Global Scientific JOURNALS

GSJ: Volume 10, Issue 2, February 2022, Online: ISSN 2320-9186

www.globalscientificjournal.com

THE IMPACT OF COVID 19 PANDEMIC MEASURES ON SUPPLY CHAIN MANAGEMENT IN CAMEROON

Dr. EYONG AKO

Abstract

The outbreak of covid-19 pandemic and its preventive measures has posed significant impacts for supply chains globally and Cameroon in particular. multiple national lockdowns continue to slow or even temporarily stop the flow of raw materials and finished goods, disrupting manufacturing as a result. The outcome is expected to affect businesses indefinitely; thus, the SC is unlikely to resume its pre-COVID-19 status. This article assesses the impact of the COVID-19 pandemic measures on supply chains in Cameroon. This paper brought to lights that the COVID-19 pandemic accelerated preexisting issues in the supply chain and brought priorities such as visibility, resilience and digitization to the fore. While some sectors were negatively affected by the measures, there were some winners, especially health sectors. But across the board, protecting, retraining and reskilling the workforce is a major focus, along with investing to make the autonomous supply chain a reality.

Keywords: supply chain, COVID-19 pandemic, preventing measures

Introduction

COVID-19 pandemic was and still is, one of the greatest risks that had direct impact on supply chains. Everything about the pandemic affect supply chains - from the restrictions being placed on the movement of people and the ways in which goods could be transported, to the human impact of the virus that meant it became more complex to produce goods and deliver services.

It should be recalled that on the 12 of January 2020, the World Health Organization (WHO) confirmed that a novel coronavirus was the cause of a respiratory illness in a cluster of people in Wuhan City, Hubei Province, China, which was reported to the WHO on 31 December 2019. [Elsevier,2020].

Looking at the context of Cameroon, the COVID-19 pandemic is part of the worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus was confirmed to have reached Cameroon on 6 March 2020. (Ritchie al.2022).

As a measures to contain the spread of the COVID-19 virus in Cameroon, on 18 March, the Prime Minister, Head of Government chief, Dr. Joseph Dion Ngute closed its land, air and sea borders *[TV5MONDE* (in French), 2020].

To add, On the 10 of April, the government took 7 additional measures to stop the spread of COVID-19 in Cameroon. These measures take effect from Monday, 13 April 2020. [@CRTV_web,2020]. The pandemic has provoked serious social and economic disruption globally, including strict social distancing, travel restrictions, and one of the largest global recessions since the Great Depression (Wheelock, 2020).

These various measures put into place to contain the spread of the COVID-19 virus have led to the reduction or total cessation of productive activities, as well as the closure of international borders. This action has brought with it great negative economic consequences and disruptions in national and international supply chains.

SUPPLY CHAIN PRIOR TO COVID 19

Prior to the global outbreak in March, supply chain (SC) management (SCM) has had major problems to cope with an unpredicted demand for certain products when simultaneous

restrictions for travel and production have been enforced and is still struggling to recover from this (Mazareanu, 2020).

According to (KARTHIKEYEN P. 2020), before the outbreak of the pandemic, most companies globally had been using a lean supply chain, with a focus on minimising cost and just in time delivery of goods. This led to decreased inventory so companies are left with no buffers in terms of provisions. This pandemic has brutally exposed the drawbacks of this lean supply chain system in the manufacturing sector.

The pandemic outbreak according to (Roy, 2020), has propelled companies to focus on building inventory, which may act as a buffer to combat the disruptions in the supply chain and develop local supply chains. Now, organisations are motivated to deploy digital supply networks, instead of sticking with the conventional linear supply chain model.

CONCEPTUAL REVIEW

According to Mentzer et al. (2001, p. 4) “Supply Chains are a set of three or more entities (organizations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer.” *SCM* encompasses the active management of such activities and relationships with the aim of obtaining a sustainable competitive advantage and maximizing customer value through optimizing SC in the most effective and efficient ways.

In order to be successful, organizations are required to carefully manage their operations by planning, scheduling, and controlling SC activities (Bozarth and Handfield, 2016, p. 19–23). The SCM literature focuses on three practices that are of great importance for the success and future of SC to prevent SC disruptions and ensure risk mitigation: RRS. In the following, when SCM practices and concepts are mentioned, they relate to those three practices.

Looking at SCM, the corona outbreak represents one of the major disruptions encountered during the last decades and is “breaking many global supply chains” (Araz et al., 2020; Ivanov, 2020, p. 1; Queiroz et al., 2020); crisis that the industry faced.

The preventive measures implemented by the government of Cameroon has posed significant challenges for supply chains country. Several domestic lockdowns continue to slow or even temporarily stop the flow of raw materials and finished goods, disrupting manufacturing as a result.

However, the pandemic has not necessarily created any new challenges for supply chains. In some areas, it brought to light previously unseen vulnerabilities, and of course, many organizations have suffered staff shortages and losses due to COVID-19. But overall, it has fastened and increase problems that already existed in the supply chain.

CERTAIN COVID 19 PREVENTIVE MEASUSRES IMPLEMENTED BY THE GOVERNMENT

Transmission is mostly cause by droplets sprayed by affected individuals, or contact with respiratory secretions from patients, contaminated surfaces and equipment. The only way to prevent infection is to avoid exposure to the virus, ensure good personal hygiene and observe social distancing strategies (World Health Organization, 2020). This has result to social distancing, lockdown of towns and cities to prevent transmission of virus, and the need for anyone involved in the care of patient suspected or known to have COVID-19 disease to wear personal protective equipment.

Many countries and Cameroon inclusively acted proactively to protect its people by implementing certain measures as seen below;

imposed strict restrictions on movements via lockdowns, social distancing, and quarantining measures in the early parts of this year. The tension and panic from such decisions affected supply chain operations and performance.

Result of the of the finding

However, the need for lockdown and social distancing meant that all elements of the supply chain in the country were interrupted, including manufacturing, procurement, distribution and supplies.

The following are some results from a study that was conducted in late 2021. The respondents were 200 organizations involving in supply chain management across several sectors, including consumer products, retail, health sciences, industrial products, automotive, and high-tech companies in Cameroon.

Effects of covid 19 to supply chain

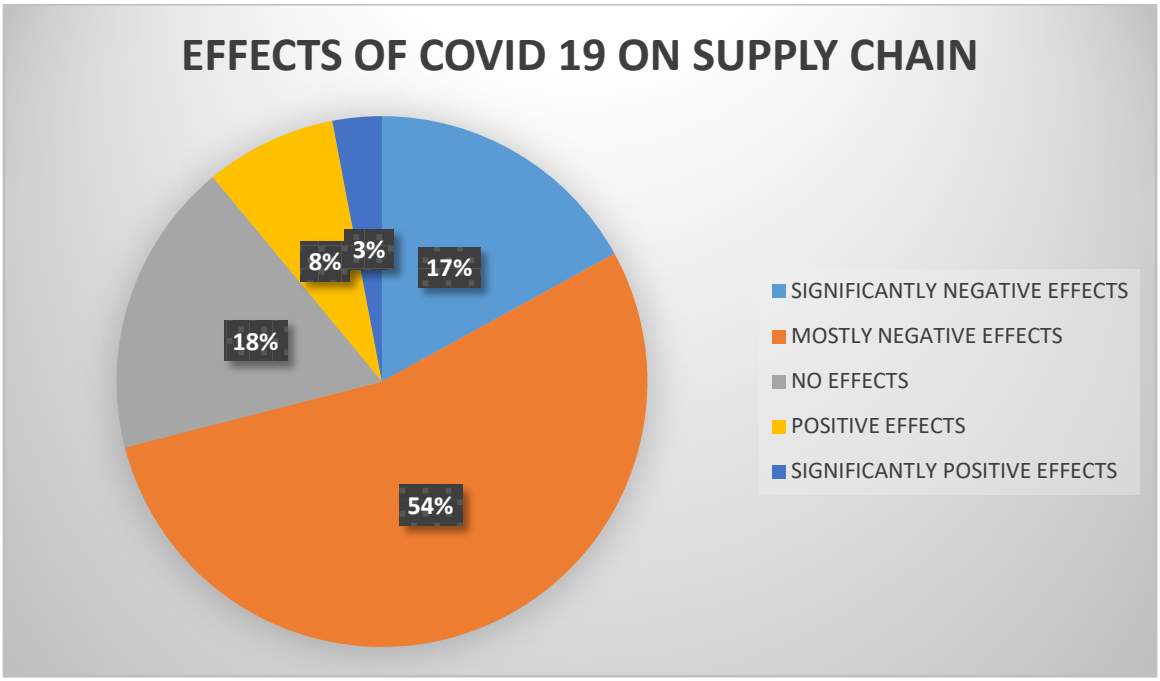
1- Effects by sectors

Supply chain management is a staged process, the coronavirus pandemic has affected most, if not all, parts of the chain (KARTHIKEYEN P. 2020).

Certain sectors where greatly affected negatively than others.

The COVID-19 pandemic measures were a worldwide disruption across education, trade, finance, health and religious organisations.

It is no strange that less than 2% of companies who participated to the study said they were fully prepared for the pandemic. Serious disruptions affected 57%, with 72% reporting a negative effect (17% reported a significant negative effect, and 55% mostly negative).



Sectors that where positively affected

-Health sector and consumer products

Evidently, there were some vivid winners by industry during the pandemic, with 11% reporting positive effects, including increased customer demand (71%) and bringing new products to market (57%). These companies were mostly in the health sector and the positive effects may be

largely because the products they produce are essential. The situation also required some life sciences companies to double down on creating essential new products such as COVID-19 tests or vaccines. **Other's sector**

Certain sectors dealing with consumer products, couldn't keep products on the shelves in the early days of the pandemic since toilet paper, canned goods, flour and other staples were in high demand.

Sectors that were negatively affected

Some sectors were hit particularly hard, however. Among survey respondents, all automotive and nearly all (97%) industrial products companies said the pandemic has had a negative effect on them. In addition, 47% of all companies reported the pandemic disrupted their workforce.

2- Effects of supply chain activities

The covid 19 pandemic influencing supply chain activities, operations, processes, and management due to supply disruptions, demand volatility, and government actions to combat the crisis.

The closures of Factory, border restrictions, travel bans, ports closures, and suspended transportations interrupted the entire supply network, thus leading to shortages.

High demand and order congestions from the delays resulted in demand vulnerability and shocks, which impacted both offline and online purchases.

Furthermore, complex challenges in addressing the massive demand while maintaining quality and continuity persisted.

Challenges brought by the pandemic measures

The main difficulties linked with the COVID-19 pandemic include industrial, economic, inflow, on-hold production, delivery, online shopping, and supply chain upsets.

Components needed to assemble final products are procured from several locations. They are then re-exported, transferred, or shipped to specified locations worldwide. Thus, disruption in the supply chain operations complicates the process.

Supply and demand disruptions, along with governments' responses, contribute to external and internal economic risks in the short- and long-term. Given such disruptions, against the backdrop

of government protection measures, several manufacturing plants and factories suspended production.

Delivery and distribution faced several challenges, including direct distribution difficulties, increased online orders, re-staffing of distribution centers and warehouses and changes in the allocation of inventory across the network and distribution channels to increase responsiveness. Thus, the pandemic proved to be an opportunity for online stores and businesses.

Prices fluctuate, as the extraordinary increase in prices during the pandemic negatively affect the relationship between suppliers, retailers, and customers.

There is a long lead time due to delays in receiving items from the source and delays in distribution. There are delays in shipments, moving cargo, loading, shipping, and unloading, as well as extra delays at the borders and ports.

Return, profits, and income reduce, thus hurting retailers' abilities regarding their quality control.

Production capacity and manufacturing capability decrease and affects the sources of production.

Lack of disruptions plans associated with small inventory levels, single supplier, or minor diversification underestimate the possibility of severe disruptions; the focus on short-term and costs minimisations lead to a lack of risk information and contingency plan.

Moreover, there are difficulties in getting information and data from partners, lack of end-to-end visibility, lack of integrations and coordination, and variations in technology utilisation throughout the supply chain.

In general, global trade and business experience abnormal interruptions, which affect the demand and supply end of the SC. Thus, organisations face significant challenges in maintaining a continuous flow of goods and services.

The future of supply chains operations

The pandemic has really provoked many preexisting trends, and supply chain is no exception: 64% of surveyed supply chain executives say digital transformation will advance due to the pandemic. The race is on for digital enablement and automation: 52% of executives say that the autonomous supply chain (e.g., robots in warehouses and stores, driverless forklifts and trucks,

delivery drones and fully automated planning) is either here or will be by the future. However, simply utilizing digital technologies does not equate to creating a digitized, autonomous supply chain — it also needs connected supply chain technologies across planning, procurement, manufacturing and logistics that work beyond the organization's four walls. It's the difference between "doing digital" and "being digital."

We can think about autonomous operations in terms of "lights-out," "hands-free" and "self-driving," where organizations use AI technologies across the end-to-end supply chain to help make predictive and prescriptive decisions. An example is responding to a change in customer demand, seen instantly by the entire value chain (the organizations, its suppliers and their suppliers' suppliers) so they can collectively adjust supply plans and production schedules immediately. Ultimately digital and autonomous technologies will help make people's jobs easier and the supply chain more efficient and optimized.

RECOMMENDATIONS

Many organisations believes that the COVID-19 pandemic is a once-in-a-lifetime event. However, as the adage goes, "hope is not a strategy." There are ways to stand out and better navigate the storms of the next inevitable disruption. These include;

1. Redefine the strategic architecture of your organization

-Organization should Rapidly redefine their supply chain strategy and alter global trade flows, considering new trade agreements, country incentives and omnichannel acceleration.

-To add, organisation should reimagine their supply chain operating model — by clearly stating the type of work that should get done locally, regionally and globally, including warehouses and manufacturing sites. a new model model adopted by organisation can also help to prepare for future disruption.

2. Build transparency and resiliency

upgrading disruption response with real-time visibility and monitoring of your end-to-end supply chain, as well as performing scenario planning and simulations.

3. Create a competitive advantage with sustainability

- The future is a circular economy where there is no waste in your products or manufacturing.
- Explore ways to redesign and engineer new products to achieve this circular economy and monitor third-party risk with supplier sustainability assessments across tiers 1-3.

4. Organisation should go digital

Work towards implementing the digital and end-to-end supply chain across planning, procurement, manufacturing and logistics. This can drive efficiencies and also open new revenue streams.

5- **Maintain visibility of the supply chain:** review the supply chain in detail to know the status of its suppliers in order to be able to anticipate possible disruptions.

6- Teleworking should be introduce by managers

Realize that companies are using supply chains as an engine for growth and a key differentiator versus competitors.

Following the above mention recommendations, your enterprise will be better prepared to manage whatever crises come next — turning potential disruptions into tremendous opportunities.

Conclusion

This paper shows that the COVID-19 pandemic accelerated preexisting issues in the supply chain and brought priorities such as visibility, resilience and digitization to the fore. While some sectors were negatively affected by disruption, there were some winners, especially health sectors. But across the board, protecting, retraining and reskilling the workforce is a major focus, along with investing to make the autonomous supply chain a reality.

References

1. Arafat, S. M. Y., Kar, S. K., Marthoenis, M., Sharma, P., Hoque Apu, E., and Kabir, R. (2020). Psychological underpinning of panic buying during pandemic (COVID-19). *Psychiatry Res.* 289:113061. doi: 10.1016/j.psychres.2020.113061

2. Akhtar, P. , Frynas J. G., Mellahi K. and Ullah S., 2019, "Big data-savvy teams' skills, big data-driven actions and business performance". *British Journal of Management*, 30: 252–271. [Google Scholar]

3. Anner, M. , 2020, "Abandoned? The Impact of Covid-19 on Workers and Businesses at the Bottom of Global Garment Supply Chains". Center for Global Workers' Rights Research Report (27 March 2020). Available at https://www.workersrights.org/wp-content/uploads/2020/03/Abandoned-Penn-State-WRC-Report-March-27-2020.pdf (accessed 10 May 2020).

4. Armani, A. M. , Hurt D. E., Hwang D., McCarthy M. C. and Scholtz A., 2020, "Low-tech solutions for the COVID-19 supply chain crisis". *Nature Reviews Materials*, 5: 403–406. [PMC free article] [PubMed] [Google Scholar]

5. Asamoah, D. , Agyei-Owusu B. and Ashun E., 2020, "Social network relationship, supply chain resilience and customer-oriented performance of small and medium enterprises in a developing economy". *Benchmarking*, 27: 1793–1813. [Google Scholar]

6. Balleer, A. , Link S., Menkhoff M. and Zorn P., 2020, "'Demand or supply? Price adjustment during the Covid-19 pandemic'. London, Centre for Economic Policy Research. Covid Economics: Vetted and Real-Time Papers, 31: 59–102. https://cepr.org/active/publications/discussion_papers/dp.php?dpno=14907 [Google Scholar]

7. Batistič, S. and van der Laken P., 2019, "History, evolution and future of big data and analytics: A bibliometric analysis of its relationship to performance in organizations". *British Journal of Management*, 30: 229–251. [Google Scholar]

8. Battaïa, O. Benyoucef L., Delorme X., Dolgui A. and Thevenin S., 2020, 'Sustainable and Energy Efficient Reconfigurable Manufacturing Systems', pp. 179–191. 10.1007/978-3-030-28782-5_9. [CrossRef]

9. Besson, E. K. , 2020, COVID-19 (coronavirus): Panic buying and its impact on global health supply chains. World Bank. Available at https://blogs.worldbank.org/health/covid-19-coronavirus-panic-buying-and-its-impact-global-health-supply-chains (accessed on 14 June 2020).

10. Birkie, S. E. and Trucco P., 2020, "Do not expect others do what you should! Supply chain complexity and mitigation of the ripple effect of disruptions". *International Journal of Logistics Management*, 31: 123–144. [Google Scholar]

11. Boissay, F. and Rungcharoenkitkul P., 2020, "Macroeconomic effects of Covid-19: An early review". *BIS Bulletin*, 20: 1–9. [Google Scholar]

12. Chatterjee, P. , 2020, "Indian pharma threatened by COVID-19 shutdowns in China". *The Lancet*, 395: 675. [PMC free article] [PubMed] [Google Scholar]

13. Cheema-Fox, A. , LaPerla B. R., Serafeim G. and Wang H. S., 2020, "Corporate resilience and response during COVID-19". *SSRN Electronic Journal*. 10.2139/ssrn.3578167 [CrossRef] [Google Scholar]

14. Choi, T. M. , 2020, "Innovative "bring-service-near-your-home" operations under Corona-virus (COVID-19/SARS-CoV-2) outbreak: Can logistics become the messiah?". *Transportation Research Part E: Logistics and Transportation Review*, 140: 101961. 10.1016/j.tre.2020.101961 [PMC free article] [PubMed] [CrossRef] [Google Scholar]

15. Choudhury, A. , 2020, "Quantzig. Analyzing the Impact of COVID-19 on the US Food Supply Chain". E:\Conference paper\Papers\COVID19\LR\Analyzing the Impact of COVID-19 on the US Food Supply Chain _ Quantzig's Recent Article Offers Unprecedented Insights _ Business Wire.html.

16. Meyer A, Walter W and Seuring S (2021) The Impact of the Coronavirus Pandemic on Supply Chains and Their Sustainability: A Text Mining Approach. *Front. Sustain.* 2:631182. doi: 10.3389/frsus.2021.63118

17. Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., and Zacharia, Z. G. (2001). Defining supply chain management. *J. Business Logistics* 22, 1–25. doi: 10.1002/j.2158-1592. 2001.tb00001.x

18. CRTVweb [@CRTV_web] (9 April 2020). "7 mesures supplémentaires contre la propagation du #Covid19 au #Cameroun Mesure 1 : port du masque obligatoire"