the management of the business administration in which management trying to build strong business organizational targets to meet the need of the service industry and fulfill the possible service quality goals [62]–[64]. The service quality in businesses is a target that have to be achieved all business organizations and firms through managing their quality control management system and on- time product delivery according to its market needs [65]–[68]. The services quality is associated with business supply chain management who understand the need of the efficient supply of the goods and items through its distributors [69], [70].

The suppliers are the major part of the distribution industry who act as a middle part between the retailers and manufacturers [71]–[73]. The suppliers also helping to get the benefits of the supply chain efficiency through effective resources. The good service quality is based on effective supply chain methods and its effective ways [74]–[76]. The services that are build with the quality and fine manufacturing process required efficient supply chain [77], [78][79]. The supply chain playing an active role to provide the visibility of the product in market through their on- time delivery [80], [81]. It is also helping to manufacturers to sustain their managing inventories and build other production according to orders and demand [82]–[84].

The service quality helps to businesses to get best profitable margin through production of good quality products and items and their sufficient supply chain management in market and around the world [85]–[87]. The effective supply chain management also helps to businesses to expand their business provision through introducing their quality product towards various destinations and meet the target of the business through effective supply chain [88]–[90]. On fact, the entire business provision is depending on the supply chain goals and its effective distribution through various mode of transportations in industry that create the best and forceful part for businesses for their goods and items delivery to cater the customers of retail market [91], [92].

### *3.2. Impact of Service Quality on Transportation Industry*

The transportation sector is one of the biggest sources of economic circle of the industries where there is no any business operation can be held without transportation channels [93], [94]. The transportation industry creates the movement of the people and goods for industrial purposes [95]–[97]. The highly effective supply chain and distribution of the goods would be possible only through the transport and communication modes [98], [99]. The global business hub and production channels are managing huge cost on their transportation for effective supply chain management for aiming to achieve their service quality goals [100]–[102].

The service quality is a major task of the business organizations in which management of the businesses making all that efficient polices and strategic implementations that helps to generate the business revenues through the quality product and services that is only possible when manufacturing [103], production, distribution and retail market visibility can be achieved [104]–[107]. The transportation industry has a major impact on business management at global level [108]. Without movement of the people and goods, there is no business activity could be happening [109]. The movement in effective manners rather it would be for people or products, the movement helps to achieve the business targets [110], [111]. The business production would be meet its standards when efficient supply chain is managed through transportation modes [112]. The biggest transportation industry associated with oil and petroleum sector and this is the only sector that can affect the transportation industry [113], [114].

The industry develops all that resources for distribution of the product through rail road, air transportation, by roads, shipment through maritime industry and many other resources [115], [116]. the entire business success would be depending on the service quality of the business that is only requirement of the transportation industrial infrastructure [117]–[119]. The transport industry creates the strong impact on business success and its possible delivery of the product in market through its quick and excess able transportation modes [120], [121]. The service quality can be achieved, when business organization understand the need of transportation requirement for their business provision [122]–[124]. The current business organizations are understanding the need of business organizational requirements and its own transportation modes for moving the production objectives and create the efficient infrastructure of supply chain for good quality services in market [125], [126]. In fact, the entire business industrial collaboration is depending

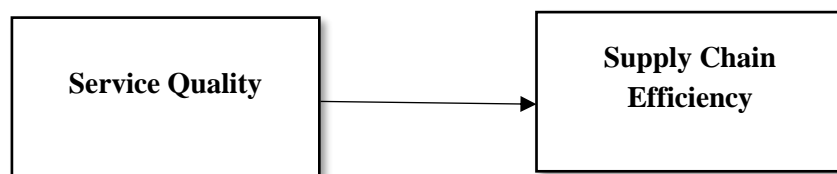
only on transportation tools that create the strong and effective collaboration between the organizations, suppliers and stakeholders [127].

### *3.3. Impact of Service Quality on Supply Chain Efficiency at Transportation Industry*

The service quality would be achieved through business management strategic planning and decision towards all that measures that are helping tools for business organizations [128]–[130]. The supply chain is one of the tools of managing the business revenues and profitability in market with excess of market shares [131]. the business successful measures depending on the effective and efficient supply chain management decisions that are managing strongly and implementing policies for possible distribution at all places [132], [133]. The product visibility is only depending on the supply chain activities that is only possible through transportation modes [134].

The transportations are playing active role to build supply chain effective utility for business products distribution at every distribution channels [135]–[137]. The product market visibility is depending on supply chain tasks that is holding through the transportation modes. The effective transportation creates the product visibility at every shelves of the retail market [138]. The different channels of transport help to businesses to distribute their products at every corner of the globe [139]. It is also increasing the service quality through supply chain efficiency and build strong impact on business collaborations in global business market. The transportation modes also create the business relationships with stakeholders and achieving the product marketing goals.

### *3.1. General Research Model*



*Figure 1: Conceptual Research Model*

#### **4. DISCUSSION**

The management of the business administration is created by the service sector, and management works to develop strong organizational targets to meet sector needs and achieve any service quality objectives. The goal of all business organizations and corporations is to improve the quality of their services by controlling their quality control systems and delivering products on schedule in accordance with consumer demands. Business supply chain management, which recognizes the requirement for the effective supply of goods and items through its distributors, is linked to service quality. The suppliers make up the majority of the distribution sector and serve as a bridge between manufacturers and retailers.

#### **5. CONCLUSION**

The management of the businesses must put in place all the effective policies and tactical implementations that contribute to the production of quality products and services that generate business revenues. This can only be done when manufacturing, production, distribution, and retail market visibility are attained. The administration of businesses on a worldwide scale is significantly influenced by the transportation sector. There can be no business activity if people and products are not moving around. Moving in an efficient manner, whether it be for people or items, aids in achieving company objectives.

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## **THE IMPACT OF LEADERSHIP STYLES ON WORK FROM HOME (WFH) DURING THE COVID-19 SITUATION**

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### **ABSTRACT**

It's been nearly twenty months since the covid-19 pandemic hit the world. More the half the world population have lived through lockdowns. Many shifted to working at home and millions have lost their jobs. While most societies have returned to normal, but we still don't know the type of effects it has left in our lives be it personal or business. The pandemic caused a massive shift to full-time remote work for much info. workers while it was viewed as a natural experiment as some jobs were beginning to shift to remote/distance work and we will try to discuss its effects, positives, and negatives in the rest of the paper.

***Keywords:*** *Leadership Styles, Work from Home, COVID-19.*

### **1. INTRODUCTION**

The epidemic new coronavirus COVID19 challenges society in ways no way imagined ahead, forcing people to reevaluate their practices, from work to rest, simple trip and everyday chores [1], [2]. Not only did this have a particular impact, but it also had a profitable impact on the country as a whole, shutting down numerous profitable sectors altogether [3], [4]. Despite numerous prospects and in-numerous warnings, especially from the public health sector, the challenge remained a substantial change that needed planning, training, and support [5]–[7]. Society has been mentally set, but its compass and results remain

unbelievable and continue to be a major challenge [8]. COVID19 is a new complaint that has been current in the population since December 2019 [9]–[11]. It's part of the coronavirus family and is the same group of contagions that caused the outbreak of severe acute respiratory pattern in Southeast Asia in 2002 and the outbreak of Middle East respiratory pattern in 2012 [12]. Presently, the main known transmission route is by driblets from the respiratory tract [13], [14]. Thus, it's believed to spread through close contact with other people. Presently, the only means of combating the spread of the contagion are the correct use of masks, the preface of social distance measures, and the practice of hand hygiene [15]–[17]. The World Health Organization (WHO) declared the outbreak of COVID 19 as a global health exigency on January 31, 2020. Since also, the contagion has spread fleetly [18].

## **2. THEORETICAL FRAMEWORK**

WFH (Work from Home) is currently known as a choice to limit the danger of COVID 19 disease. In any case, WFH isn't new and has been the focal point of a few schools for a long time [19]. The idea of WFH was first referenced by [20], and WFH was characterized distinctively during the 40 years [21], [22]. At the end of the day, telecommuting, adaptable work, telecommuting, telecommuting, e-work [23]–[25]. These terms are the capacity of representatives to work in adaptable work areas, particularly at home, use innovation to perform some portion of their plan for getting work done, and utilize electronic media to speak with others inside and outside the association [26], [27]. Focuses to. Specifically, they said that "different spots" allude to "home." (1525). As per a new report by [28], [29], 37% of work in finance, corporate administration, proficient and logical administrations should be possible at home during the COVID 19 pandemic in the United States [30]. A few positions, particularly medical services, farming and cordiality, is impossible at home [22], [31], [32]. WFH acknowledgment is expanding all throughout the planet, however researchers are examining its qualities and shortcomings [33], [34].

WFH positively affects the two managers and representatives [35]–[37]. Benefits incorporate more limited drive times, evasion of inside governmental issues, diminished office space utilization, expanded inspiration, further developed sexual orientation variety (like ladies and vocations) [38], a sound labor force with less non-appearance and inconstancy, there are enhancements in the standard for dependability of HR, work fulfillment, and efficiency [39]–[41]. Studies have shown proof of these advantages [42], [43]. For instance, a Colefield review in the Greater Dublin region observed that representatives can save money on movement time and the worth of movement time [44], [45]. A few examinations propose that telecommuting can lessen turnover and further develop representative efficiency, commitment, and execution [46]–[48]. Likewise, e-working can further develop usefulness, adaptability, work fulfillment, and WLB [49]. This incorporates work-life clashes and diminished driving [50], [51]. Furthermore, As far



as adaptable time, WFH contended that it could assist laborers with taking care of business and save money on the expense of driving.

### **3. LITERATURE REVIEW**

#### *3.1. Covid-19 effects on working from home*

Before the covid-19 pandemic working from home was not a common thing between people [52], [53]. Only certain people were doing it most of them are people who work for themselves like stock and crypto traders also people who do e-commerce and run online stores [54]–[56]. But during the pandemic a lot of private companies and government agencies let their employees work from home [57]–[59], so most employees worked from home for about a year and that change had a lot of positive and negative impacts on employees and companies [60], [61]. One of the most important positive affects is that employees had more time with their families and that means more communicating time with the family so a stronger relationship between family members [62]–[64]. Also when working from home you can choose your working hours, so you will choose the best time for you which mean you will be more productive [65]–[68], to some people working from home is more relaxing which will result in a better working experience because in home you're working alone without coworkers so you will choose the best climate to work on [69]–[71], you got to adjust the temperature, lightning and noise as you like so you make your own working environment [72], [73].

Working from home also has a variety of positive impacts on companies [74]–[76], if they could sustain the same level of productivity [77]–[79]. because its way cheaper for companies if workers worked from home, electricity and water bills will be way cheaper [80], number of employees will be reduced as they will not need that many employees, number of first line managers will be less as if they will not need that much supervision on workers from home [81]–[83]. A lot of companies choose to be online companies during the pandemic so that means they reduced property renting which saved them money as well [84], [85]. Another important benefit is that you can have better communication with clients [86], [87], if it is too much easier for clients to contact employees [88]–[90]. Another benefit is that you can have more control on your working hours because you will choose the best time for you so your productivity will be higher [91]–[93]. A negative impact of being an employee working from home many people don't want to commute with public transportation so they decided to work from home mostly because their house didn't have power so most people couldn't go to work [94]–[96]. But with the covid-19 pandemic they are starting to commute, but some people are still choosing not to commute with public transportation because of the fear that they will die on their way to work [97], [98].

In the opinion of [99], [100] working from home has a lot of positive affects but that doesn't mean it has no negative impacts [101], [102]. First of all, employees don't have the skills for it because they didn't get

the proper training and preparation for it [103], [104], also some old generation employees who are used of doing their work manually don't know how to use electronic devices which is needed for home working [105]–[107]. Employees from home can't socialize with coworkers [108]–[110], this will affect teamwork and skills development, working from home can be bad for your health because that will mean less walking and more screen time [111], [112]. Majority of companies and businesses got affected by the pandemic, most of them are small businesses because they didn't know how keep up with the new of working [113], so they had to cut losses and one way of doing it is by firing employees because they don't need that many employees with home working, and to cut costs they had to do it [114]–[116]. A lot of companies couldn't track or monitor their employees when they are working from home so that means productivity [117], [118]. With the pandemic, many companies saw their productivity decreased, because they didn't know what to do with their employees, so they had cut them or fired them [119]–[121]. A lot of information about how to keep up with the time of working has spread across the world, some are useful while some are not [88], [122], [123].

Many people are being isolated from outside contacts that can affect their productivity level [124]–[126]. Many people attempt to work through corporate networks which is very problematic because most corporate networks are always on, and you have no idea if your company is working or not [127], [128]. When it comes to working from home, many companies see this as a great opportunity for saving money so many corporations try to implement this policy without even testing it first [129], [130]. Many companies fail to connect with their home workers because they don't have a relationship with them [131]. When it comes to work, the workplace is very serious, and many people see this as a workplace and not a fun place [114], [132]–[134]. In order to boost employees' productivity, employers should adapt the working policies according to the local culture, climate, and national holidays [135]–[137]. In this way employees can take more vacations during winter months or summer months if they want [138], [139], but the problem is many corporations don't want to adapt their working policy according to employees' needs because they think that this is bad for business.

### *3.1. General Research Model*



*Figure 1: Conceptual Research Model*

## **4. DISCUSSION**

### *4.1. The future of Working from home*

The impact of Covid-19 on organizations. The viral epidemic that broke out in 2019 has had a drastic change on the way we go to work. It changed the way we practice our work, behaviors, and habits. The impact is so strong that it may be one of the reasons why organizational culture has been rapidly changing over time, for better or worse. Covid-19 has shaped our future—our workplaces—in ways unimaginable before it occurred—meaning there are positive and negative effects of the pandemic which will affect organizations for years to come. Let's take a closer look at some of these impacts now:

### *4.2. Changes in the way we do work*

One of the most significant impacts of Covid-19 has been that it's made us more conscious about how we do our work, and what our work entails. The reason for this is simple: due to the helplessness of medical professionals in fighting the virus, employees took an active role in fighting it. And when our time is spent studying up on how to survive rather than focusing on our regular jobs, it's inevitable for this focus to trickle down into other aspects of our workplace as well. We're far more aware of what we do and how we do it, and we feel that our focus is on performing better and better rather than merely getting things done.

This change in the nature of work has had a significant impact on how we perceive our jobs, with positive results for some professions. A survey conducted by the Society of Human Resource Management (SHRM) in 2011 showed that workers were happier with their jobs, with 45% reporting an increase in job satisfaction. Another study conducted by SHRM found that these employees were more likely to stay with their companies after Covid-19.

Not all occupations have been positively impacted by changes in the way they work, though. Jobs with a high degree of complexity have been shown to suffer a negative impact due to the changes in the way we conduct our work. Since time is now a precious resource, jobs that require a lot of time and effort have been affected. A study by the University of California suggests that this may be part of a natural process, as newer jobs replace older ones. The article goes on to state that "when all else is equal, the relative wage of an occupation will correctly signal its productivity." This tends to have an impact on covid-19 survivors

who are displaced from their jobs since they're likely to take up different positions within other organizations.

### *4.3. Changes in our leadership styles*

With all the changes, one thing is certain: employees are more involved in their work now than they ever have been. They are aware of how much damage is being done by Covid-19, so they are also more involved in the work of fighting it. This shift has given rise to a new type of "leader" that was never witnessed before Covid-19. The shift can be explained by the shift in perspectives among employees, with many taking on more responsibility and assuming leadership roles previously reserved for senior employees. This kind of shift has resulted in two major types of leaders: the reluctant leader and the reluctant follower.

There's a considerable difference between the leadership traits of people on the move and those who've been on the move for a while. Newly infected people are often highly motivated to protect their livelihoods and work to ensure that they have a secure future. This means being available for overtime, being more open to suggestions from others, and putting in extra effort in their regular jobs. One vital trait of these employees is that they want to achieve results fast so they can gain security quicker, and this is precisely what they achieve by shifting into a leadership role.

With the shift in leadership styles, employees are striving to fulfill their duties faster than ever before. The problem? This often leads to the neglect of other key tasks which, if left unattended, could cause irreparable damage to the organization. This rapid shift in leadership styles has also led to higher turnover rates among both managers and employees. Some of the most popular reasons cited by employees for leaving their jobs were: "I can't keep up with all the changes," "Too many demands on my time," and "I feel like I'm getting burned out". Many of these changes were attributed directly to Covid-19.

Many managers are also reluctant leaders, but for different reasons. Employees in managerial positions are typically older than their subordinates, and employers typically hire them because of the experience they provide. Think about it: if you're older than most of your employees, it means you've lived through more changes in the workforce than they have. And with Covid-19 decimating populations worldwide, changes are far more frequent now than ever before. In addition, this has given rise to an unusual occurrence: that of the reluctant leader who doesn't like to be in charge anymore.

## **5. CONCLUSION**

So to conclude, when working from home you can choose your working hours, so you will choose the best time for you which mean you will be more productive, to some people working from home is more relaxing which will result in a better working experience because in home you're working alone without coworkers so you will choose the best climate to work on, you got to adjust the temperature, lightning and noise as

you like so you make your own working environment. But during the pandemic a lot of private companies and government agencies let their employees work from home, so most employees worked from home for about a year and that change had a lot of positive and negative impacts on employees and companies. A negative impact of being an employee working from home many people don't want to commute with public transportation so they decided to work from home mostly because their house didn't have power so most people couldn't go to work.

Majority of companies and businesses got affected by the pandemic, most of them are small businesses because they didn't know how keep up with the new of working, so they had to cut losses and one way of doing it is by firing employees because they don't need that many employees with home working, and to cut costs they had to do it. because its way cheaper for companies if workers worked from home, electricity and water bills will be way cheaper, number of employees will be reduced as they will not need that many employees, number of first line managers will be less as if they will not need that much supervision on workers from home. First of all, employees don't have the skills for it because they didn't get the proper training and preparation for it, also some old generation employees who are used of doing their work manually don't know how to use electronic devices which is needed for home working. These terms are the capacity of representatives to work in adaptable work areas, particularly at home, use innovation to perform some portion of their plan for getting work done, and utilize electronic media to speak with others inside and outside the association. Employees from home can't socialize with coworkers, this will affect teamwork and skills development, working from home can be bad for your health because that will mean less walking and more screen time. Changes in the way we do work One of the most significant impacts of Covid-19 has been that it's made us more conscious about how we do our work, and what our work entails. A lot of companies couldn't track or monitor their employees when they are working from home so that means productivity levels decreased.

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## **IMPACT OF SERVICE COMPETENCE ON SUPPLY CHAIN EFFICIENCY AT UAE MARITIME INDUSTRY**

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### **ABSTRACT**

The implementations of service quality and competency have been seen by many as significant benefit and success enhancers, supply chain efficiency and service competency have also been receiving increasing attention. Any business is a component of a sizable supply chain and network. Due to the fact that competence services can increase organizational adaptability and enable the transfer of operational risks to another entity. This research is aimed to theoretically investigate the model that identifies the impact of service competence on supply chain efficiency in the maritime industry UAE. Further, findings showed the positive impact of service competence on supply chain efficiency.

***Keywords:*** *Service Competence, Supply Chain Efficiency, Maritime Industry UAE.*

### **1. INTRODUCTION**

Supply chain management or service competence depends on how effectively management can deal with the ramifications of each application [1], [2]. Supply chain efficiency uses additional

capital in such a way as to give the organization direct participation at each point of each phase and procedure [3], allowing for a better vision and direct oversight of the improvements [4], [5]. Competence services can influence the organizational adaptability and allow for the transfer of operational risks to another entity [6]–[8]. Due to factors and impacts like globalization and entry into new markets, mass customization in response to product and consumer segmentation [9], lean manufacturing techniques, and associated cost changes, service competency is changing at an increasing rate [10], [11].

Service competency is moving toward more adaptability, effectiveness, and precision as an essential component of each transaction [12], [13]. Lacking the necessary skills, employees may not be able to meet consumers' expectations or deliver appropriate service quality [14], [15]. The company's personnel can provide a good picture of the actions to be demonstrated and the standard of success to be required in order to create operational results thanks to their competencies [16]–[18]. They give the client an illustration of the behaviors that should be respected, acknowledged, and compensated [19]. A corporation can increase its performance by using a competency system to properly match the knowledge, skills, and experience of its people with corporate objectives.

## **2. THEORETICAL FRAMEWORK**

### *2.1. Service Competence*

Service Competence implies the determination by different methods that 2 individuals conducting the same or similar procedures shall achieve the same or equivalent performance [20]–[23]. Competence is commonly described as a combination of abilities, expertise, qualities and behaviors that enables a person to conduct a role or operation effectively within a given work [24]–[27]. Competencies are measurable behaviors that can be assessed and tested and are thus important for the specification of work qualifications and the recruitment, retention and advancement of workers [28], [29].

Competencies allow the employees of the company to provide a good view of the activities to be demonstrated and the quality of success to be required in order to produce operational results [30], [31]. They provide the client with an example of the habits and acts to be respected, recognized and compensated [32]–[34]. The use of a competency system allows a company to successfully

match its staff's expertise, strengths and experience with corporate goals, resulting in business improvement and performance [35], [36].

For a service dominated environment, quality service is one of Hong Kong's most successful strengths [37], [38]. Trying to promote leadership that emphasizes the importance of a server rather than a leader is therefore especially necessary for Hong Kong to retain its leading position as a leading service-oriented economy [39], [40]. In response to this call, the Hong Kong Institute has established a program structure to facilitate the knowledge and development of service, and service leadership in Hong Kong's college, sector and individual institutions [41]–[43]. In this system, an ideal service leader can exhibit not only a situational specific leadership competence, but also a good nature and a compassionate temperament [44]–[46].

## *2.2. Supply Chain Efficiency*

Effective control of the supply chain has gradually been recognized as a critical element in the separation of product and service offerings and the comparative advantage of companies [47], [48]. Efficiency is described as an internal output norm [28], [49]. Supply Chain Productivity is a reflection of how the organization processes its resources in the best possible manner [50], [51], whether or not certain resources are economical, human, technical or physical [52], [53].

Here, this concept of quality is silent regarding improving the performance of the operation [54], [55]. An organization can have a very effective supply chain that minimizes material and packaging costs but leaves consumers highly dissatisfied because the commodity they purchase is not up to their standards [56]–[59]. It requires for the stabilize of internal processes inside a firm and productive connection with external functions [60]–[62]. Operations of the channel participants of the chain. It is also important that supply chains do so Not stay stagnant, but rather change constantly on the basis of changing business and consumer demands [55], [63], [64].

The efficiency of the whole supply chain is a crucial element in the achievement of an effective supply chain [29], [65], [66]. It is also necessary to use the collective capabilities of the participants of the supply chain as effectively as possible to produce sustainable and cost-effective goods and services [67]–[69]. The overall efficiency of the supply chain is characterized as quality, taking into account the various performance metrics related to the members of the supply chain, as well as the integration and management of the output of those members [70]–[72].

The productivity of the supply chain has contributed to the creation of models and techniques for calculating the efficiency of the supply chain [73]–[75]. These models may be used to determine efficiency standards along supply chains and help management find vulnerabilities in order to increase the overall operation of the chains [76], [77].

### *2.3. UAE Maritime industry*

The UAE maritime industry is now the pioneering maritime industry in the Middle East, and attempts are ongoing to strengthen it. The near future of the shipping industry in the UAE is also positive. Recently, Dubai declared the establishment of the first maritime arbitration center in the country, which it is hoped would take place among the other globally recognized arbitration center. The UAE is also scheduled to quickly adopt a new maritime code that will modernize the control of several maritime issues in the UAE and act as a blueprint for other countries to pursue. The shipping sector has been hard hit by the coronavirus epidemic [78]. The decline in exchange and production, the change in freight prices due to the shock in demand for containerized products, and the limitations levied by policymakers across the world on repatriation and adjustments in crews are just some of the forms in which the pandemic is placing yet more strain on the industry that has already been threatened by widespread geopolitical uncertainties, environmental issues and trade restrictions.

## **3. LITERATURE REVIEW**

### *3.1. Impact of Service Competence on Supply Chain Efficiency*

There are a number of metrics that may be used to assess the performance of the supply chain [79], the criteria used by this analysis are speed, durability, expense and consumer loyalty [80]–[82]. While speed, durability, cost and consumer satisfaction are, on their own, just indicators of efficacy, when viewed in terms of their effects on resource use in the supply chain [83], [84], they may be used to quantify performance [85], [86]. For example, if the facilities, efficiency and other characteristics of a supply chain network meet the requirements of its customers at the least economic expense, i.e. the minimal use of resources, capital or infrastructure and machinery [87], [88], labor, materials and electricity, that connection or node may be deemed to be effective [89]–[91].



A literature review synthesis suggested that the weakness of previous SCM research relates to their emphasis on the general forms of SCM that are applicable across various categories of organizations [92]–[94]. In order to overcome this restriction, the basic obligation of service organizations urges potential researchers to concentrate on the specific type of SCM which is the SCM practice service [95], [96]. This justifies more study into the SCM activities of the service sector by concentrating on public health in Malaysia [97]–[99]. In this respect, this report concludes SCM activities that are relevant for public health, including technology and information managing, relevant regulatory, client experience management [100]–[102], provider client relations, resources management and resource management to be used in the research context [103], [104].

### *3.2. Relationship between Service Competence on Supply Chain Efficiency*

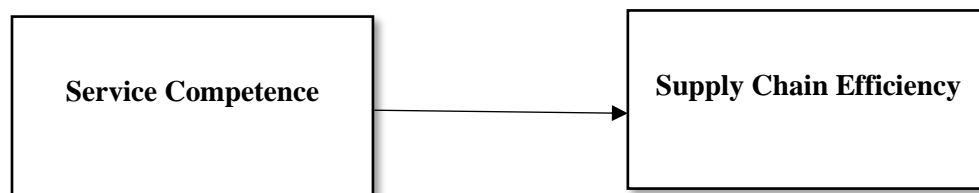
Supply Chain Efficiency and Service Competence have also been giving growing importance as their implementations have been regarded by many as important benefit and success enhancers [105]–[107]. Any company is part of a broad SC and supply chain network [108]–[110]. The decision to implement either Service Competence and SCM depends on the management's ability to meet the implications of each application [111], [112]. As competence services can maximize the organizational versatility and allow for the transition of operational risks to another entity [113], SCM uses further capital in such a way as to provide the organization with direct participation at each point of each phase and procedure [114], thereby allowing for a better vision and direct oversight of the improvements [115]–[117]. As a wide corporation with everything; from the procurement of capital from mother earth to the development, manufacturing, distribution and eventually delivery of the finished commodity to the final consumer [118]–[120]. It does not exist in one vast region but is distributed around it, however the asset and maintenance of these services with the competencies although trivial [121], is the duty of the organization itself and is carried out by its own employees [122]–[124].

### *3.3. Influence of Service Competence on Supply Chain Efficiency*

The influence of competence services on supply chain is very strong because if the services in the supply chain is competences so the efficiency must be increase in the supply chain management [125]–[127]. There is a great influence and role of services competence in the supply chain and it can highly affect the efficiency [128], [129]. The decision to implement either Service Competence

and SCM depends on the management's ability to meet the implications of each application in a more efficient way [15]. As competence services can influence the organizational versatility and allow for the transition of operational risks to another entity [130], [131], SCM uses further capital in such a way as to provide the organization with direct participation at each point of each phase and procedure [132], [133], thereby allowing for a better vision and direct oversight of the improvements [134]. Service competence are increasingly changing due to influences and considerations such as globalization and penetration into new markets [116], [135], [136], mass customization in reaction to product and consumer segmentation, lean manufacturing methods and related cost changes [137]–[139]. Service competence is heading towards greater versatility, efficiency and accuracy.

### *3.4. General Research Model*



*Figure 1: Conceptual Research Model*

## **4. DISCUSSION**

Based on the proposed model, theoretical finding of the research illustrate, a company has a very efficient supply chain that reduces material and packing costs, the consumers may still be extremely unsatisfied if the product they buy does not meet their expectations. It necessitates the stabilization of internal business operations and effective interaction with outside entities. Operations of the supply chain channel becomes more stable and effective. Additionally, it is crucial that supply networks comply. not remain unchanged but instead alter continuously in response to shifting commercial and consumer demands. Moreover, a key component of achieving

a successful supply chain is the chain's overall efficiency. The company's personnel can provide a good picture of the actions to be demonstrated and the standard of success to be required in order to create operational results because of competencies. They give the client an illustration of the behaviors that should be respected, acknowledged, and compensated. Using a competency system enables a company to successfully match the knowledge, skills, and experience of its employees with corporate objectives, leading to performance and business improvement.

## 5. CONCLUSION

The above research model and theoretical findings can be concluded as implementations of service competence have come to be seen by many as significant success and benefit enhancers, supply chain efficiency and service competency have also been receiving increasing attention. Additionally, any business is a part of a sizable supply chain and SC network. The ability of the management to address the ramifications of each application will determine whether Service Competence or SCM should be implemented, and the best suited criteria to followed for supply chain efficiency and business progress.

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## **IMPACT OF DISTANCE LEARNING TECHNOLOGY ON ONLINE EDUCATION PERFORMANCE**

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### **ABSTRACT**

Distance learning technologies have become mainstream due to the emergence of coronavirus (COVID-19) and its variants over the last few months. Both companies and institutions are now resorting to using technology for their operations, whether to train their workforce or educate their students. This research has devised full stack distance learning technology platform to enable a factious educational institutions or corporation to enable its usage and effectively demonstrate how technology could be utilized to fully transform learning online. As a result, the functioning of how a university or learning institution could take their learning online away from their physical medium, thereby insulting themselves from the risk of suffering contagion due to the coronavirus while continuing their operations and business as usual.

**Keywords:** *Distance Learning Technology, Online Education Performance.*

## 1. INTRODUCTION

Throughout the years, businesses and commerce have adapted and adjusted to the changing circumstances [1], [2]. In 2020, when the coronavirus pandemic affected the world, the concept of ‘social distancing’ became mainstream [3]–[5]. Reasonably, activities that involved human interaction were now restricted, and as a result, many companies suffered significantly [6]. Many small and medium-sized businesses (SMBs) suffered failures and had to shut down operations and exit the market due to their inability to operate via social-distancing friendly models [7], [8].

Restaurants and hotels too were affected, as were schools and colleges that did not have the infrastructure to continue their operations via online or digital modes [9], [10]. The advent of the pandemic signalled the lack of preparedness among businesses and commercial entities, many of which were not prepared to face a pandemic or situational disaster such as COVID-19 [11]–[13]. As a result, it was that their owners suffered losses since their fixed costs continued while their sales dropped almost fully due to the lack of customers in their premises [14]. Schools and offices were forced to let their students and employees stay in at their residences, which disrupted the former’s learning and the latter’s livelihoods [15]–[17].

As such, the ‘work-from-home’ or ‘WFH’ model became relevant and prominent in 2020 as many businesses eventually found that they could continue their employees’ working through online collaboration technologies [18], [19]. Several firms worldwide invested in upgrading their infrastructure to ensure that they could continue to operate and remain in business [20]. This marks a critical step, because it wasn’t certain about how long the pandemic would last or may continue to affect the world [21].

In 2021, the situation still largely remains the same; although global institutions such as the World Health Organization (WHO) have been active in guiding nations towards getting their populations vaccinated, new variants of the virus such as the ‘Alpha’ variant, the ‘Delta’ variant, and now, the ‘Omicron’ variant continue to ravage the masses [22]–[24].

While the pandemic has caused damage worth trillions to the global economy [25], [26], it is an ongoing problem that calls for intervention at both the governmental as well as the individual levels [27], [28]. In schools and universities, distance learning technologies are becoming more relevant and necessary than ever before, as students’ future continues to be at stake due to the

virus's contagion [29]–[32]. While it is not completely possible to eliminate the impacts of coronavirus for students, distance learning technologies could reduce it and improve the manageability [33].

Therefore, this research encapsulates the strategies to be implemented by educational institutions revolving around the business management of implementing an idea that may boost the ability of the firm (whether educational institution or commercial entity) to better handle itself and its operations amidst situations produced as a result of the coronavirus (COVID-19). Hence, this research elaborates on the idea of various distance learning technologies on the basis of prior literature.

## **2. LITERATURE REVIEW**

Distance learning technologies may become well-known now due to the compulsion of various institutions and firms to rely on them, but they have been present in the global marketplace since years ago [34], [35]. Research by [36] suggests that distance learning technologies have not been utilized much for a significant part of their overall existence in the corporate and academic contexts until late 1960s; however, following then, distance learning technologies gradually began to be adopted by institutions [36], [37].

### *2.1. History of Distance Learning Technologies*

Prior to the advent of distance learning technologies, the concept of 'distance education' was relevant. As per [38]–[40] the earliest instances of distance education can be traced back to 1800 when the University of Chicago initiated their first major correspondence program in the US wherein the instructor and students were located at different locations [41], [42]. The incidence or occurrence of distance learning took place because of the efforts of various parties to make education accessible to the non-elite sections of the society [43]. Prior to 1800, education was primarily considered a privilege and was expensive and hence couldn't be afforded by the non-nobility in society [44]–[46].

Initially, correspondence courses and distance learning programs were not openly accepted because the nobility considered it an insult to them [47], [48]. Research by [49] suggests that distance learning remained without technology for a significant period and correspondence was limited to books and personal visits by students at their respective educational institutions [50]–[52].

Following the events of World War, I (1914-1918), the increase in the usage of radios enabled a relatively new mode of communication that was later picked up in correspondence study [53]–[55]. The earliest instances of usage of technology in distance learning (thereby creating the distance learning technologies that are primarily used today) could be traced back to the Open University in Britain in 1970 and the innovative applications of media by Charles WEDEMEYER in 1986 at the University of Wisconsin [56], [57]. Following those events, educational institutions gradually picked up on distancing learning technologies [58], [59].

## *2.2. Key Elements of Distance Learning*

Research by [60] explains that there are six dimensions of distance learning including:

- Distance between the instructor and student (as being separated geographically)
- Presence or influence of an educational institution (to oversee the transaction between the instructor and student)
- Application of media to connect student and teacher (this was limited in the pre-2000 era)
- Two-way transaction of communication (receiving and sending information between the individuals)
- Individually receiving education as opposed to being grouped (in the early days, distance education wasn't as developed to handle large numbers of students at once)
- Educators in industrialized capacity (rather than individuals, those educators were affiliated with some institution and hence used the resources of the latter to impart education to the students)

In the modern distance learning, many of those continue to hold true except point five [61], [62], because distance learning now enables entire courses to be delivered to students over digital means [63].

## *2.3. Modern Trends in Distance Learning Technologies*

In the current era, distance learning technologies have become the commonplace for both educational institutions as well as for-profit firms considering to upgrade their workforces' knowledge [64], [65]. The rise of coronavirus (COVID-19) and its subsequent transition into a full-scale pandemic may have accelerated the shift towards digital-based modes of learning, but it

hasn't been, by far, the only factor to have caused the same [66]–[68]. Some major factors to be considered with regards to trends in modern distance learning technologies include the following:

- Several universities and educational institutions now have distance learning programs for their students, and this enables both parties to gain. Students have a relatively low-cost way of acquiring further education that may enable them to find better jobs and/or progress in their career, while educational institutions can earn more from their workforce and operations without having to invest in capital expenditure such as renting or leasing more physical space to house a larger student body [69], [70].
- Subjects that are fundamental such as Calculus I, English for Business, etc. aren't too specific and hence can be delivered over online modes. Due to the coronavirus pandemic, those courses are being delivered online, although the universities may have collected the full payment for them [71]–[73].
- Various reasons exist for why it is advisable for students to not step out of their homes during the coronavirus pandemic era. New variants continue to afflict masses, and vaccinations taken previously may not be as effective for or against new variants [74]. Hence, health-wise, it is considerably important that students continue their lessons and/or education through distance learning technologies to avoid coming into contact with any potentially infected individuals and hence minimizing their risk of contracting the virus themselves [75], [76].

#### *2.4. Management Idea Influenced by COVID-19*

For the purpose of this research, it is assumed that the report is a reference document delivered to the shareholders of an educational institution by the management or board of directors [77]–[79]. The chosen topic that the fictitious educational institution aims to adopt is distance learning technologies [80]; therefore, it consists of about five distance learning technologies that may be adopted by the management and the firm or institution [81], [82]. Following the explanation of those five distance learning technologies, a brief discussion is provided to help the readers understand how they may aid the resilience of the firm and their operations against the onslaught of COVID-19 pandemic in 2021 [83]–[85].



**2.5. Proposed Model of Modern Learning**

As far as education and learning are concerned, the author suggests that they can be classified into two main segments or aspects, including in-class learning, and out-of-class learning [86]. It may be argued that learning itself is a continuous process, and students continue to gain knowledge within the classroom [87], [88], but also outside it through various media or channels as well as environmental stimuli. The illustration below demonstrates how the same may be structured [89].

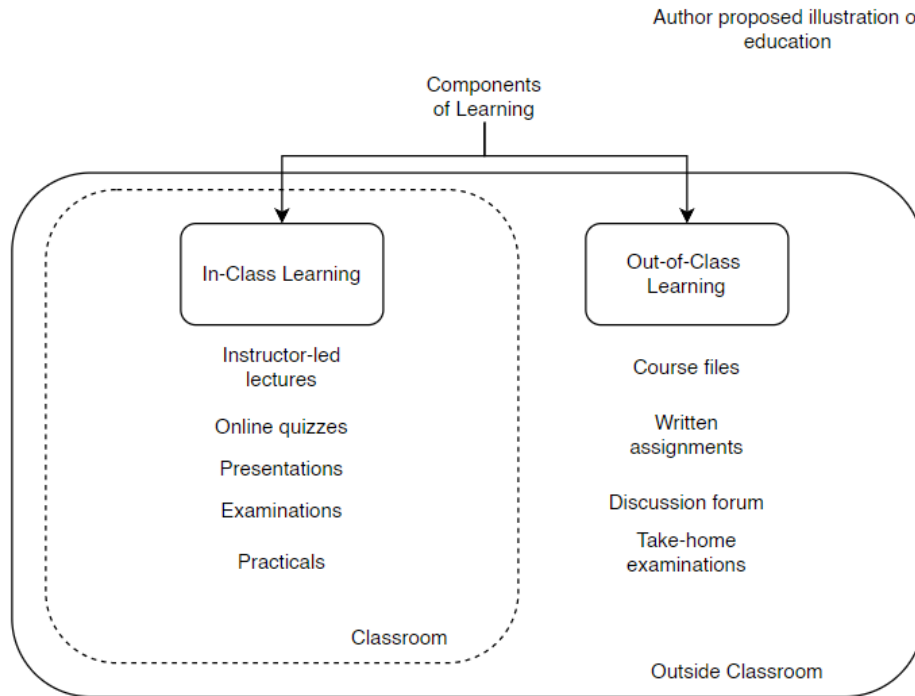


Figure 1: Modern Learning [90].

Hence, the author proposes that learning has to continue happening whether learners are in the classroom or not; with the advent of distance learning technologies, the primary objective of the institution is to ensure that they can find technological platforms responsible for ensuring that the in-class learning technologies are handled effectively [91], [92].

**2.6. Proposed Distance Learning Technologies**

In the model proposed above to illustrate the components of learning, the various parts shall be complimented by various platforms and distance learning technologies as the author suggests [93]–[95]. Hence, this subsection shall have parts that would necessarily include the potential products

that when combined together may form a distance learning stack responsible for fully digitalizing learning for the institution or firm [96].

### *2.6.1. Learning Management Systems (LMS)*

The learning management system or LMS is the foundation or bedrock of the ‘universe’ of online learning [97]. It is impossible to determine or define a distance learning technology suite. For the firm chosen in this report, the LMS shall include two components, including the in-class component as well as the out-of-class component [98], [99]. However, more so than being a dedicated tool, it shall be more of a platform which may serve as the foundation for other integrations of various tools and technologies [100].

At the basic level, LMS includes the following features that may help support online education or distance learning [101]:

1. Unified platform that is accessible by students, instructors, and other authorized parties through the means of a login ID (usually their registered e-mail ID or username) and password [102].
2. Dashboard interface that presents all the necessary information related to the course on one screen, including due dates of assignments, courses enrolled for, instructors’ names and details, grades, lecture timings, course files, etc [103].
3. Integration with third-party collaboration and productivity tools to enable students to benefit from the same without having to exit the platform.
4. Discussion forum and e-mail inbox integrated into the portal to enable students, instructors, and other authorized parties to communicate with each other seamlessly.

Two of the proposed or valid learning management systems (LMS) are Blackboard (BB) and Moodle. Either LMS may be deployed by the firm to enable distance learning technologies to be used by our students [104], [105].

### *2.6.2. Collaboration Tools*

Although the learning management system (LMS) would provide the foundation for the distance learning technology stack, the two components (in-class learning component and out-of-the-class learning component) need to be considered for replacement of their physical forms with online

replacements [106], [107]. The author suggests that collaboration tools may be used to handle the in-class learning component of the distance learning technology.

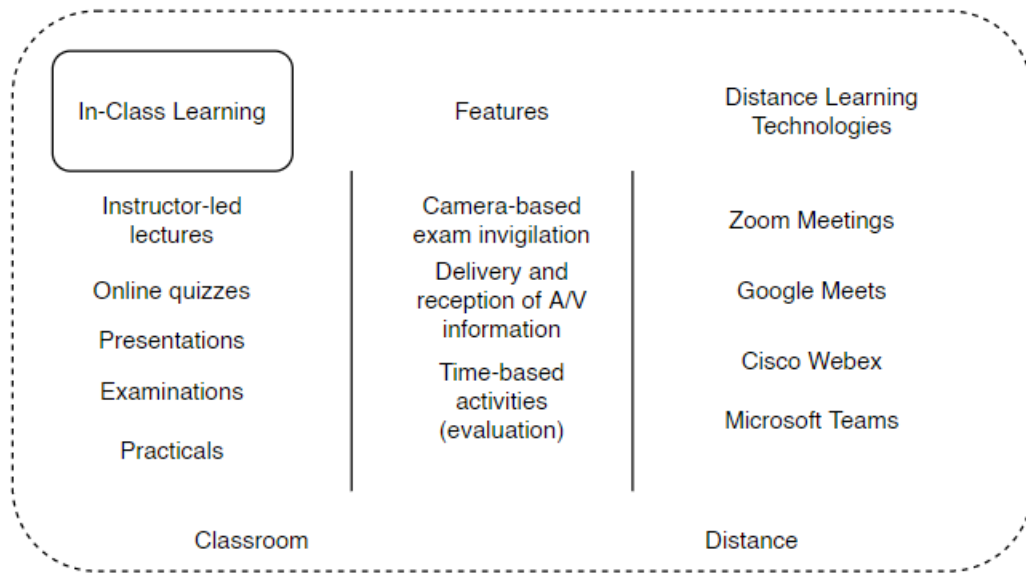


Figure 2: Collaboration tools [108].

Collaboration tools are technologies that enable students to communicate and work together in some form to achieve some meaningful benefit collectively [109]–[111]. Therefore, collaboration tools enable more than one student to work together and hence, because learning now happens to be collaborative, the usage of collaboration tools cannot be ignored or undermined [112], [113]. The features that the collaboration tools must have include the ability to invigilate students via camera (webcam), delivery and reception of audio-visual information [114], and time-based activities such as quizzes, exams, and tests that may be conducted by the instructor [115], [116]. Some of the features here are enabled through or via distance learning technologies such as Zoom Meeting, Google Meets, Cisco WEBEX, and Microsoft Teams such as the instructor-led lectures and classroom discussions [117]. However, as for the examinations, practical tests, and quizzes, they may be built into the portal (LMS) itself and hence function with the collaboration tools [118].

In short, the collaboration tools handle the in-classroom learning component. As for the out-of-class learning component, the same shall be explained and handled by the next set of tools, the productivity tools as shall be explained below [119], [120].

2.6.3. *Productivity Tools*

As for the second component of distance learning, the out-of-class learning component, the same would be taken care of by productivity tools [121]. As the name suggests, productivity tools are tools that are employed or utilized by individuals to produce results or outcomes [122]. In this context or that of distance learning technologies, productivity tools would include the likes of Google Suite, Microsoft Office 365, ZOHO Suite, etc [123].

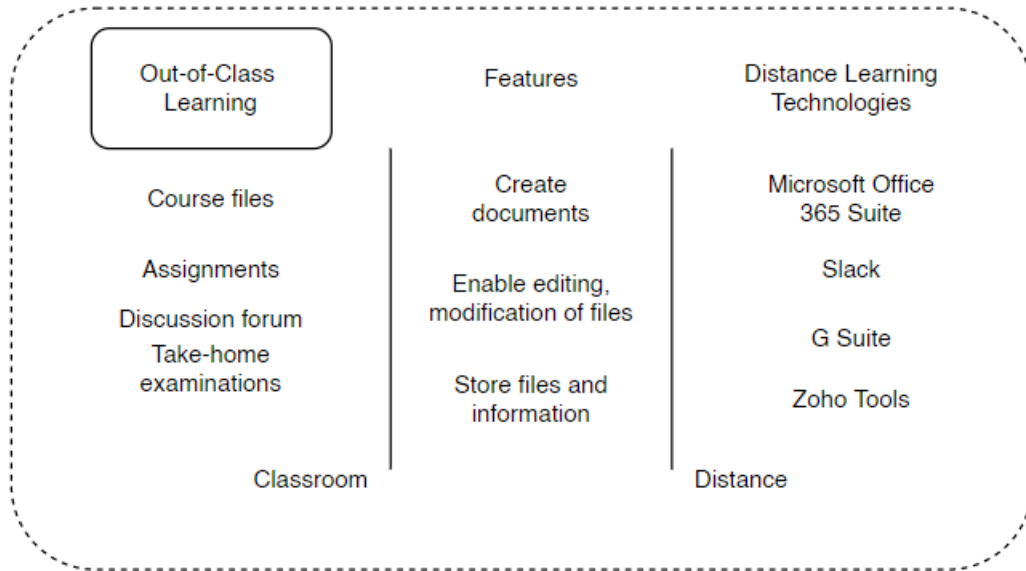


Figure 3: Productivity tools [124].

The diagram above demonstrates how the same may be incorporated into out-of-class learning endeavours [125], [126]. The main features necessary for out-of-class learning components are to create documents of various types, enable the editing and their modification by either the creator of the document or by other authorized parties, and to store information and/or files in secure space digitally [127].

As the figure 3 above illustrates, some of the distance learning technologies among productivity tools would include the likes of well-known productivity suites such as Microsoft Office 365 Suite and Google Suite [128], [129]. It must be noted that in this context, it is expected that they would have some of the abovementioned characteristics if not all [130], [131]. However, the main idea is that they should enable the gathering of knowledge even beyond the classroom, and then allow its documentation.

#### 2.6.4. *Combined Model*

The final model here is a combination of both the productivity tools and collaboration tools which are both integrated into the foundation which is the learning management system (LMS) that the firm shall use [132], [133]. In the real world, both the productivity tools and collaboration tools would be likely used simultaneously by the students and professors as part of their distance learning technologies [134], [135]. In this sense, the collaboration tools would be interconnected with the productivity tools, so students can both use their own devices as well as that of the cloud-based platforms like Microsoft Office 365 Suite, G Suite, Slack, etc. Through a combination of both aspects, the distance learning technologies model can be completed [136], [137].

The process of the combined model is as such given below (in steps, though not exactly):

- The university deploys a full stack distance learning technology platform that is replete with a foundation (LMS or learning management system) along with a productivity suite of tools that supports out-of-the-classroom learning coupled with a collaboration suite that enables in-classroom learning [138].
- Students login to the portal and use the collaboration tools to effectively communicate with each other and collaborate to achieve the learning outcomes of their courses.
- Students use the productivity tools when outside their classroom to ensure that they continue to learn and grow.
- Cloud storage would be used for the students to store and retrieve the data as per their requirements.

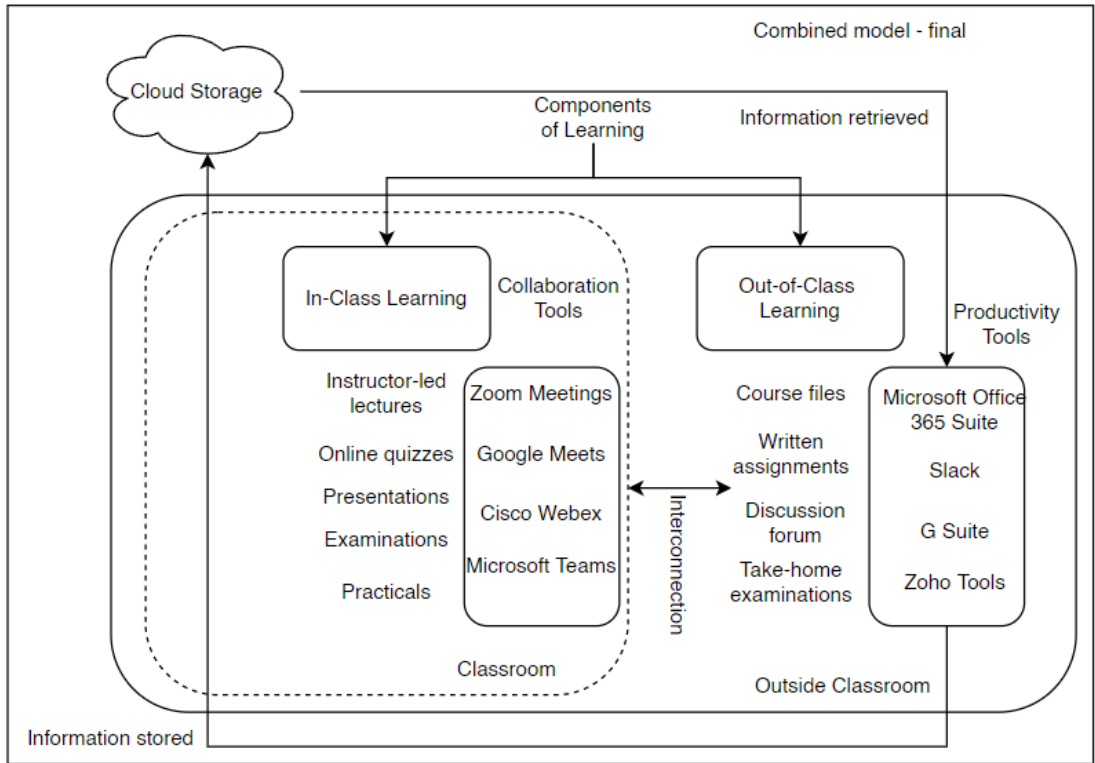


Figure 4: Combined model [139].

Thus, the overall distance learning technology stack would be ready and usable for our firm that we have considered for the purpose of this study.

2.7. General Research Model

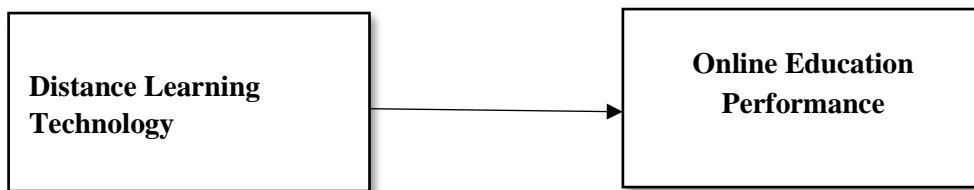


Figure 5: Conceptual Research Model

### **3. DISCUSSION**

In addition to the system proposed in this research, the recommendations that may be applied in this situation for the firm would include the following.

- The incorporation of both productivity and collaboration tools would ensure that the in-class learning and out-of-class learning parts are handled properly. However, because technology may be difficult to master, adequate training must be provided to both students as well as instructors to ensure that they make the most of the system provided to them for distance learning. Research by suggests that there may be challenges associated with the learning systems via technology, but they can be handled through proper training.
- Proactive approaches are essential for educational institution as well as other institutions considering to deploy systems for online learning. In this context, the method suggested for distance learning technologies must be frequently tested and updated, so that it continues to improve in both usability as well as features for the students and other associated stakeholders.
- Research and development (R&D) with regards to the distance learning technology system would have to be continuous, otherwise security issues like bugs could potentially hamper the functionality of the same and hence the same would be ill-advised.

### **4. CONCLUSION**

To conclude, it can be seen that although distance learning technologies were optional for companies and institutions at some point in the past, they are a necessity now. It has become ever more important for companies and universities to deploy infrastructure and digital equipment to ensure that they are capable of delivering knowledge upgrades to their respective stakeholders, including students and employees. As this research report demonstrates theoretically, the concept of a distance learning technology suite must have components that involve both the in-classroom learning and out-of-classroom learning. The foundation for any distance learning technology stack would be a competent learning management system (LMS) such as Moodle or Blackboard, a portal that would be accessible through a login username or e-mail ID and a password.

On top of this foundation system, third-party applications from various developers such as Microsoft Office 365 Suite from Microsoft, Google Suite from Google, Microsoft Teams from

Microsoft (again), Zoom Meetings from Zoom, Cisco WEBEX from Cisco, etc. could be integrated. As a result, students would have the functionality of both collaboration tools and productivity tools at once on one platform. Thus, they would experience a seamless learning experience with regards to the same wherever they shall be physically. Some challenges to note in this case would be the lack of familiarity that many or most students would have in case they do not have a tech-savvy background, but at the same time, they too would likely ensure that they could pick up quickly if adequate training is provided to them by the university or educational institution. As a result, the overall system would function seamlessly and pandemics such as coronavirus or any other would have much lower or lesser impacts on the business.

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