

GLOBAL SUPPLY CHAIN MANAGEMENT AND ORGANISATIONAL PERFORMANCE: A CASE OF WORKERS AFFORDABLE PROPERTIES (WAP) LIMITED, KIGALI, RWANDA

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Abstract: This study aims to explore “Global Supply Chain Risks and Organizational Performance”, a case of WAP (Workers Affordable Property) Ltd, a real estate organization in Kigali - Rwanda. With a fast growing, constantly evolving and volatile business landscape, supply chains in the 21st Century are prone to occasional if not frequent disruptions in their operations. This study specifically seeks to determine how much Supply Chain Risks can affect the overall performance of an organization, the case of WAP Ltd. While there is a general impression that current global instabilities and increasing uncertainties in this era is having a significant effect on different organization’s supply chain activities, this does not go unnoticed on an organization’s performance. This study will be addressing the problem of low organizational performance in real estate due to growing universal supply chain menaces. To test the hypothesis that these risks have a weighty effect on organizational output, some structured questionnaires on the above-mentioned risks were distributed to the staff of WAP Ltd. Respondents were to give their most suitable opinion by agreeing or disagreeing to the statements made. By means of descriptive research design while making use of stratified random sampling, the study gave equal and independent chances of being selected for the research work. The finding from this study suggest that among all the supply chain risks looked at, two major supply chain risks stood out to have a significant effect on the overall performance of the firm, namely; environmental and financial related risks, with financial risks found to have the biggest effect on the operations of the organization. The study recommends that a dynamic and functional supply chain risk management system or strategy or function be put in place to identify, avoid, and reduce potential risks, so as to come up with possible actions to counter them. As some risks can equally be transferred or even simply accepted depending on the type or its seriousness.

Keywords: Global Supply Chain Management, Risks, Organizational Performance.

1. INTRODUCTION

Background

Over the years, the attention on SCM literally has changed the way businesses look at the corporate setting and how best they can gain or loss their competitive edge in a highly evolving business landscape. This has brought many to the argument that proper supply chain running constitute the backbone of every business and goes a long way to ensuring the continuity or sustainability of any business which knows how to eat of its fruits. However, SCM can be said to have today

arrived at that crossroad which may need some deep-seated re-thinking in the light of major changes in the global business environment in recent years. Today's contemporary supply chains are facing increased risk and uncertainty, driven by the prevailing strategies in the field, namely: globalization, outsourcing, lead-time reduction, reduced inventory holding and increasing integration. (Sheffi & Rice, 2005, Zsidisin *et al.*, 2005).

In today's globalized and interconnected world, some potential roots of Supply Chain (SC) disruptions include terrorism, climate change effects/natural disasters, demand fluctuation, misguided investments, cyber espionage and political risk which can prove fatal for any unsuspecting business supply chain. In the year 2011, Thailand floods, arguably the worst flooding experienced by the country in more than fifty years, can provide a satisfactory case study into the fragility of the present-day global supply chains. This upheaval has developed the basis for exemplifying how a localized affair can affect the supply chains of several corporations and have penalties that echo all across the international or universal economy (ADVISEN Ltd, 2013). Thereafter, Thailand's GDP growth projections decreased from 2.6% to 1% as flooding continued to be a concern.

A seemingly more potent threat to global supply chain is the very ongoing Covid-19 pandemic. Originated from Wuhan, China, it is apparently one of the most devastating disruptions of this scale and magnitude in the supply chain industry. This pandemic has affected virtually every sector, from textile to automobile, agriculture, retailing, construction, just to name a few. According to the Jabil's Special report: Supply Chain Resilience in a Post-Pandemic World, like 70% of Supply Chain Decision-Makers say COVID-19 is creating the Biggest impact on Supply Chain currently.

Also, in East African, looking at the Rwanda-Uganda dispute which led to the close of borders between Uganda and Rwanda, this has warranted several small and medium size business to greatly struggle and some even shutting down due to their inability to get supplies from Uganda, some of which was their major or sole source of supplies. An experience which has equally affected the large enterprises, increased cost of merchandises and thus, affecting the common man, together with the entire societal cost of living.

According to the Federal Emergency Management Agency (FEMA), roughly 40 to 60 percent of small businesses never reopen their doors following a disaster and every supplier that shuts down causes untold disruptions to every one of its clients' supply chain and other directly connected supply chains. As supply chains turn out to be more multifaceted, there is more of an imperative to understand risks from both an internal perspective and the external environment (Christopher & Holweg, 2011; Ritchie & Brindley, 2007).

Statement of the Problem

Conferring to the SNCF (Société Nationale des Chemins de Fer) Geodis Supply Chain Worldwide Survey of 2017, 57% of companies believe supply chain management gives them a competitive edge that enables them to further develop their business. Regardless of the supply chain risk type, these risks, especially those external to the business are very unpredictable at best. It is a common complain amid the Supply Chain of some organizations as supply chain market research illustrates that most of companies (69%) don't have complete visibility around their supply chains (BCI Supply Chain Resilience Report, 2017). Other studies have examined the influence of supply chain disruptions and their feedbacks obtained have revealed that disruptions in Supply Chain would probably negatively influence the performance and business continuity of a company (Knight & Pretty, 1996). In spite of the enormous consequences global SCR pose to organizations today, seemingly very few organizations have any appropriate SC risk management program with which they can identify possible risks inside their SC and come up with a plan to counters these risks.

Specific Objectives

- i. To examine the role demand risks has on corporate quality in WAP Ltd.
- ii. To determine the effects of supply risks on organizational reliability in WAP Ltd.
- iii. To find out the part environmental risks plays on organizational quickness in WAP Ltd.
- iv. To determine what effects financial risks has on business performance in WAP Ltd

Research Questions

- i. How does demand risks impact quickness in WAP Ltd?
- ii. What are the effects of supply risks on the reliability in WAP Ltd.?
- iii. What is the role of environmental risks on cooperation in WAP Ltd?
- iv. How does financial risk influence organizational effectiveness in WAP Ltd?

2. LITERATURE REVIEW**Theoretical Review****Christopher & Peck Model:**

Christopher & Peck (2004), proposed framework for categorizing SC risks can be better illustrated through their five (5) subdivided different risks categories:

Process risks - internal to the company; They influence the activities carried out by the company, from the manufacturing, production to quality levels, from warehouses management to transportation activities.

Control risks - internal to the company; Within an organization, processes and activities are governed by rules and controls. Poor controls and rules serve as risks upsetting the performances of the firm together with its resilience.

Demand risks - external to the firm & internal to the supply chain; These risks are associated to the helplessness of the company (due to unpredictable events) to gratify market demands and also include demand forecasts risks.

Supply risks - external to the firm & internal to the supply chain; These risks are associated to suppliers' reliability and suppliers' base selection.

Environmental risks - external to the supply chain. These are uncontrollable and sometime unpredictable events that greatly affect the SC susceptibility and suppleness. Among others can be cited natural disasters, wars, terrorist attacks, political and social disorders.

Empirical Review

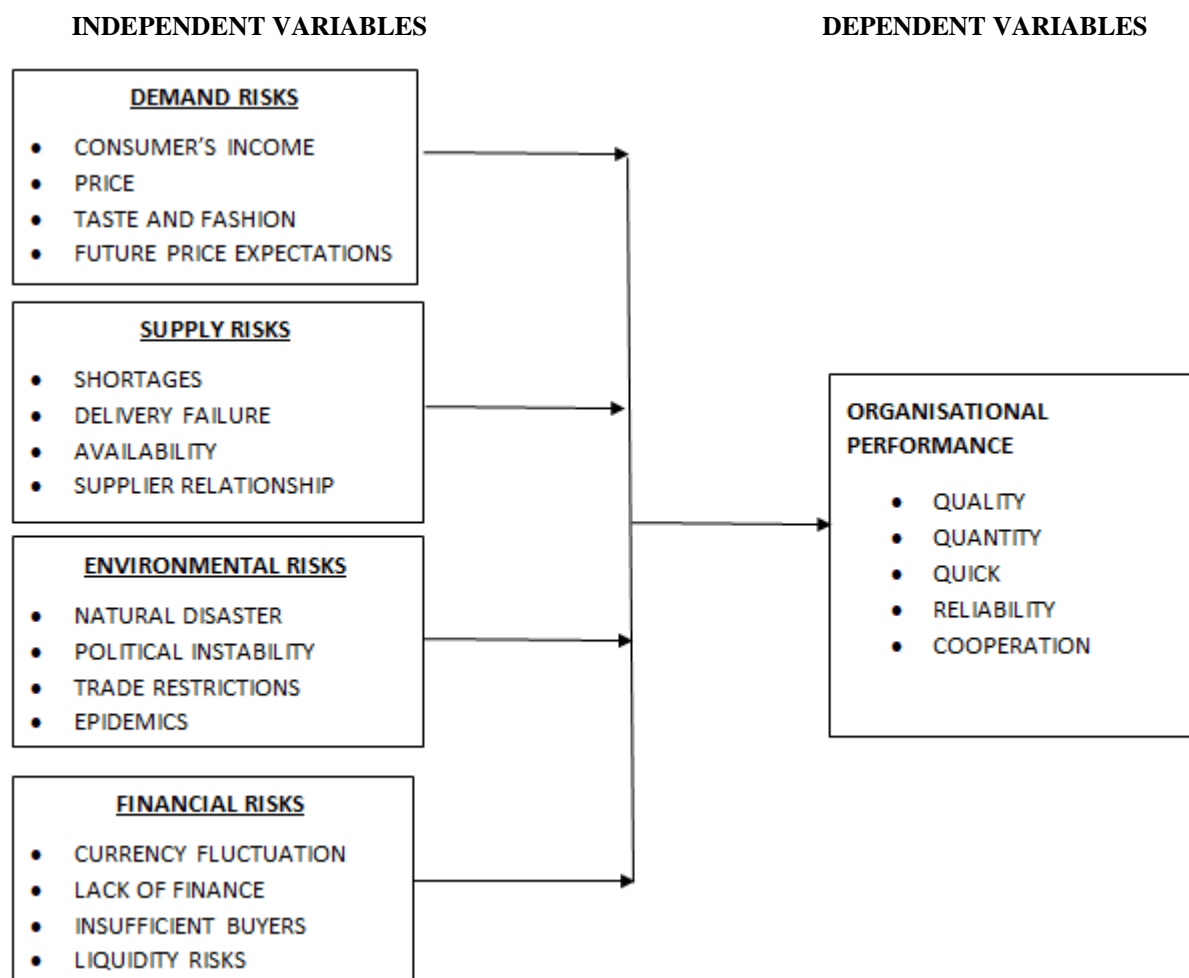
In an investigation conducted by Caroline (2015) in Andy Forwarders services limited, on the 'effects of Supply Chain Risk Management on Organization Performance', using a sample size of 50% (of its target population), there was an established rapport between the two variables being discussed.

Respondents were asked to rate the factors on sources of risks that influences organizational performance within each category of the bases of these risks. It was found that on technological risks the factors were rated to a great extent and these factors that were found to affect the SC were ICT disruptions (mean of 4.1100) and Infrastructure failures (mean of 3.9650). On environmental risks it was discovered the respondents agreed to a great extent that Natural disaster could affect organizational effectiveness or performance with a mean of 4.1708. The respondents were neutral on Extreme weather with a mean of 3.0786 and pandemic with a mean of 3.2667. On political risks it was realized that the risks would affect organizational performance while political instability was rated with the high mean of 4.4708 followed by theft and illicit trade with a mean of 4.3100 and Trade restrictions was rated with a mean of 4.1100. On market risks completion was rated highest with a mean of 4.4500 followed by demand shocks with a mean of 3.9750 and finally supply shocks was rated with a mean of 3.9001. On financial risks the factors were rated to a great extent to the absence of finances being the highest with a mean of 4.3250 followed by Currency fluctuations which was rated with a mean of 4.1002 and Price volatility was rated with a mean of 3.9000.

From the study, one could comfortably infer that SCR may well have a corresponding influence on the overall performance of an organization.

Conceptual Framework

Variable Identification for the Study



Source: Researcher's Analysis, 2021.

Research Gap

Most researchers have mostly generated their models from a manufacturing industry perspective and so specific risks of a firm or industries are left out. The theories used in previous studies fell short of explaining the idea of financial menaces as a driver to global supply chain risks. The indispensability of finance in this topic seem to have been omitted or overlooked, that explains why the researcher thought it wise to include this particular risk source into the work for greater authenticity of the findings, as it applies greatly to the case being discussed, real estate.

3. RESEARCH METHODOLOGY

Research Design

This study employed a descriptive research design. According to Donald and Pamela (2006), a descriptive study deals with the what, how and who of a phenomenon. This permits the researcher to summarize the characteristics of different groups or to measure their attitudes and opinions toward some issue.

Study Population

In this study, the accessible population comprised mostly the employer and employees of Workers Affordable Properties (WAP) Ltd, a real estate company in Gahanga, Kicukiro District, Kigali, Rwanda who constitute a population of about 105 personnel. Target population refers to the larger population to which the investigator ultimately would like to generalize the results of the study (Berg, 2001).

Sample Size

This study employed the universal sampling technique. According to Richard and Margaret, 1990 in Kabera, 2009, universal sampling refers to the selection of sample where not all the people in the population have the same probability of being included in the sample and each one of them, the probability of being selected is unknown.

Sample Design

This study used the stratified random sampling design. To stratify means to categorize people into groups based on some characteristics, such as position, rank, income, education, sex, or ethnic background. This sampling method was used to select respondents from the population frame of WAP Ltd. This sampling technique is often used when one or more of the strata in the population have a low incidence relative to the other strata.

Data Collection Method and Instrument

The instrument used in collecting the data was a questionnaire. According to Kumekpor (2002) questionnaire organizes the project and gives it direction and coherence; they delimit the project showing its boundaries, keep the researcher focused during the project and point to the data that will be needed. Prior to the administration of questionnaires, a supporting document was gotten from the University of Kigali, to give the researcher access to the place being studied.

Data Analysis

The data analysis for this research study followed a quantitative approach; using Statistical Package for Social Sciences (SPSS) and Microsoft excel. This permitted for means, charts, tables, frequencies and correlations to be produced for subsequent inference to be made to the data.

4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Demand risks as a risk source which affects organizational performance: The study found that demand risk is not a principal threat to the overall performance of WAP Ltd. Respondents of WAP Ltd indicated that there is a relatively low influence of demand risk in the performance of the organization. This is known as an overall 2.3% of the respondents disagreed to the risks associated with the demand of WAP Ltd.'s products not being a hindrance to their performance, whereas a more imposing 70.5% agreed that these risks sources have little interference to the performance of WAP Ltd. This implies that demand risks do not pose as much a menace to the operations of the organization. However, pricing of products stood out to be resounding menace within the Demand associated risks sub variables with a 21% affirmation of being a threat to the performance of the organization.

Effects of supply risks on organizational performance: From the findings, it is noticeable that supply risks influence on the overall performance of WAP Ltd are minimal. This is according to the feedbacks gotten from the respondents wherein an overall 15.9% of the respondents disagreed to the risks associated with the supply in WAP Ltd.'s not being a deterrent to their performance, whereas a more daunting 61.4% agreed. This suggests that respondents do not esteem supply related risks being a major threat to the operations of the organization. Nonetheless, product availability (29% disagreement) and supplier relationship (22% disagreement) within the supply related risks demand some attentiveness to avoid future major impact which could hamper the performance of the organization.

The role environmental risks play on organizational performance in WAP Ltd: From the findings, environmental risks influence on the overall performance of WAP Ltd are significant. An overall 31.8% of the respondents disagreed to the risks associated with the environment not being a deterrent to WAP Ltd.'s performance, and a smaller 29.5% agreed. This suggests that the respondents very much approve these environment related risks of being a major threat to WAP Ltd.'s performance. More specifically, the major threats being trade restrictions and the ongoing Covid pandemic with a 55% and 66% affirmation respectively, to their negative influence on the performance of the organization.

Financial risks and organizational performance in WAP Ltd: Statistics from the field survey reveals that there is equally a significant effect of financial risk has on WAP Ltd.'s performance. This can be buttressed by the mean financial risk findings where an overall 38.6% of the respondents disagreed to finance related risks not being a threat to WAP Ltd.'s performance, while a smaller 29.5% agreed. This suggests that the respondents very much supported the claim of finance risk posing a major threat to WAP Ltd.'s performance. The findings also revealed some financial risks being more

of a threat than others, that is, access to proper financing and insufficient cash at hand/bank with 50% and 56% disagreement respectively from the respondents to the claim they are not a menace to the performance of the organization.

Conclusion

The conclusion which can be derived from the findings is that there is significant threat posed to WAP Ltd.'s performance from both environment and finance related risks, with the highest scores registered by financial related risks. Also, to be noted is that these are inferences made from the data gotten during the course of this study, therefore, they may be more representative of the location or country where the research was conducted.

Environmental risks can easily become breathing ground for financial risks to strive as accessibility to adequate funds can arise as a result to the general state of the economy caused by environmental risks. While demand risks and supply risks are relatively low, that does not mean they are non-existent. Therefore, management must continually look upon them and endeavor to keep them at bay given that today's less threatening risks may grow to become tomorrow's high threatening risks if not properly handled or ignored. From the findings of the study, it can be concluded that the performance of an organization cannot only be measured in terms of the quality or quantity of their products or services but also on other inimitable qualities like the proper management of one's own supply chain so as to gain competitive advantage in the market place.

Recommendation

- i. To begin with, the study found out that there were no supply chain risk management systems which were in place to counter any arising risks threatening the welfare of the organization. Therefore, it is only right to recommend a flexible, dynamic and efficient supply chain risk management system to be put in place to monitor the various risks that may arise in the operations of the organization as the potential benefits to be realized are enormous. A proper system will help to diagnose or identify potential risks sources and adequate action taken to evade, or minimize them including smoother and more reliable operations, fewer disruptions, lower overall costs and increased added value – hence, competitive advantage gained.
- ii. Furthermore, given that global supply chain risks occur due to international boundaries that arise in the supply chain, a more effective way to counter these risks would be to encourage local firms or industry. If governments can step in to this effect by creating flexible systems to foster their growth through easy access to business loans, satisfactory tax systems, free trade among regions, reduced trade restrictions, training programs to groom and inspire young talents into manufacturing or revolutionary initiatives, a greater focus on practical or hands-on learning than theory or certificate oriented learning; then this will go a long way to boost the local market and make it more self-sufficient.
- iii. Financial risk management would warrant setting funding for emergency situations. There should be contingency plans in place for addressing funding liquidity risk that include an action plan with measures for reducing funding gap limits and guidelines.

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