



Supply Chain Integration and Performance of Humanitarian Organizations in Kenya, A Case Study of Red Cross Society, Nairobi

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ABSTRACT

The main objective of the study was to examine the effects of supply chain integration on performance of humanitarian organizations in Nairobi County. The research was done at Kenya Red Cross Society in Nairobi County. The research was led by ensuing variables like internal integration, external integration, and finally influence of beneficiary integration on the performance of humanitarian organizations in Nairobi City County. The research was based on Resource Based View Theory because this theory elucidates that identification as well as possession of inner planned resources underwrites to a company's aptitude to make as well as espousing a modest gain and expand SC recital. The study was also supported by Partnership Model and Contingency Theory. The research espoused a descriptive research design to offer the general plan in lieu of gathering as well as analyzing data to get enough knowledge on topic from the respondents. The target population of the research was 300 respondents and the investigator targeted a sample size of 90 respondents which is 30% of the entire population. The scholar used a simple random sampling method for the study. The researcher used questionnaires to gather information and were analyzed and presented through tables and figures. The analysis was done through presentation of the (SPSS) software. The investigation similarly used the regression analysis to establish the connection amidst the dependent and the independent variables. The coefficient of determination implied that the set of independent variables in this research accounts in lieu of 52% of disparities in the Supply chain integration and performance of humanitarian organizations in Kenya. The remaining percentage (48%) is accounted for other variables outside the model. The outcome shows that acquaintance as well as information concerning the independent variables offers a great share of information concerning performance of humanitarian organizations in Nairobi County. The study recommended a vigorous as well as operative Internal Integration by solidification their competences in the system, data, as well as process amalgamation before they can participate in meaningful external integration. The investigation similarly advocates for the Red Cross Society to ponder participation as well as communication of their procedures to suppliers to upsurge their buoyancy in the process and bring them on board to comprehend the facility's necessities and make them committed to conveying the facilities' prospects. Consider integrating as part of their client amalgamation procedure, the assortment, as well as distribution of crucial data of the respondents. A conclusion made by the investigation is that supply chain integration has momentous influence on enactment of humanitarian aid organizations in Kenya. The results of this investigation posited out that humanitarian aid organizations have actual communication amid all the supply chain cohorts. Sharing information permits humanitarian aid establishments to decide on better selections and to make well-versed choices in the occurrence of difficulties or tragedies.

Key words: internal integration, external integration, beneficiary integration

1. INTRODUCTION

Supply chain integration (SCI) is an essential norm, which, denotes a retreat from the outdated purposeful procedures which were wrought as silos to incorporated commercial procedures both within as well as outwardly, (Childerhouse & Towill 2017). This necessitates the establishment carrying out what they do best founded on the establishment's essential aptitudes as well as uniting with other establishments to offer other resources not accessible within to generate value for the clientele. SCI is considered as an integrative viewpoint which permits the establishment to realize its strategic objective in the acquirement of peripheral resources. The execution of SCI outcome in the upgrading of the organization's recital, effectual as well as precise processes, all geared to streamlining the product/amenity, info, as well as coffers movement from upstream to downstream cohorts.

Notwithstanding the benefits of SCI, intellectuals have suggested more researches geared toward understanding well the convolutions of achieving greater SCI links. A better understanding of the notion of SCI magnitudes and its insinuations has an impact on both the practice as well as academic prominence that will lead to tangible theory-building in SCI since there is no conjunction on the theory to apply when it comes to investigation amid SCI scopes as well as recital. The absence of merging is connected with absence of clear descriptions of SCI as well as its scopes, (Childerhouse & Towill 2017). Supply Chain Integration (SCI) is the gradation to which an establishment deliberately cooperates with its cohorts in running intra as well as inter-organizational procedures, to realize operative as well as effective movements of products as well as amenities, info, money, as well as choices to offer value to clientele, (Flynn, 2019).

There are numerous philanthropic establishments under the parasol of the UNO for example the UNICEF that deals with children's privileges, UNDP which deals with matters regarding development ventures in numerous nations, WHO which deals with matters to do with well-being of people around the globe as well as UNHCR that deals with the anxieties of immigrants comprising resettlement, (Coipuram, 2018). Emergency circumstances like terrorist attacks, natural catastrophes, as well as local power outages from the past numerous years have all emphasized the low echelons of catastrophe readiness that are at several companies. Supply chain interruptions instigated by exterior dealings can have a noteworthy monetary as well as operative influence on companies not well equipped. Consequently, refining catastrophe readiness in supply chains is perilous, (Hale and Moberg, 2019).

1.1.1 Internal integration

Internal integration is essential in the organization and relays to information distribution as well as working together more tactically, (Koufteros, 2017; Zhao, 2019). According to Horn, Scheffler, and Schiele, (2017), inner integration is vital and is considered the building chunk to exterior incorporation, (Droge, 2018). Most studies on internal integration have engrossed on the affiliation of inner integration on establishments recital, while others have scrutinized inner amalgamation as a mediator of the affiliation amid exterior amalgamation as well as recital, (Schoenherr & Swink, 2019). Some of the pointers for gaging interior amalgamation are, amid others, collaboration, mundane gatherings, cross-functional teams, as well as the use of enterprise resource planning schemes, (Ataseven & Nair, 2017).

1.1.2 External integration

External integration incorporates both the upstream as well as downstream procedures of the establishment's supply chain cohorts with the purpose of augmenting value to entire chain players which comprise both client as well as supplier amalgamation, (Flynn, 2018). Supplier amalgamation is dependent on the establishment cooperating with the suppliers concerning info sharing; the supplier has two-pronged aims of offering the products required by the organization as well as sharing their proficiency and acquaintance for a syngeneic affiliation with a view of meeting the client prospects, (Narasimhan, 2017).

Supplier incorporation encompasses association, direction as well as info sharing activities amid the establishment as well as the suppliers with the purpose of harmonizing the establishment information into sellers' procedures, aptitudes, restraints and eventually permitting more proficient planning, predicting, product, procedure design, as well as transaction management, (Schoenherr & Swink, 2019; Narasimhan, 2020). Yuen and Thai (2017), claim that when companies acknowledge suppliers as a perilous tactical partner has a mammoth stake in their general hallucination, they can effortlessly halt the inert as well as preventive public procurement dogma forced practices to enhance value to the course. Equally, client incorporation is cooperating with the company's clientele via distribution of info to meet the customer's requirement and expectations, (Zhao 2017; Wong, 2018).

1.1.3 Beneficiary integration

Beneficiary integration encompasses planned information distribution in addition to partnership amid the firm as well as clientele with the main goal of enlightening perceptibility via the endowment of premeditated intuitions into market anticipations as well as prospects, (Schoenherr & Swink, 2016). Furthermore, an establishment that is copiously incorporated with its clientele attitudes to benefit via rapid problem tenacities, timely errands harmonization, cost, as well as decrease of inventories, deciding of superiority matters in good time as well as reduction in waste, (Wong, 2017).

Statement of the Problem

Supply chains connect the foundations of "supply" (suppliers) to the proprietors of "demand" (end clientele). In a distinctive philanthropic supply chain, governments as well as NGOs are the main players involved. Governments have the key influence above political as well as fiscal circumstances and directly impact supply chain procedures with their choices. Coordination as well as management of catastrophe supply chains has perplexing glitches. The supply web is enormous as well as intricate with plentiful actors, and it is difficult to organize all of them in conjunction with all the stuffs that must be conveyed. Notwithstanding the diverse cultural, dogmatic, topographical as well as historical variances amid them, partnership as well as specialty of the errands amid NGOs, military, administration as well as private business are gradually wanted in the benevolent supply chains, (Wassenhove, 2016).

Notwithstanding being proficient and cognizant of the main points in philanthropic supply chains, individuals in control of logistics as well as supply chain administration in most philanthropic establishments are not habitually specified in this expanse, therefore they are not specialists in the tools for unravelling the glitches that may ensue during the processes. There might also be domestic obstacles for instance the requisite of unnecessary paper exertion, and explicit strategies of the area that might cause extra deferments, and exterior hitches owing to extraneous associations, (Ergun, 2019). Philanthropic supply chain management has engrossed a number of scholars. Torabi (2018) did an investigation on philanthropic supply chain management Bent. The investigation revealed that philanthropic supply chain administration is flatterer a mainstream of investigation amid business conservatories in reply to the rising inclination of catastrophes all over the world.

In recent years, humanitarians have faced enormous force from the benefactors, promising millions in aid as well as goods, to demonstrate that they are meeting their goals in the utmost effectual as well as operative manner. 80% of philanthropic establishment's processes is used on logistics as well as Supply Chain Management (SCM). Supply chain encounters confronted consequently deteriorate philanthropic procedures generating a lot of vagueness amid philanthropic establishments, (Kimani, 2017).

Ergun (2019) similarly did a research on philanthropic supply chain management. The research revealed that many encounters of benevolent supply chain are connected with the demand as well as supply of materials. EUISS and ICRC (2017) in a mutual report on town encounters on benevolent tests signpost that the challenge is to pay attention on ventures on fundamental benevolent action knowing that it happens in a setting characterized by superior evolving as well as structural inadequacies. Nyamwange and Nyaguthie (2019) in their research on benevolent logistics encounters concentrating on lessons gained from Somalia conclude that logistics of benevolent assistance are confronted by many encounters as well as stressed the prerequisite for further acquaintance and standards to aid in operative as well as effectual benevolent supply chains. The preceding researches have not focused precisely on supply chain integration and how they affect operational performance of humanitarian organizations.

The encounters philanthropic establishments face varies from different countries. One nation's challenges might not be another nation's encounters. Consequently, there is a prerequisite to carry out an investigation to inaugurate the effects of supply chain integration on operational performance of humanitarian organizations in Kenya. This assisted in likening the condition in Kenya with other nations. This research consequently sought to determine the influence of supply chain incorporation on effective recital of humanitarian organizations.

Objectives of the study

- i. To determine the effect of internal integration on the performance of humanitarian organizations in Kenya Red Cross society, Nairobi City County
- ii. To establish the effects of external integration on the performance of humanitarian organizations in Kenya Red Cross society, Nairobi City County.
- iii. To determine the effects of beneficiary integration on the performance of humanitarian organizations in Kenya Red Cross society, Nairobi City County.

LITERATURE REVIEW

Theoretical Literature

Resource Based View Theory

The RBV theory was discovered by Wernerfelt in 1984, and has even since advanced into a planned thought of progression, (Cleland, 2009). Depending on this observation, establishments improve their competitive advantage from their aptitude to gather as well as advance a suitable mixture of resources. Resource Based View (RBV) Theory elucidates that identification as well as possession of inner planned resources underwrites to a company's aptitude to make as well as espousing a modest gain and expand SC recital, (Shalakra, 2015). A resource is well-thought-out to be tactical if it meets certain standards-cherished, non-substitutable, detailed or intermittent as well as imitable to contribute to improved SC recital of the organization (Barney, 2017). Resources need to be proficiently managed as well as subjugated given the varying exterior conditions that an establishment encounter in the modest business situation, (Lippman & Rumelt, 2018).

For the humanitarian organizations, Fonseca et al (2017) claim that the inconsistencies amid establishments in respect with funding is as an outcome of distinctive strategies combined and therefore increases performance and the obtainability of company's funding. This infers that frail strategies will distress humanitarian organizations' aptitude to admittance money and in an imperative aspect forecasting company's admittance to funding as it designates the aptitude of the companies to settle the loan. The potential proposition for resource dependence theory is diverse. At first, bordering switch of Businesses over its acquaintance to the market forces or the exterior setting and the usage of the petite-period agreements might lead to companies being commercial leaning, (Poutziouris, 2016).

Contingency Theory

Contingency theory signposts that in varied circumstances, diverse elucidations might attest to be operative (Barney, 2012), instead of proliferating entirely pertinent business administration philosophies, the theory tries to establish that diverse circumstances compel diverse organization edifices, (Odhiambo, 2013). Establishments are pretentious by copious eventualities comprising milieu, size as well as know-how. These eventualities are accountable for increasing the detailed edifices as well as undertakings of an establishment. When there is an absurdity amid the depending variables as well as the edifice, the establishment shall accomplish inferior recital, (Akintoye, McIntosh & Fitzgerald, 2010).

Kalakota and Robinson (2017) indicated that with the aim of augmenting supply chain recital for practical as well as inventive products, an establishment need to alter its administrative physiognomies as well as establishing its supply chain drivers for example board funding as well as info distribution to generate an effectual as well as receptive supply chain, (Lee, 2016). Operative supply chain amalgamation shall probable be tangled to an assortment of tactical, conservational, human as well as processes variable. For efficacy as well as efficiency, a fit need to exist amid explicit supply chain amalgamation as well as the tactical as well as environmental situations, (Christopher, 2016). This consequently harangues to the quintessence of inventory administration in the execution of supply chain administration practices.

Conceptual Framework

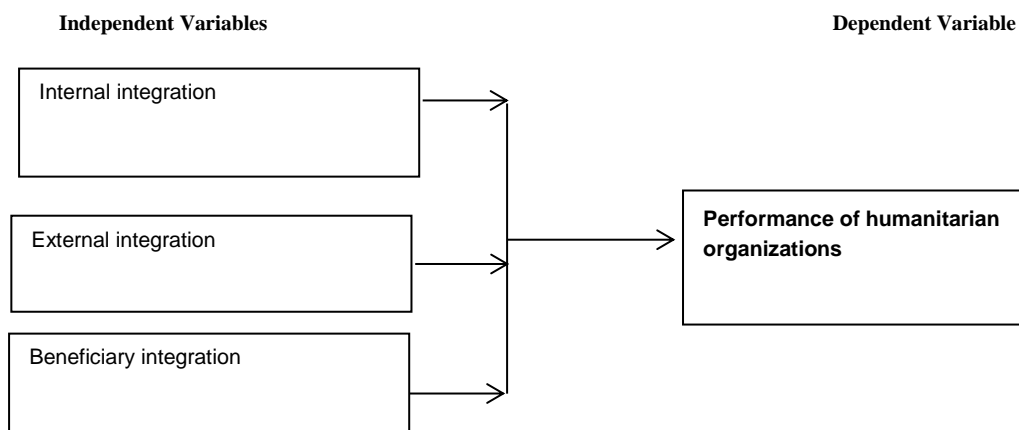


Fig 1: Conceptual framework

RESEARCH METHODOLOGY

Research design

Creswell (2013) defines a research design as a master plan developed by a researcher to guide their data collection and analysis process with the aim of achieving study objectives. The descriptive design was used in the investigation. The design was used to define the characteristics of the independent variables. This was appropriate to obtain gen concerning the present prominence of the spectacle to designate what the modern state of matters is with respect to the variable of the research.

Target population

The target population was 300 employees of Kenya Red Cross Society in Nairobi City County. The population was divided into three sets with varied segments of top, middle and lower management.

Sample and Sampling Technique

A sample is a smaller set of facts that an investigator selects from a larger populace using a well-defined assortment way, (Chandran, 2016). Sampling is the act of picking a lesser set of respondents or matters from a target population in an investigation to take part in a study, (Kothari, 2018). The sample size was determined using the formula by Cochran and Snedecor (1989) and the sample size determined as:

$$n = N / (1 + Ne^2)$$

Data Collection

The investigator established facts gathering tools for primary data. The questionnaire, a gathering tool of facts to which the respondent respond in written form was considered by the investigator. It contained questions in word format that was dispersed to the respondents. General gen was covered in the first part whereas the second part captured questions linked to the objective of the research. A 5-point likert scale structural questionnaire was applied.

RESEARCH FINDINGS, ANALYSIS AND PRESENTATIONS

Response Rate

The investigation targeted 171 participants of which 60 of the questionnaires were attended to with precise level of 35%. Mugenda and Mugenda (2008) indicated that a response rate of 50% is satisfactory, 60% is good and above 70% is excellent. Therefore, the response rate of 35% was considered fair to examine the Supply chain integration and performance of humanitarian organizations in Kenya.

Reliability of the data

Reliability result showed that human capital efficiency had an acceptable reliability of 0.904, beneficiary integration had an acceptable reliability of 0.757, internal integration had an acceptable reliability of 0.750, while external integration had an acceptable reliability of 0.790. Lee Cronbach pointed out that the acceptable reliability threshold should be above 0.70. Table 5 shows the reliability outcomes.

Table 5: Reliability

Variable	Number of items	Cronbach's Alpha	Decision
Internal integration	5	.750	Acceptable
External integration	5	.790	Acceptable
Beneficiary integration	5	.757	Acceptable
Human capital efficiency	5	.904	Acceptable

Regression analysis results**Table 15: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518 ^a	.268	.260	.747

a. Predictors: (Constant), internal integration, external integration, beneficiary integration and human capital efficiency.

The model summary results in table 14 shows that the unadjusted R square values of .518. This is the coefficient of determination which implies that the set of independent variables in this research accounts for 51.8% of disparities in the supply chain integration in humanitarian organizations. The remaining percentage (48.2%) is accounted in lieu of other variables outside the model. The outcome indicates that acquaintance as well as gen concerning the independent variables offers a great proportion of gen concerning performance of humanitarian organizations in Nairobi County. ANOVA results in table 16 assessed the model fitness.

Table 16: ANOVA

Model		Sum of Squares	Df	Mean of Square	F	Sig.
1	Regression	13.221	3	17.892	32.048	.000 ^b
	Residual	6.864	56	.430		
	Total	20.085	59			

a. Dependent Variable: Performance

b. Predictors: (Constant), internal integration, external integration, beneficiary integration and human capital efficiency

The ANOVA findings showed that the F_{ratio} is 32.048 with a corresponding p-value of .000. This shows that the model is fit. The anticipated model supply chain integration (internal integration, external integration, beneficiary integration and human capital efficiency) to performance of humanitarian organizations is a good model

Conclusion

Based on the investigation upshots, the researcher came up with suppositions on the technique where supply chain integration relates to performance of humanitarian organizations. A conclusion made by the research is that supply chain amalgamation has substantial impact on performance of humanitarian aid establishments in Kenya. The results of this investigation showed that humanitarian aid establishments have operative statement amid all the supply chain cohorts. Sharing gen lets humanitarian aid establishments to decide on enhanced choices and to make conversant judgments in the occasion of predicaments or adversities. Furthermore, when players have eminence gen, it leads in enhanced harmonization as well as making conversant decisions, which interprets to better amenities in lieu of beneficiaries.

The contribution of the numerous varied players contributed to the intricacy of relief processes therefore calling for supply chain amalgamation as well as suitable harmonization of humanitarian accomplishments. In contrast, the outcomes of this research showed that there is meagre synchronization as well as poor gen sharing amid the humanitarian players during inter-agency adversity reaction therefore negatively prompting shared decision-making as well as engagements. The prerequisite for harmonization in inhibition of predicament is unobstructed, as lack of harmonization has been seen to expanse in certain fiasco, which then lead in predicament escalation and perhaps a greater number of victims. Failure of humanitarian aid establishments to collaborate can lead to concentration of support in one place while overlooking others.

Recommendations

The investigation made interrelated dogma commendation as informed via the outcomes. The research has established that SCM integration is very momentous in augmenting enactment of universal humanitarian organizations. All such establishments must be advised to embrace the notion so that they can realize the benefits of an incorporated SCM function. It is also palpable that SCM amalgamation has allowed international humanitarian establishments realize better enactment. Other establishments must also be fortified to espouse the same so as to offer quicker as well as effective goods, works and amenities to the recipient.

The research commends vigorous as well as operative Internal Integration by reinforcing their competences in the system, data, as well as process amalgamation before they can engross in evocative external incorporation. The research also advocates for the Red Cross Society to deliberate engrossment as well as communication of their procedures to suppliers to upsurge their assurance in the course and bring them aboard to comprehend the facility's necessities and make them dedicated to delivering the facilities' anticipations. Consider integrating as part of their client amalgamation procedure, the assortment, as well as distribution of crucial data of clients who visit their institutions.

The research recommends that Red Cross Society must advance safe as well as electronic health records of clients, which will make well-being gen accessible electronically as well as gladly reachable in lieu of decision making. The investigation commends that forthcoming researches contemplate on probing the effect of other aspects that were not found to be momentous in this research. Such gen will enlighten the health amenities on how to adequately incorporate these aspects of SCI into the processes. Given that SCI is vigorous, it would be fascinating to have a research carried out over time to scrutinize the upshot of supply chain integration magnitudes and working performance and scrutinize the multiplicative influence over time. Additionally, impending researches, given the vitality SCI, must integrate exogenous variables that facilitate on the influence of SCI dimensions on operative recital.