



STRENGTHENING IN CHARITABLE LOGISTICS

TUNCAY BIÇAKÇI

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ÖZET

İNSANİ YARDIM LOJİSTİĞİNİN GÜÇLENDİRİLMESİ

Bıçakçı, Tuncay

Yüksek Lisans

Tez Danışmanı: Doç. Dr. M. Hakan Demir

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Bu tez, Haiti'de 1 yıl BM polisi olarak bulunduğum sırada, kuruluşlar arasında konsolidasyon faaliyetlerinin yetersiz kalması üzerine yazılmıştır. Master tezinin konusu olarak araştırılmasına karar verildi. Tezin faktörü, insani lojistiğin güçlendirilmesi konusundaki endişelerin ana hatlarını ortaya koymaktır. Bu tezde insani tedarik zincirlerinde malzeme konsolidasyonunun ana hatları verilmektedir. Konunun ayırt edici yönlerini, satın alma ve kitleme üzerine analitik bir çerçeveye götüren ana bir literatür incelemesi yoluyla keşfeder. Ayrıca tedarik zinciri yönetimi ve sosyal sorumluluk alanında yüksek lisans tezi kapsamında yazılmıştır. Bu alanda temas edebilecek farklı insani lojistik çalışmalarına ek olarak, muhtemelen konularının fazladan teorik bir açıdan fikirlerin geliştirilmesiyle ilgilenen uygulayıcılara faydalı bir miras sağlamaktır. Yazar, ilk olarak, tez ve sınav yöneticisi, lojistik yönetimi bölümü Doçent Dr. M.Hakan Demir, Doçent Dr. Bengü Sevil ve bu çalışmada paha biçilemez katkı sağlayan Profesör Dr. Ömür Yaşar Saatçi'ye teşekkür eder.

Anahtar Kelimeler: İnsani Yardım, Yardım Lojistiği, İnsani Tedarik zinciri, Doğal Afet, Reaksiyonu, Güçlendirme.

ABSTRACT

STRENGTHENING IN CHARITABLE LOGISTICS

Bıçakçı, Tuncay

Graduate Program

Supervisor: Associate Professor Dr. M.Hakan Demir

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This thesis was written after as a UN Police stay of a 12 months in Haiti where consolidation activities were inefficient among agencies. This caused the decision to perform a research on the subject as master Thesis work. The factor of the thesis is to provide an outline of concerns for strengthening in humanitarian logistics. On this thesis an outline of material consolidation in humanitarian supply chains is provided. It discovers distinctive aspects of the subject thru a main literature review leading to an analytic framework on procurement and kitting. Also was written within the context of a master Thesis in supply Chain management and Social responsibility. It must provide beneficial heritage for different humanitarian logistics studies that could contact in this field in addition to for practitioners that is probably interested by know-how strentghening of their topic from an extra theoretical angle.

The writer would love to renowned, first and principal, his thesis and examination manager associate professor M.Hakan Demir in Logistics management, associate professor Bengü Sevil and and Professor Yaşar Saatçi whose steerage confirmed priceless on this work.

Keywords: Humanitarian Aid, Charitable Logistics, Humanitarian Supply Chain, Disaster Reaction, Strengthening

TEŐEKKÜR

Arařtırma boyunca yardımlarını ve bilgilerini esirgemediđi için hocam Sayın Muhittin Hakan Demir'e, en içten dileklerimi sunmak isterim.



ÖNSÖZ

Bu tez çalışmasında, insani yardımların ihtiyaç sahiplerine ulaştırılması konusunda karşılaşılan sorunlar ele alınarak, çözüm önerileri sunulmaya çalışılmıştır.

Öncelikle tez konusunu seçerken isteklerimi göz önünde bulundurup bana yardımcı olan tez danışmanım Doç. Dr. M. Hakan Demir'e teşekkürlerimi sunarım. Yol gösterip bana vakit ayıran Doç. Dr. Bengü Sevil, Prof. Dr. Yaşar Saatçi ve bu zorlu tez sürecinde benden desteğini bir an için bile esirgemeyen bütün hayatım boyunca benden desteklerini esirgemeyen her zaman yanımda olan sevgili aileme teşekkürlerimi bir borç bilirim.

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PART 1: INTRODUCTION

Foremost disasters took place at some stage in history and their legacy has been recorded by using the scholars and observers who witnessed their aftermaths. Such big scale disasters still arise; current examples encompass the Japanese (2011) and Indonesian (2004) Tsunamis, the Haitian Earthquake (2010) and Philippine's Haiyan hurricane (2014). Natural disasters tendencies (EM-DAT the international disaster Database, 2011) from 1954 to 2019 imply a relative growth within the wide variety of disasters, a growth within the number of human beings suffering from disasters, a growth within the economic cost and a lower within the number of human beings killed in disasters. Occasionally natural disasters may be compounded through industrial disasters which includes in Fukushima (2011) to complicate further an already disastrous scenario.

Any other trouble that has affected the wellness of people is violent conflicts. Conflicts may be among states and also can encompass non-state actors (Uppsala College Branch of Peace and Struggle Studies, 2014). Those actors becomes concerned in conflicts for a large number of motives that may range from poverty and inequities among agencies to a loss of state legitimacy. Occasionally those motives may even stem from natural disasters which includes droughts which exacerbate the problem of water get entry to among groups.

Each conflicts and disasters make contributions to create humanitarian disaster not only from financial trouble but also thru loss of life and destruction which displaces, injures and kills humans. A number of the resource dispatched to cope with humanitarian crises is created from material items and may cover a wide variety of desires for the human beings affected which includes: health, education, sanitation, shelter, meals, and so on. Those desires can also vary in line with various factors which includes the purpose of the disaster, its depth, its area in addition to the wide variety of human beings affected. Those elements may also affect how the products will reach the human beings affected with humanitarian disaster regularly making access and management of the transportation of products tough. Troubles that complicate the management of supply chains in humanitarian crisis encompass infrastructure disruptions, loss of sources and unknown demand (Day et al., 2012;

Balcik, et al., 2010). Some other vital attention is the truth that the cost of transporting the gadgets to the site of the humanitarian crisis can account for a vital quantity of the cost of the objects. Those excessive costs, the sector problems, the huge quantity of human beings affected (353 disasters and ninety six million affected in 2013 (EM-DAT The Worldwide Disaster Database, 2011)), the vital sums of cash spent on humanitarian resource and improvement (\$12 billion was provided for humanitarian resource and \$156 billion was provided for improvement in 2011 (global Humanitarian assistance, 2014)) in addition to the significance of performance and fairness in humanitarian operations (Van Wassenhove and Pedraza Martinez, 2012) make the study of consolidation applicable. Certainly, consolidation can provide advantages within the commercial enterprise area, it could lessen transportation, procurement and warehousing costs as well. This problem of cost is particularly applicable while thinking about the truth that investment appeals through the UN frequently go partly unmet; in 2013 with 19 investment appeals, the highest funded attraction was Afghanistan with 77% of asked investment acquired and the lowest was the Philippines Bohol earthquake attraction with 21% of investment desires met (Smith and Swithern, 2014). Through addressing cost and performance problems within the supply chain. Thru material consolidation, humanitarian agencies can collect extra lifesaving material and spend much less on coping with and buying it.

1.1 Literature Review

Humanitarian interventions have historically centered on making sure a proper to existence for refugees within the short time period (Betts and Collier, 2017). The historic technique to refugees has been to organise camps (Hunter, 2009; Betts and Collier, 2017). Current humanitarian responses are discovered to be insufficient for protracted crises. Such strategies are actually criticised for being short term, adverse to human rights and dignity, and failing to provide instructional and livelihood possibilities (Hunter, 2009; Hyndman and Giles, 2017). Camps are observed to limit the rights of refugees and restricting their monetary possibilities (Hunter, 2009). Strengthening refugees' livelihoods and assisting their monetary self-reliance is truly an urgent issue (Calabria and Omata, 2016).

Value effective answers should assist longer-term initiatives. Responses should be tailored to cope with longer-term crises. Global management of crises should date been inefficient. Advanced strategic making plans is wanted. The potential of host governments should be reinforced. Donors should work with numerous actors to be best (Mitri, 2015). Refugee resilience may be reinforced through that specialize in private features, assist and faith. Resilience may be undermined through language limitations, racism, discrimination, and labelling the trauma story (Hutchinson and Dorsett, 2012).

Intolerable conditions from which human beings flee should be addressed thru wide based totally political and humanitarian techniques, in addition to interventions to make sure refugees' fundamental rights and address abuses. Further, new questioning on piecemeal, slow, and developmental strategies to refugee integration is suggested, with resettlement known as a crucial safety device in a complicated disaster. Adequate investment for each emergency humanitarian reaction and longer-term improvement-focused activities is called for (Lindley, 2011).

Microfinance can offer get admission to credit and loans for refugees, who're excluded from set up economic offerings. Those economic offerings to refugees are considered as dignified and empowering. To make microfinance work for refugees necessitates a reflection at the unique traits and situations of refugee populaces.

The focal point should be on increase guidelines for regions suffering from refugees in which the goal populace is constituted through refugees and hosting populations alike (Verme et al., 2016). To conquer the mission of mass displacement, it is vital to reconsider refugee help and to be seeking for methods to promote refugees' monetary ability (Omata, 2016). alternative strategies to humanitarian and refugee management should be evolved that allow and help refugees to self-settle, get admission to legal and social help and take part in and make a contribution to their social and monetary surroundings in significant and sustainable approaches (Ilcan, Oliver and Connoy, 2015).

A movement is required from refugee-oriented emergency resource, toward improvement programs. Governments and global establishments should cooperate to create improvement programs in light of countrywide improvement desires.

This will create jobs and invigorate the countrywide monetary cycle. Responses should be context particular, with distinctive intervention strategies in unique regions. Geographical variations should be taken into consideration when growing regulations, or designing resource programs for refugees (Hourani and Vliet, 2015).

5Refugee rebound advances past the Western personal perception of rebound to an extra communal creation of rebound, which incorporates refugee human beings' broader social context. Work with refugees must take an inclusive anti-overwhelming strengths-primarily based technique. Elements that have been discovered to make a contribution to refugee rebound covered private characteristics, assist and faith. Elements that have been observed to obstruct rebound covered language limitations, racism, discrimination, and labelling the trauma story (Hutchinson and Dorsett, 2012).

The converting ecology of disagreements has led to an extended danger to charitable performers, lowering get entry to for programming and tracking, further to the charitable presence in emergency settings; this withdrawal of worldwide agencies has a dangerous effect on affected populations. This overview objectives to discover strategies, instructions discovered, and satisfactory practices, in order to in the end resource the advent of formal proof-based steerage that facilitates future charitable programming and tracking activities in unattainable struggle settings.

Troubles that complicate the management of supply chains in humanitarian crisis encompass infrastructure disruptions, loss of sources and unknown demand (Day et al., 2012; Balcik et al., 2010). Some other vital attention is the truth that the cost of transporting the gadgets to the site of the humanitarian crisis can account for a vital quantity of the cost of the objects. Those excessive costs, the sector problems, the huge quantity of human beings affected (353 disasters and ninety six million affected in 2013 (EM-DAT The worldwide disaster Database, 2011)), the vital sums of cash spent on humanitarian resource and improvement (\$12 billion was provided for humanitarian resource and \$156 billion was provided for improvement in 2011 (Global Humanitarian assistance, 2014)) in addition to the significance of performance and fairness in humanitarian operations (Van Wassenhove and Pedraza Martinez, 2012) make the study of consolidation applicable. Certainly, consolidation can provide advantages within the commercial enterprise area, it could lessen

transportation, procurement and warehousing costs as well. This problem of cost is particularly applicable while thinking about the truth that investment appeals through the UN frequently go partly unmet; in 2013 with 19 investment appeals, the highest funded attraction was Afghanistan with 77% of asked investment acquired and the lowest was the Philippines Bohol earthquake attraction with 21% of investment desires met (Smith and Swithern, 2014).

Vital realism which was recommend through Roy Bhaskar is located within the center of a spectrum among positivist and interpretivist epistemologies. This particular epistemology creates information thru the study of causal relationships in social sciences wherein a couple of systems and mechanisms can have a tendency to result in certain occasions or restrict them. The holistic point of view of the systems technique has been diagnosed as having a vital function within the logistics discipline (Lindskog, 2012).

Cooperation, collaboration or coordination are topics frequently present within the literature and material strengthening is a particular sort of centralized coordination. Coordination and partnerships are vital for humanitarian agencies (Balcik et al., 2010) and it requires adequate matching between companions (Akthar et al., 2012). One method to facilitate it is the humanitarian cluster system but horizontal and vertical cooperation between intercluster and intracluster coordination pressure trade-offs due to constrained sources (Jahre and Jensen, 2010). From the humanitarian angle, unknown or tough to plan demand with the shortage of Sources which include investment and human sources (Balcik et al., 2010) could complicate the application of strengthening practices.

Humanitarian disaster all have a security measurement however those who contain conflicts have a more complicated security element that desires to be addressed and can prevent reaction from taking place (Tomasini, 2012). Material strengthening is a preoccupation of humanitarian agencies and certain projects are taken to allow strengthening. One instance is the United Nations Humanitarian Response Depot (UNHRD) (WFP, 2014). Any other instance is the cluster technique recommend via the United Nations Office for the Coordination of Humanitarian Affairs in 2005 with the purpose to growth coordination (United Nations Office for the Coordination of Humanitarian Affairs, 2014) between UN and non-UN organizations in disasters.

This cluster is controlled via WFP and, throughout the 2010 earthquake in Haiti, it managed the strengthening of products for transportation between Santo-Domingo and Port-au-Prince (Logistics Cluster, 2010). Schulz and Blecken point out ability consolidation stemming from shared warehousing, transportation and procurement thru using horizontal cooperation (Schulz and Blecken, 2010). Strengthening activities also are one of the activities installed location in Darfur through the WFP as lead coordinator for the logistics cluster (Tomasini, 2012). The cluster technique installed location through the United Nations office for the Coordination of Humanitarian Affairs (OCHA, 2014) regroups primary humanitarian agencies and allows enhance cooperation among them throughout emergencies. Strengthening can additionally take place among humanitarian agencies and the army in which warehousing and installations are shared to enhance operations (Sebbah et al., 2013).

The United nations throughout all its organizations procured a total of 15,372 billion US\$ with 44% in items and 56% in services in 2012 (UNOPS, 2013). The UN in addition to other authorities or NGOs is situation to strict procurement necessities that concentrate on open competitive bidding presented to the lowest cost provider both domestically and internationally (UN Procurement Division, 2013). This technique permits for transparency toward providers and accountability to the donors. The UNHRD is also an awesome instance of the way procurement strengthening may be carried out for a couple of agencies (WFP, 2014). Procurement activities in disaster reaction will arise immediately at a nearby level or on a worldwide scale based on the sector checks of the desires of the affected populace (Blecken, 2010). Kits are a part of the reaction activities of the primary humanitarian agencies (Berger, 2013). They may be notably simple to be immediately given to the beneficiaries or notably complex to cover a huge need including the Inter-agency health kit (World Health Organization, 2011).

There's no clear cut case to pick between kitting and line stocking (Hua and Johnson, 2010; Caputo and Pelagagge, 2011) but, kits act as manner of strengthening because materials are regrouped before getting used at a later time and factor within the supply chains. Material strengthening via kitting also can be carried out immediately via a supplier (Lanier et al., 2010) and act as a way to facilitate management, strengthening volumes, lessen supply chain complexity and achieve better service.

There are ten main humanitarian agencies that procure kits from providers to distribute them within the field (Berger, 2013) in case of humanitarian crisis. Theoretical framework which includes a literature evaluate uses a particular technique called content analysis to study written texts. This technique has been utilized in a wide variety of various research fields (Seuring and Gold, 2012) and attempts to apprehend the meaning and context of the written texts decided on and their content.

UNICEF performs a vital function in responding to humanitarian troubles via the distinctive programmes it operates. Those programmes encompass young infant survival and improvement, primary schooling and gender equality, infant protection, policy advocacy and HIV/AIDS (UNICEF, 2013). To assist its programmes and the imposing companions it works with, UNICEF provided imposing companions with material goods and services which amounted to \$2.84 billion in 2013 (UNICEF Supply Department, 2014). The procurement services for companions procure for more than a hundred international locations for a cost of \$1.36 billion in 2013 (UNICEF Supply Department, 2014). One a part of the entire material procured and introduced are kits of which UNICEF makes use of a wide variety; at its international warehouse alone it fulfilled orders 362 000 kits in 2013 (UNICEF Supply Department, 2014). Thru their supply chain, humanitarian agencies flow items to gain this aim and, as such, the overall performance of those supply chains is also applicable with postpone cost, quantity of shipment, vital commodities, equality in achieving beneficiaries and achieving inclined populace (Gralla et al., 2014; Huang et al., 2015). Kit management, using Kits is pretty commonplace and at the least 10 primary resource agencies use them (Berger, 2013).

This overview demonstrates that whilst many agencies are taking part in faraway programming or tracking, few articulate their reviews in writing to disseminate instructions discovered immediately to different agencies or stakeholders, or to be to be had usually to manual future operations. extra research of the dispute and requires of nearby companions and personnel who enforce tasks is needed, in addition to research of beneficiary views and the way faraway operations effect their groups. worldwide, national and nearby companions have to all be endorsed to record their work and keep in mind incorporating regions of operational studies from the onset of

faraway programming and tracking activities, which will enhance expertise of satisfactory practices and create realistic equipment and tips that may be used to enhance humanitarian aid shipping in inaccessible struggle settings.

Humanitarian Supply Chain and Key Achievement Elements: There's no easy manner to provide an explanation for the humanitarian supply chain, in precept, it is distinctive from its business counterpart, and it adapts as a result to the sort of catastrophe. The humanitarian supply chain is a complicated network of various obligations and activities constructed through numerous actors concerned in a alleviation operation. a standard humanitarian operation usually includes catastrophe alleviation supply chain, this consists of but isn't restricted to activates like desires evaluation, making plans, procurement, warehousing, and distribution of the materials to beneficiaries. Costa et al. (2012) in addition provide an explanation for that humanitarian supply chain resembles plenty with its business counterpart, for example, they share similar activities like coaching, making plans, procurement, transportation, storage tracking, and customs clearance. but, the primary goal of the humanitarian supply chain in movement is to offer the proper materials to the beneficiaries on the proper time and place. in addition recommend that the primary seventy two hours are the most vital hour, and this is the time while desires are assessed and sources are mobilized. in line with Abidi et al. (2014), an effective, efficient and well timed supply chain control is immediately proportional to the fulfillment of catastrophe alleviation operation, the speed with which medication, meals, shelter and water is supplied to the beneficiaries may be the distinction between existence and demise. consequently, it places a lot pressure on humanitarian agencies (LNGOs / INGOs) to carry out every project and activity as efficiently and correctly as feasible. Delays in supplying alleviation to the beneficiaries ought to bring about an augmented variety of causalities. but, in line with Celik et al. (2014), no actor concerned in a humanitarian alleviation operation has enough capacities or sources to cope with the catastrophe on its own. consequently, to reply to a catastrophe efficiently and correctly it is vital for all taking part LNGOs and INGOs to increase their performances. Yadav and Barve (2015) recommend, to enhance the effectiveness and efficiency of a humanitarian supply chain and to systematically control certain activities, it is vital to divide management strategies into elements.

In humanitarian literature, those elements are referred as vital achievement elements (Yadav and Barve, 2015; Kabra and Ramesh 2015b; Eriksson) or Key achievement elements (Oloruntoba, 2010).

Within the final couple of many years, there was a considerable growth within the quantity of disasters global. Those disasters are affecting the world in a reported economical and geographical way. Tatham and Houghton (2011) point out that the disasters have raised from around 220 in line with 12 months within the mid-Nineties to about 350-400 disasters in line with annum in latest years, affecting over 2 hundred million human beings and are predicted to value around US\$2 hundred billion. This unexpected growth in disasters has additionally placed much stress on all actors concerned within the humanitarian supply chain to enhance their performances and to facilitate the beneficiaries effectively and efficiently (Ngwenya and Naude, 2016). A standard alleviation operation entails numerous actors like donors, host authorities, local non-governmental organizations (LNGOs) or international non-governmental organizations (INGOs), army and providers (Maghsoudi et al., 2018; Costa et al. 2012). but, LNGOs and INGOs have a pivotal function to play; they act as an agent to jell all of the additives of the humanitarian supply chain and greater importantly, within the time of distress, beneficiaries look in the direction of them for all of the viable assist they could get (Van Wassenhove, 2017).

Though, neither LNGOs nor INGOs have good enough manner to reply to the disaster efficiently and effectively on their own, and hurdles like excessive urgency, uncertainty, loss of sources and nearby infrastructure could make alleviation operation even extra hard for such agencies (Martinez et al., 2011, Balcik et al. 2010). consequently, Yadav and Barve (2015) recommend breaking down the management procedure into the elements, may assist responsible people to systematically control and enhance the disaster management procedures. those elements are frequently known as vital achievement elements or key achievement elements and that they were considerably studied within the commercial supply chain (Kabra and Ramesh 2015a). But, in line with Van Wassenhove (2017), Literature on humanitarian supply chain or humanitarian logistics is nearly 15 years in the back of its commercial counterpart.

Nevertheless, within the beyond few years handful of researchers like (Celik et al. 2014; Dasaklis and Pappis 2018, Kabra and Ramesh 2015b, Pettit and Beresford 2009, Sridhar and Nagabhushanam 2008) have proven a few interest in information the effect of those achievement elements at the humanitarian supply chain. although, there work especially refers to a few unique situations or is primarily based on a few fuzzy strategies or qualitative interviews for figuring out the importance of those elements.

1.2 Motive of The Thesis

This thesis includes purpose to apprehend the competence and underlying sources for strengthening of materials in supply chains through humanitarian agencies. This thesis provides to the scarce information on strengthening in humanitarian logistics via the presentation of specific research views. The thesis specializes in strengthening of materials and its management especially in procurement, warehousing and transportation. Every of those activities provide an opportunity to strengthening materials together and gain certain advantages. However, those advantages derived from specific strengthening activities are acquired with trade-offs and impose particular management concerns which are associated with the sort of strengthening carried out. Those particular concerns are taken into consideration in each view. Theoretical framework addresses theoretical concerns for humanitarian logistic, procurement strengthening explores the function of procurement strengthening for materials and Kit management explores the function of kits for strengthening materials. The aim of Theoretical framework is to widen a theoretical scheme to better grab motivations and boundaries to strengthening of materials in humanitarian logistics and its research query is: how can a scheme be developed to visualize material strengthening in humanitarian logistics?

The aim of procurement strengthening is to understand and find out how intergovernmental humanitarian organizations can strengthening materials through their procurement activities and its research question is: how do humanitarian organizations manage to strengthen global procurement goals? The cause of Kit management is to understand and find out how strengthening takes place through the specific use of kits in humanitarian supply chains and its research question is: what

are the preferred resources to set up kits and what do they offer to humanitarian organizations?

Strengthening of materials takes place within the context of procurement, warehousing and transportation; those three activities may be carried out via the supplier, through the agency or by way of the client relying on the decision to strengthening the materials. On this thesis the three sorts of strengthening are mentioned (Table 1) with the belief that a single agency manages strengthening either internally or externally relying on the sources it has available to accomplish that. Strengthening may be understood as a particular sort of competence of companies and this thesis and the views use dynamic abilities to apprehend what are the sources required to gain the organizational competence for strengthening within the context of humanitarian.

Supply chain: With the proper sources, humanitarian agencies can cope with limitations to strengthening and benefit from the specific incentives strengthening can provide.

Table 1. Topics and material strengthening types discussed

		Topics		
		Theoretical framework	Procurement strengthening	Kit management
Material strengthening	Warehouse strengthening	Overview of strengthening management	Procurement strengthening	strengthening through kitting
	Procurement strengthening			
	Transportation strengthening			

Theoretical framework is tries to construct a framework to better apprehend strengthening in humanitarian logistics. It is primarily based on content evaluation and uses an examination of current literature to increase its coding. Procurement strengthening is a case study that explores strengthening in procurement within the context of humanitarian logistics.

Kit management follows the identical layout as Procurement strengthening however specializes in kitting and has a couple of cases. The research questions for each view are as follows:

- a. Theoretical framework: how can a framework be evolved to conceptualize material strengthening in humanitarian logistics?
- b. Procurement strengthening: how do humanitarian agencies manage the strengthening of worldwide procurement wishes?
- c. Kit management: what are the desired sources to arrange kits and what do they provide to humanitarian agencies?

1.3 Positioning of The Thesis

This thesis provides are set within the context of supply chain management. The supply chain management and logistic flow of scientific literature is instead massive and special sub literature streams are drawn upon for each view. Theoretical framework draws from the literature on general strengthening practice and humanitarian logistics. Procurement strengthening draws from the literature on procurement strengthening and humanitarian logistics. Kit management draws from the literature on kitting and humanitarian logistics.

The primary level of information that is addressed is the meta-level or philosophy of science in which research paradigms are mentioned. The second level is the field level in which theories and strategies are mentioned. Those two first levels represent the primary dialogue of the positioning of the thesis whilst the third level, the practice level, may be observed within the views themselves. The rest of this phase maintains through discussing research paradigms then addresses the idea used in every view and links the idea to the strategies thru a short review of the research method.

1.4 Research Criteria

To keep in mind the research paradigm within which this thesis positions itself, it is critical to apprehend its underlying ontological and epistemological positions. The attention of what's knowledge or the "nature of knowledge" is called ontology. In social sciences, the most commonplace ontological dichotomy is an opposition

between nominalism and realism in which nominalism bases the social world on names and labels to shape truth whilst realism defines the social world as outside to individual cognition and made of tangible structures. This thesis is set within the context of realism in which an outside truth is present and the objects which are defined exist objectively.

The talk associated with epistemology additionally applies within the context of logistics and supply chain management. The sector of supply chain management and logistics is pretty frequently portrayed as being single sided in the direction of positivist epistemology. This could generally be defined through the emphasis of using quantitative techniques. But, this thesis does not comply with the common positivist epistemology and rather is based totally on vital realism.

Vital realism hinges at the ontological concept of realism and considers that there's a distinction among what's actual (items, systems and power), actual (whilst items, systems and powers are activated) and empirical (what's observable). Vital realism which was recommend through Roy Bhaskar is located within the center of a spectrum among positivist and interpretivist epistemologies. This particular epistemology creates information thru the study of causal relationships in social sciences wherein a couple of systems and mechanisms can have a tendency to result in certain occasions or restrict them. Those characteristics make vital realism well suited with numerous research techniques relying on what's being studied and what are the questions associated with the research problem.

The underlying purpose of the thesis of looking to recognize the activities and capacities associated with strengthening of materials in supply chains through humanitarian agencies displays the underlying concept of information introduction of vital realism. Certainly, through attempting to recognize strengthening, it specializes in the tendency of agencies to self-organize. Their supply chains so as to achieve a certain final results (strengthening). Moreover, supply chains are based totally on a complicated set of entities and their interactions thru distinctive sorts of flows. This thesis envisions that every supply chain and its flows may be prepared in a large number of methods that could exchange during time and feature distinctive sorts of outputs to achieve material strengthening.

To purpose to recognize those distinctive systems and their mechanisms results in the introduction of information at the inclinations of supply chains to acquire material strengthening.

1.5 Elemental Frame of Reference

There's a large number of theories related to supply chain management and logistics. Lots of those theories can provide exciting insights for material strengthening. To gain a greater holistic review of the viable frame of reference for this study, it is useful to check a number of the unique theories within the discipline of supply chain with the general concept that strengthening may be seen as one of the practices that may come out from integration and collaboration. To acquire this holistic point of view, a selection of theories diagnosed in short mentioned whilst concerns for strengthening are put forward in table 2.

Most of the theories provided in table 2 try to give an explanation for consolidation that takes place among agencies. They may be divided in kind of two classes; either static or dynamic. The focal point of the 2 static strategies of primary agent idea and transaction cost attention on lowering costs and on maximizing performance; those principles also are observed within the principle of general cost evaluation. As plenty of studies on strengthening specializes in performance and strengthening is frequently carried out thru third parties within contractual agreements, primary agent idea and transaction cost evaluation can be exciting avenues to study strengthening. The primary agent-idea proposes an exciting way as strengthening of material is frequently undertaken through an agent for any other agency, frequently within the context of third party logistics company or freight forwarders who use economies of scale in strengthening. In this example, the individual organizing the strengthening may not be willing to share all data about its operations so as to growth its margin. Proper contracts with companions are therefore key to share the financial savings in economies of scales in a manner that each primary and agent are happy. Transaction costs evaluation additionally offers exciting insights in material strengthening. This technique is just like the troubles introduced in primary agent idea however additionally it is other cost elements than simple contractual engagements which includes the search and data costs. As strengthening is undertaken through an agency it's going to lessen the whole quantity of transactions required as every transaction

will cover a bigger percent of its quantity of activities. This in effect may assist lessen the transactions costs through lowering duplicating activities.

Table 2. Supply chain management theories in relation to strengthening

Theory	Considerations related to strengthening
Principal agent theory	Contractual arrangements and their management influences supply chain strengthening agreements.
Transaction cost analysis	Transaction costs can bring about strengthening of supply chain by actors thereby reducing the number of transactions because of the greater scope they now cover.
Network Theory	The interactions and relations with its suppliers and clients are the key for any strengthening to be done outside the company.
Resource based view	The capacity to strengthening activities because of specific assets allows certain companies such as 3PLs to develop specific competencies.

This thesis presents use the underlying thoughts of dynamic functionality to recognize strengthening of materials in a humanitarian setting. Strengthening need to be anticipated as an organizational routine or a competency based on sources which can be organized in the agency. The organizational routine of strengthening gives humanitarian agencies the opportunity to put ahead value efficient techniques appealing for donors which in turn assist in obtaining exceptional funding from a couple of resources over the years. The focal point of the thesis is on how the unique sources are organized to allow the organizational competence of strengthening (Figure 1).

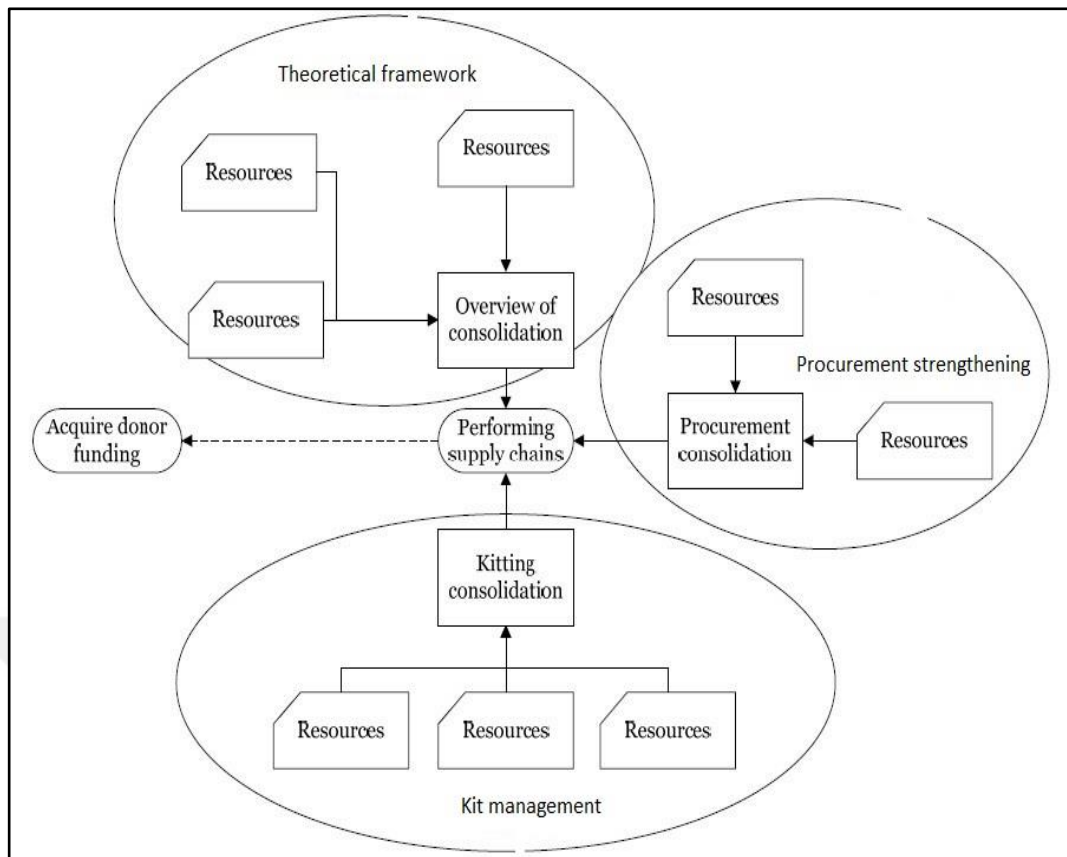


Figure 1. Underlying frameworks

1.6 Research Ways

Research techniques permit tying theories to the proper technique. The research techniques for all 3 views are qualitative and are primarily based on dynamic functionality. However, there are particular concerns to keep in mind whilst assessing research techniques based on the researcher's view of fact and research questions. The systems method suits the underlying concept at the back of the purpose of each view that material strengthening is managed by special entities with distinct supply chain activities and constraints associated with the work of the agencies within the humanitarian setting. The holistic point of view of the systems technique has been diagnosed as having a vital function within the logistics discipline (Lindskog, 2012). The systems technique is also diagnosed as being within the center of the interpretivist-positivist spectrum of epistemologies.

Despite the fact that the paradigm and underlying framework of the 3 views are similar, it must be mentioned that they do not comply with the equal techniques. Theoretical framework makes use of a content evaluation technique within the context of a literature evaluation. Those distinctive techniques will impact the aware scientific reasoning and strategies to create new information. This information is created in Procurement strengthening and Kit management in an inductive way in which the literature evaluation and dialogue of the outcomes drive propositions for in addition research. The material strengthening literature evaluation in view theoretical framework, which makes use of a content material-evaluation technique, creates new information thru the established order of a conceptual framework; the view gives a theoretical framework to recognize the concerns of material consolidation within the humanitarian framework.

1.7 Boundaries

There are inherent limits to the mixture of crucial realism epistemology with case studies and content evaluation techniques. In Theoretical framework, using content evaluation of a couple of views in a literature evaluation gives an outline of generalizations toward material strengthening in scientific literature. The findings have a totally low explanatory power and may be tough to generalize to particular agencies as those may have very particular and specific operational constraints that change over the years and region. For Procurement strengthening and Kit management, using a single agency and in depth qualitative methods results in findings that also have confined generalizability as the relations discovered between the objects are an intrinsic a part of the item. Though, Procurement strengthening and Kit management each have gadgets of evaluation to assist evaluate the management activities of the agency.

The selection of dynamic functionality additionally has a few inherent limits. The primary most apparent restriction is the focal point on the belief that agencies will clearly exchange to fulfill rising demanding situations. But, within the context of humanitarian agencies, the legal context in their operations and their resources of investment may restrict or inhibit certain activities that cause exchange within the organizational abilities.

The activity of material consolidation is a confined subset activity carried out inner supply chains; it isn't undertaken within the context of each supply chain. Certainly, certain agencies may use decentralized or disaggregated activities to acquire its organizational desires. This absence of waiting time can regularly be determined in certain supply chains managed in a just-in-time technique which targets to lessen work in development stock, batch size and unit price. Moreover, whilst the fee of materials is extraordinarily excessive as compared to its delivery cost, using non-consolidated transport is probably suitable to hurry up the transport of the materials required. Through restricting themselves to consolidation activities, the views provided on this thesis are confined in their insurance of supply chains. But, this obstacle lets in for a better information and extra intensive information of the phenomenon studied. The other obstacle of the views on this thesis is the context of humanitarian logistics supply chains. Certainly, those supply chains evolve in a particular context which isn't always one which regular commercial enterprise agencies face on a normal basis which include disasters or conflicts in addition to in improvement activities in useful resource bad regions.

1.8 Is Material Strengthening a Matter of Challenge

The truth that strengthening is not generally a research trouble matter commonly addressed in humanitarian logistics is not in essence justification enough for strengthening as a relevant research issue matter. Material strengthening has been studied in plenty of unique contexts in enterprise literature. For humanitarian logistics, the study of strengthening allows flow beforehand research at the properly-researched issue matter of coordination. Cooperation, collaboration or coordination are topics frequently present within the literature and material strengthening is a particular sort of centralized coordination. Coordination and partnerships are vital for humanitarian agencies (Balcik et al., 2010) and it requires adequate matching between companions (Akthar et al., 2012). One method to facilitate it is the humanitarian cluster system but horizontal and vertical cooperation between intercluster and intracluster coordination pressure trade-offs due to constrained sources (Jahre and Jensen, 2010). Coordination and collaboration is also vital among different actors (local and extra-local) for different steps of the disaster segment.

Material strengthening in humanitarian logistics could be predicted to be distinctive than material strengthening practices within the non-public area. Material strengthening is an operational practice with the general purpose of efficiency and performance. Strengthening can lessen expenses or enhance overall performance or occasionally, relying on the approach positioned in area, it could obtain each. Material strengthening requires making plans and infrastructure in order to optimize and mixture material flows. In a commercial enterprise logistic angle, the possibility for demand making plans in addition to the smooth get entry to sources to manage strengthening regularly makes strengthening a general commercial enterprise selection. This selection might be effortlessly outsourced to third party logistics agencies. From the humanitarian angle, unknown or tough to plan demand with the shortage of sources which include investment and human sources (Balcik, et al., 2010) could complicate the application of strengthening practices. Those troubles coupled with the frequently missing or terrible infrastructure and different problems observed within the context of disasters or growing international locations could make the utility of strengthening practices really tougher for humanitarian logistics.

Eventually using dynamic abilities provide an interesting angle in respect to knowledge strengthening in humanitarian logistics. Humanitarian agencies are not-for earnings and their investment comes from offers or donations and, as such, the investments required to successfully installed area strengthening may not be applicable to brief term investment activities. The investment mechanisms additionally exclude supply chains being a vital element of competition as within the non-public area as agencies compete for offers thru their programme activities. Supply chains are as a result considered as a help function for programme activities. But, humanitarian agencies are additionally interested by acting supply chains to enhance their reaction, something that reaction can be. Including to this need for overall performance and occasional competition in supply chains, is the truth that generally many agencies collaborate or coordinate at the ground and as such may share sources to enhance their reaction. Therefore the humanitarian angle for consolidation alongside dynamic abilities should result in exciting findings on how sources and abilities are controlled through non-profit agencies. certainly, the humanitarian angle approach that agencies are confronted with larger constraints in terms of sources, larger disruptions within the surroundings, a decrease incentive to

compete over supply chains and extra incentives to collaborate and coordinate to enhance the assist they supply all of the whilst nonetheless looking to enhance their overall performance and decrease their expenses like non-public businesses. even though the sources to manage strengthening might be just like the non-public area, it is how they're prepared this is of interest so as to recognize the variations among each sectors and push ahead the information of consolidation in humanitarian logistics.

1.9 Basis of The Thesis

The rest of the introductory chapter discusses distinctive subjects that pertain to each view. After an introduction to logistics concerns with respect to strengthening, phase discusses standard concerns for strengthening, procurement strengthening and strengthening via kitting. Phase three explores the distinctive research design for every view. Within the Theoretical framework, the research technique is content evaluation and for Procurement strengthening and Kit management. Phase four addresses the distinctive contributions of the papers while phase five offers a general concluding discussion of this thesis.

PART 2: MATERIAL STRENGTHENING IDEAS AND HUMANITARIAN LOGISTICS ACTIVITIES

2.1 Center Ideas For Material Strengthening Types

Strengthening in the discipline of management is an activity that is undertaken to pay attention similar items or activities into a single commonplace entity. One of the most commonplace strengthening purpose that is observed in supply chain literature is market strengthening because of the merger or acquisition of agencies in which agencies will integrate belongings and activities to rationalize them and reduce costs. Strengthening is generally driven through a choice to enhance performance either via the discount of charges or a better utilization of belongings. Material strengthening is frequently carried out within the context of three distinctive activities for supply chain and logistics: inventory, managing and buying activities.

The 3 distinctive sorts of material strengthening involve various management concerns to make sure that materials are regrouped at distinctive factors of the supply chain. Agencies may partake in a single kind of strengthening or use a couple of and occasionally combine them in a commonplace approach to use their sources as effectively as viable alongside everything in their supply chain. The strengthening of activities could be carried out based according to the particular trade-offs required through the company to gain its general goals whilst controlling costs in its transportation, warehousing and procurement activities of course each sort of strengthening faces distinctive troubles (Table 3).

Table 3. Potential issues for each strengthening type

Strengthening type	Potential issues
Warehousing	Increase in transportation costs Increase in delay Lack of flexibility Creation of uncertainty
Purchasing	Infrastructure investment cost Increase in transportation distance
Transportation	Increase in investments (e-procurement, ERPs) Reduction in flexibility

Disaster stock is decided as social stock which differs from commercial stock and desires quick evaluation defined the traits of acquisition, storage and distribution of disaster alleviation. In addition they supplied a number of the vital variations from agency inventories within the regions of acquisition, storage and distribution distinctive evaluation.

2.2 Warehousing Strengthening

Warehousing strengthening describes the activity of regrouping items to facilitate their management internal a fixed set up. This regrouping is carried out to manage the desires of more than one customers on the same time and make sure the availability of materials. Warehousing strengthening performs a vital function in material strengthening because it allows goods to be stored and managed internal a single set up. If this set up has a big enough capability, the warehouse allows both the technique of transport strengthened items to more than one customers and responding to customers with huge orders that require to be strengthened. strengthening in a huge warehouse but allows pooling safety stocks and specializing in standard lead times Many companies that manage items will generally have materials managed in at the least one factor of distribution. This distribution factor can act as a strengthening node and be located either upstream or downstream relying on the sorts of material dealt with in addition to their final destinations.

2.3 Procurement Strengthening

Procurement strengthening describes the aim at the back of regrouping purchases to facilitate their management so as to increase the performance of the agency. The strategies to acquire this aim may be achieved internally through regrouping suppliers or externally via centralization of activities (Figure 2). There's a debate on the variations between procurement and purchasing activities and the relative significance of various activities with a few arguing about the shortage of strategic relevance of purchasing or the relative significance of strategic purchasing. On this thesis, the idea of procurement especially refers to externally oriented making plans which includes value-adding duties and includes purchasing and buying activities. In Procurement strengthening discusses in information procurement, there's additionally a discussion on sourcing techniques to further the knowledge of the connection

between the providers and the agency. Addition to the procurement technique additionally placed public procurement management concerns at the same stage as strategic purchasing or strategic sourcing. Figure three presents the numerous steps of procurement strengthening.

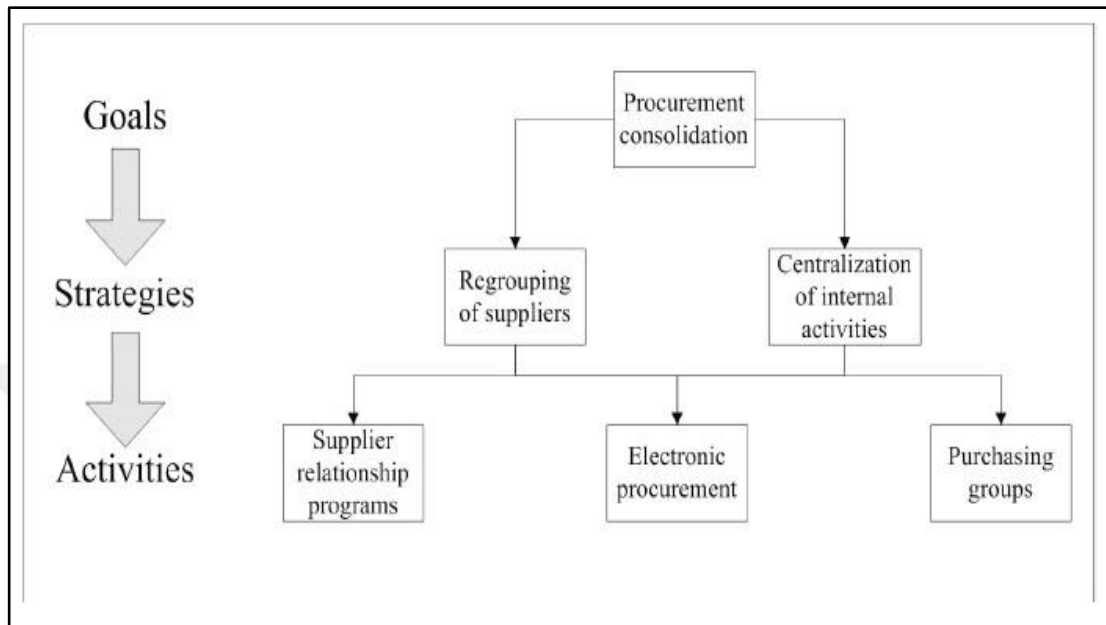


Figure 2. Classification of procurement strengthening activities inside organizations

The first sort of activity that allows procurement strengthening are supplier relationship programs. This method reduces the variety of providers for an agency so as to growth the quantity purchased from every provider and gain better leverage while interacting with this reduced quantity. The second sort of activity that allows procurement strengthening is digital procurement. This technique focuses on procurement through information technology activities and on-line services that require an excessive stage of technical integration.

The third activity that allows procurement strengthening is composed of buying agencies. buying agencies generally constitute a couple of agencies with similar procurement desires and assist in acquiring better leverage and buying strength through regrouping the material desires of all of the agencies concerned within the organization (Rolfstam, 2012; Huff-Rousselle, 2012).

This offers an incentive to the agencies a part of the buying agencies to apply the providers of that organization to achieve the advantages and decreases their ability wide variety of providers.

2.4 Transportation Strengthening

Transportation strengthening defines regrouping gadgets so as to use at full capacity a certain shipping module including a container or trailer truck. Full truck load strengthening is a completely common subject matter within the literature for research on strengthening in both the context of qualitative and quantitative views. Those views perceive distinctive sorts of transport regulations to optimize the efficient use of vehicles and make sure the right use of belongings. Strengthening policy for transportation is occasionally complicated because the need to reflect the distinctive transport concerns requires to integrate extensive ranging information. Within the context of less than truck load transport, there are distinctive transport costs relying on the amount of material that is loaded into the truck. Vehicles that deliver with a higher weight or quantity relying on the dimensional weight of shipment can provide positive discounts for usage of its capability for transportation. This transportation practice permits the introduction of amount withholding strengthening policy. The addition of discount systems can replace awaiting a totally strengthened truck load as a transport rule. Rather transportation policy can purpose to gain a positive degree of strengthening to achieve lower costs with a minimal weight or quantity required to be reached before time becomes a constraint. Strengthening is likewise a situation within the context of milk-run transportation and lowering Co2 emissions.

2.5 Strengthening in The Background of Humanitarian Organizations

Material strengthening is a commonplace activity in lots of logistics systems and is frequently undertaken within the context of warehousing, procurement and transportation. Every of those activities offers the opportunity to achieve positive benefits via the regrouping of materials.

Humanitarian disaster all have a security measurement however those who contain conflicts have a more complicated security element that desires to be addressed and can prevent reaction from taking place (Tomasini, 2012). While access is feasible,

items may be shipped to affected populations. populace that require humanitarian resource also are present within the context of ongoing improvement activities and huge humanitarian agencies will frequently attempt to deal with the difficulty of both emergency disaster reaction in addition to ongoing development aid. Figure 3 links humanitarian logistics levels and supply chain activities.



Figure 3. Supply chain activities in humanitarian activities

2.6 An Analysis of Strengthening in Humanitarian Logistics

Material strengthening is a preoccupation of humanitarian agencies and certain projects are taken to allow strengthening. One instance is the United Nations Humanitarian Response Depot (UNHRD) (WFP, 2014). The UNHRD offers to a couple of agencies to store, shipping and procure prepositioned items throughout a global network of warehouses. Any other instance is the cluster technique recommend via the United Nations Office for the Coordination of Humanitarian Affairs in 2005 with the purpose to growth coordination (United Nations Office for the Coordination of Humanitarian Affairs, 2014) between UN and non-UN organizations in disasters. This cluster is controlled via WFP and, throughout the 2010 earthquake in Haiti, it managed the strengthening of products for transportation between Santo-Domingo and Port-au-Prince (Logistics Cluster, 2010).

Material strengthening activities were parsimoniously noted during the literature on humanitarian logistics. Schulz and Blecken point out ability consolidation stemming from shared warehousing, transportation and procurement thru using horizontal cooperation (Schulz and Blecken, 2010). Strengthening activities also are one of the activities installed location in Darfur through the WFP as lead coordinator for the logistics cluster (Tomasini, 2012). The cluster technique installed location through the United Nations office for the Coordination of Humanitarian Affairs (OCHA, 2014) regroups primary humanitarian agencies and allows enhance cooperation among them throughout emergencies. The logistics cluster operations provide the

possibility to coordinate and occasionally consolidate materials but, this isn't a properly-documented exercise within the literature.

Other than humanitarian agencies, there are different actors within the humanitarian network that play the function of strengthening. A number of those actors are non-public transportation agencies and third party logistics companies who use strengthening as a part of their activities to growth the productiveness in their property. Some other agency that is occasionally active and found in humanitarian networks or deploys in regions with similar constraints as humanitarian agency is the army. Army literature discusses issues for strengthening as they've attempted to bring in distinctive industrial practices inside their supply chains. Multiple sorts of strengthening may be diagnosed within the army context which includes: activity strengthening, material strengthening, management strengthening and control strengthening. Strengthening can additionally take place among humanitarian agencies and the army in which warehousing and installations are shared to enhance operations (Sebbah et al., 2013).

2.7 Procurement Strengthening in Humanitarian Logistics

Procurement in humanitarian agencies performs a vital function. The United nations throughout all its organizations procured a total of 15,372 billion US\$ with 44% in items and 56% in services in 2012 (UNOPS, 2013). The UN in addition to other authorities or NGOs is situation to strict procurement necessities that concentrate on open competitive bidding presented to the lowest cost provider both domestically and internationally (UN Procurement division, 2013). This technique permits for transparency toward providers and accountability to the donors. The UNHRD is also an awesome instance of the way procurement strengthening may be carried out for a couple of agencies (WFP, 2014).

Supply chains keep in mind material and data flows that may be localized or span the globe while considering the procurement activities of agencies. Humanitarian agencies are similar within the feel that they have to regularly supply their materials from more than one markets differing in commercial shape and size. A few markets are local whilst other markets may be on a worldwide scale. The extensive kind of distinctive conditions wherein humanitarian agencies may set up ranges from disaster

zones to conflicts and occasionally improvement activities. Whilst improvement activities, gradual-onset disasters and chronic conflicts may provide the opportunity to plan procurement in advance, rapid-onset disasters create uncertainties in terms of making plans for ability demand. Certainly, the unexpected growth of demand from occasions including the South Asian Tsunami or the Haitian earthquake are tough to take into account and acquire for.

The second one section happens whilst disasters moves and complicates procurement activities for material as there's an emphasis on pace to attain the people affected. Occasionally the sufferers of a disaster may acquire cash rather than real items to hurry the reaction within the case in which the nearby marketplace remains functioning. Procurement activities in disaster reaction will arise immediately at a nearby level or on a worldwide scale based on the sector checks of the desires of the affected populace (Blecken, 2010). Despite the fact that sudden and unpredictable, the desires may be addressed thru previous framework agreements and contract preparations with providers for certain items.

The third section of reconstruction is just like improvement activities and humanitarian agencies have the possibility to plan in advance the sort of procurement activities to do in line with their desires. These desires may be reached thru using the suitable sources for the approach selected by the agencies. Within the context of supply chain activities, consolidating materials thru procurement will become a choice to growth the performance of the sources available.

2.8 Material Strengthening Via Kits In Humanitarian Logistics

Kits are a part of the reaction activities of the primary humanitarian agencies (Berger, 2013). They may be notably simple to be immediately given to the beneficiaries or notably complex to cover a huge need including the Inter-agency health kit (WHO, 2011). Agencies which includes UNICEF manage a vital variety of kits each year (Table 4).

Table 4. Kit distribution by UNICEF 2013.

Type of supplies	Kits
Medical supplies and equipment	13.7 million malaria rapid diagnostic test kits
	13.2 million HIV rapid diagnostic test kits
	110,500 health kits in 62 countries
Water and sanitation	212,000 adult hygiene kits
	41,000 family water and sanitation kits
Education supplies	24,000 classroom kits
	14,000 Early Childhood Development kits
	32,000 recreation kits
	140 000 country-specific classroom kits

Source: UNICEF Supply Division, 2014.

Material strengthening can occur at distinctive factors within the supply chain in transportation, warehousing and procurement. At every of those steps distinctive techniques may be used including time withholding for transportation and organization purchasing for procurement. There's no clear cut case to pick between kitting and line stocking (Hua and Johnson, 2010; Caputo and Pelagage, 2011).

But, kits act as manner of strengthening because materials are regrouped before getting used at a later time and factor within the supply chains. This creates a strengthening factor within the supply chain where the proper gadgets are stocked, organized and assembled regardless whether or not they're fed to an assembly line or shipped to any other agency or person for use at a later date.

Kitting is also an activity that may be carried out through third party Logistics Company as a specialised and value adding service in a distribution center. Material strengthening via kitting also can be carried out immediately via a supplier (Lanier Jr et al., 2010) and act as a way to facilitate management, strengthening volumes, lessen supply chain complexity and achieve better service. Glaringly those advantages come at a trade-off of service degree and timeliness because strengthening into kits implies a withholding of gadgets till they're assembled.

This trade-off is frequently visible within the strengthening of gadgets in transportation and warehousing; but kits, due to the fact they regroup gadgets required for use collectively on the same time, have extra advantages and drawbacks to keep in mind (Table 5).

Table 5. Benefits and weaknesses of kits in the supply chain.

Benefits	Source
Kit allows for efficient space usage and material handling	Hua and Johnson, 2010; Caputo and Pelagagge, 2011; Kilic and Durmusoglu, 2012
Kits improve quality for the final user	Caputo and Pelagagge, 2011; Kilic and Durmusoglu, 2012
Kits reduce fetching and picking time of parts when they are used	Kilic and Durmusoglu, 2012; Hanson and Medbo, 2012
Kits help increase flexibility through their mix of items	Hua and Johnson, 2010; Caputo and Pelagagge, 2011
Weaknesses	
Kits are labor intensive as they combine all picking and moving required to pre-assemble items before their use	Caputo and Pelagagge, 2011
Kits require space and time	Caputo and Pelagagge, 2011
Kits require extra management and planning	Caputo and Pelagagge, 2011
Kits are easily disrupted by a quality issue on a part	Caputo and Pelagagge, 2011

The benefits particular to kits are what motivates humanitarian agencies to use them out of the context of an assembly line. Certainly, even outside the context of factory manufacturing, kits nevertheless play a vital function and assist cope with troubles confronted in humanitarian logistics. There are ten main humanitarian agencies that procure kits from providers to distribute them within the field (Berger, 2013) in case of humanitarian crisis.

The sort of humanitarian crisis will frequently dictate what kind of kits are needed that can vary extensively and be composed of medical kits, educational kits, water and sanitation kits, kitchen kits, winterization kits and another sort of kits in line with the needs.



PART 3: RESEARCH DESIGN

Research design specializes in the little by little moves required to deal with a research query. Within the context of Theoretical framework, which includes a literature evaluate with a content evaluation, the goals and shortage of propositions or hypothesis to assess make for a trustworthy research design. within the context of Procurement strengthening and Kit management that are based on exploratory case studies, they could comply with the distinctive components of studies design diagnosed via Yin including a research query, unit of evaluation and standards to interpret findings.

3.1 Content Analysis

Theoretical framework which includes a literature evaluate uses a particular technique called content analysis to study written texts. This technique has been utilized in a wide variety of various research fields (Seuring and Gold, 2012) and attempts to apprehend the meaning and context of the written texts decided on and their content. Content analysis may be carried out within the context of a quantitative or qualitative research which results in distinctive sorts of content analysis. But, most content-analysis follows a particular little by little method with distinctive iterations required to better check and examine the material (Figure 4) so that it will be mentioned within the evaluation and that is made out of:

- a. The delimitation of the material,
- b. The evaluation of the characteristics of the material,
- c. The definition of the structural dimensions of the coding to apply it to the material, and
- d. The evaluation of the material.

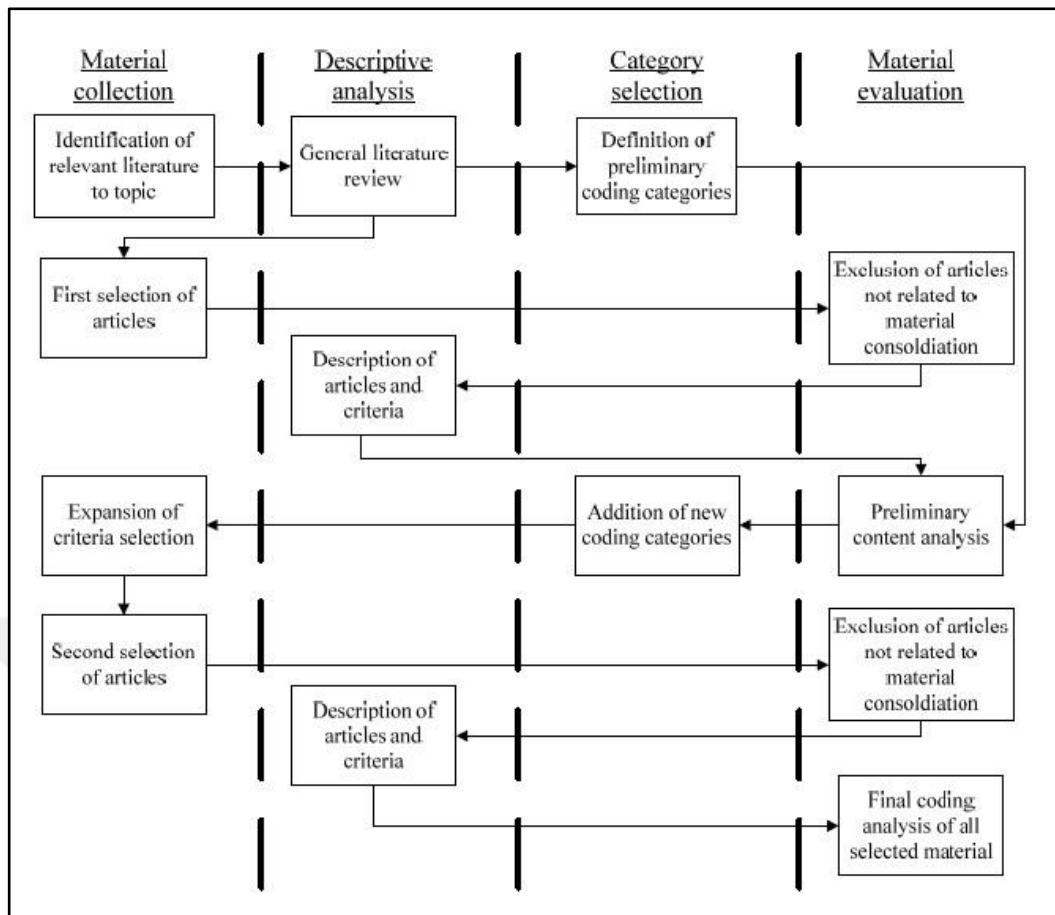


Figure 4. Content evaluation methodology steps in Theoretical framework
 Source: Seuring and Gold, 2012.

3.2 Data Collection

To acquire a correct information of incentives and boundaries of strengthening of products for humanitarian agency via the improvement of a conceptual framework, it is vital to delimit the material used within the literature evaluation. To perceive the scientific articles, first the proper journals should be selected. This preference was based on articles that ranked journals based on a survey in their usefulness through academics. Once the journals are selected, the next step is to select the distinctive articles based on subjects which are associated with strengthening via keywords. The importance of “logistics” and “supply chain management” are included for their extensive coverage of the subject whilst “humanitarian logistics” was selected for its importance. Other applicable articles included articles on “distribution”, strengthening in “purchasing”, “warehousing”, “transportation” and “third party logistics” or “3pl”s.

This step is followed by using an evaluation and assessment of the material followed through a content analysis of the final material. The first data collection segment targeted on the top 5 ranked journals for research with key-word searches at the body of the text of articles based on a general literature assessment (Figure 5). This first extraction was then assessed and only articles that mentioned strengthening were decided on and submitted for a first content evaluation. Following this first choice of articles and their evaluation, new coding categories were set up and coded for.

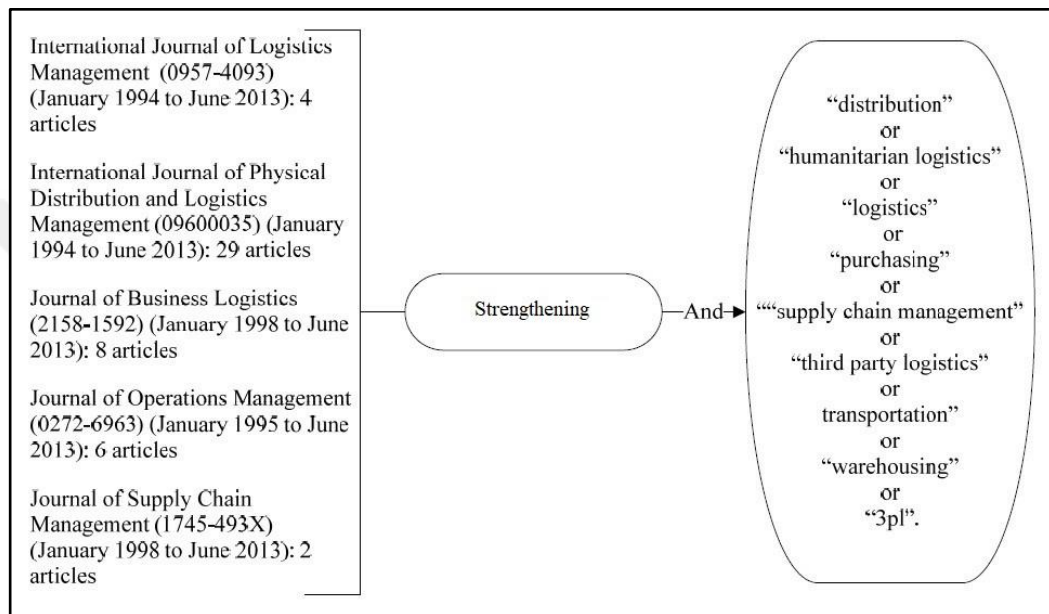


Figure 5. First choice of articles based on whole text

This primary evaluation of the literature created a more in depth knowledge of the subject to hand and a need to enlarge the scope and depth of the literature. This was carried out via the addition of journals in addition to with the addition of key words (Figure 6). on this 2nd choice of material, journals that cope with disasters in addition to humanitarian logistics were introduced to the list of top ranked journals for logistics and supply chain research; the content seek was carried out at the summary only. This 2nd extraction of articles was additionally filtered on the basis of their discussion of strengthening associated with material strengthening. On the end of the second round of iteration there were a complete of 78 articles coded via content evaluation.

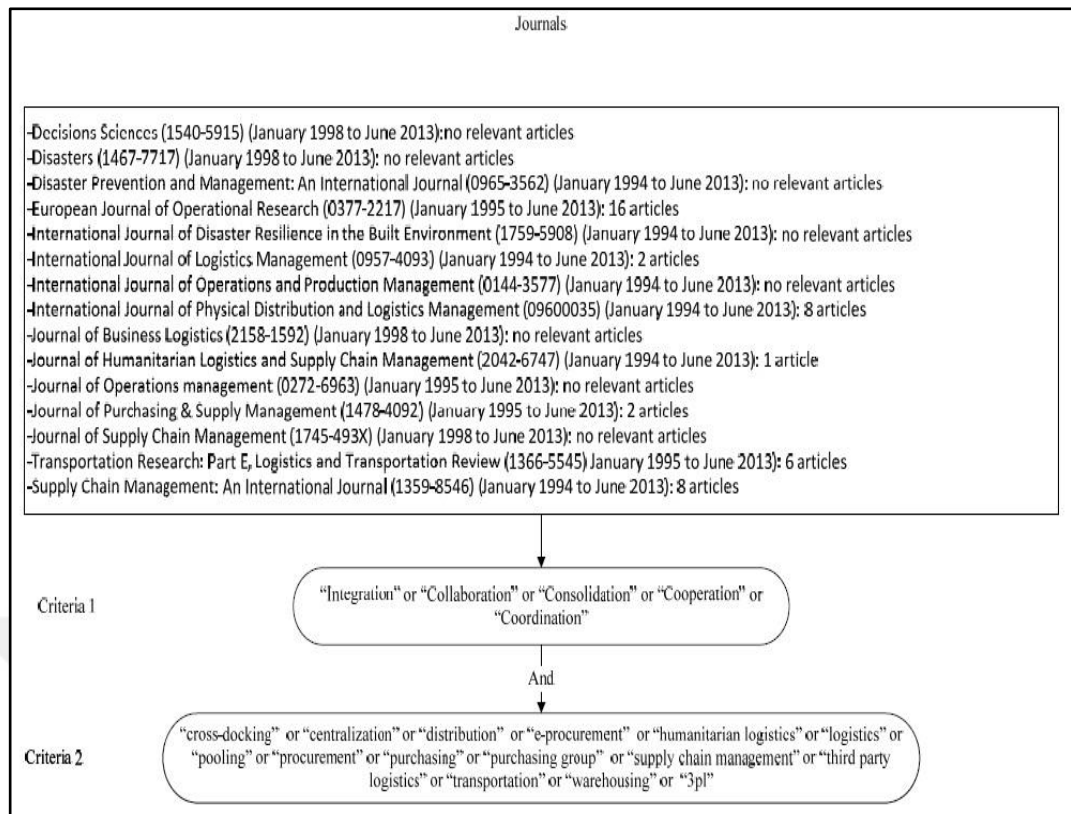


Figure 6. Second choice of new articles based on abstract

3.3 Data Evaluation

To define the structural dimensions of the coding and discover the problems at the back of materials strengthening in humanitarian logistics, a coding scheme was evolved (Table 6). The coding is based on distinctive categories, with the first category identifying the wide sort of research technique. The second category breaks down what are the distinctive sorts of strengthening. The third category identifies the variety of agencies concerned within the strengthening. The fourth category identifies the kind of network used for strengthening. Those distinctive categories pertain to the sort of sources and selections which are required in strengthening materials. To cope with the incentives and limitations of strengthening concerns, there were categories one for the incentives and one for the limitations. Those categories are composed of signs based on possibilities and impediments for logistics services vendors to horizontal cooperation. Horizontal cooperation consists of strengthening activities offer a great basis to define signs. Each indicator was first described based on previous literature however extra signs were introduced later to

the kinds based on the articles analyzed throughout the primary content evaluation assisting to enhance the coding scheme.

Table 6. Coding categories for content analysis in theoretical framework

Category	Indicator
Type of Strengthening decision	Pure dispatch strengthening
	Integrated inventory and outbound shipment strengthening
	Purchasing external strengthening
	Purchasing internal strengthening
	Cross-docking hub strengthening centers
Type of strengthening network	Dedicated (1 to 1)
	Multiplant (Multiple to 1)
	Inverse Multiplant (1 to Multiple)
	Multiplant to Multiplant (Multiple to Multiple)
Number of organizations involved	Inside a single firm
	Multiple firms (including third party logistics)
Potential incentives of strengthening	extended productiveness of center logistics activities
	decreased cost of non-center activities
	discount of buying cost
	Specialization and broadening of logistics offerings
	higher exceptional of logistics offerings at decrease cost
	Use of massive shippers for massive agreement
	cost discount and economies of scale
	reducing of hazardous gas emission
	Increased speed of supply
	Increased security of item
Flexibility and responsiveness to exchange	
Potential obstacles to strengthening	Hard to find appropriate LSP s with whom it is possible to cooperate for (non-)center activities
	Hard to find a reliable party that can coordinate the cooperation in such a way that all participants are satisfied
	When an LSP cooperates with commensurable companies, it becomes harder to distinguish itself
	It is hard for the partners to determine the benefits or operational savings due to horizontal cooperation
	Partners find it hard to ensure a fair allocation of the workload in advance
	A fair allocation of benefits to all the partners is essential
	Cooperation is greatly hampered by ICT-investments
	When benefits cannot be shared in a perceived fair way, the larger players will always benefit most
	strengthening can increase delays
	strengthening can cause increase in costs
	Reduced flexibility
	Lack of information/uncertainty
	Conflicting mission and principles and cultural differences

3.4 Effectiveness and Authenticity

The coding was carried out dichotomously for every indicator and right steps were taken to make sure reliability and validity. To assure objectivity and transparency, the types and signs were certainly defined and evolved. Validity has been ensured via the selection of literature coming from top journals in addition to having 78 articles selected. To research the articles, a right framework anchored in literature is important and as such has been used within the context of the incentives and boundaries. Moreover, to complement the framework, high-quality tuning of the categories all through the coding was additionally carried out. To make sure reliability, the first step was to use two coders to code the information with the same coding scheme in parallel. To similarly make sure the reliability of the coding by way of each coders, the outcomes were examined the use of Krippendorff's alpha coefficient to assess the level of settlement between the coders. The final coding phase had a Krippendorff's Alpha coefficient of 0.83 with inter-coder agreement of 95%.

3.5 Data Collection

The data for Procurement strengthening and Kit management were gathered on the same time from the same agency: UNICEF. UNICEF performs a vital function in responding to humanitarian troubles via the distinctive programmes it operates. Those programmes encompass young infant survival and improvement, primary schooling and gender equality, infant protection, policy advocacy and HIV/AIDS (UNICEF, 2013). To assist its programmes and the imposing companions it works with, UNICEF provided imposing companions with material goods and services which amounted to \$2.84 billion in 2013 (UNICEF supply department, 2014). This procurement is produced from material and services that UNICEF budget and which are introduced to their enforcing companions (Governments and NGOs) and material funded via their companions and procured via UNICEF procurement services. The procurement services for companions procure for more than a hundred international locations for a cost of \$1.36 billion in 2013 (UNICEF Supply Department, 2014). One a part of the entire material procured and introduced are kits of which UNICEF makes use of a wide variety; at its international warehouse alone it fulfilled orders 362 000 kits in 2013 (UNICEF Supply Department, 2014).

3.6 Data Evaluation

The vital quantity of statistics that may be observed from a couple of resources in qualitative research can represent a frightening project of evaluation. To parse via those resources in an efficient way researchers can use a wide variety of various equipment for evaluation. The evaluation for each Procurement strengthening and Kit management was carried out with a template. Template evaluation is a way to arrange the interpretation of records thru coding. This technique to coding has additionally been proposed as a qualitative evaluation device within the context of management and organizational studies.

The pre-described code was focused on the sort of material group that make up the kits in addition to the agency's activities: either disaster preparedness, disaster reaction, and improvement or reconstruction. The open coding categories focused on steps within the supply chain, sources, abilities, troubles and overall performance. Those topics were stimulated through the underlying topic of supply chain activities and dynamic abilities with its sources and abilities. Those extra attributes allowed a more in depth knowledge of the information and the activities of the agency.

3.7 Integrity

Using different resources of information permits making sure that the findings can shape good enough constructs. The constructs are progressed thru an assessment of the information among the distinctive resources to make sure that the findings are suitable internally. In addition enhance this inner trustworthiness thru assessment, a particular template evaluation device was evolved which organizes the information and allows less complicated coding and sample matching. These activities permit a better information and interpretation of the underlying logic in the back of the consolidation phenomenon studied in Procurement strengthening and Kit management. Each view additionally had devices of statement that have been associated with the activities of strengthening of materials to permit for assessment based on the variations within the standard traits of the units. Materials performed a function in defining the unit of commentary with sorts of materials being the unit in Procurement strengthening and sorts of kits in Kit management. The unit of statement for each view gives an excellent review of the distinctive materials dealt

with through the agency within the context of its international supply chain. Those distinctive instances are the 4 individual kits (Inter-enterprise health kit (IEHK), school-in-a-box kit, person hygiene kit and a health kit custom designed to serve country programmes) and standard kitting activities.

It's also vital to make sure integrity throughout the actual collecting of materials. Within the case of written files, this was smooth to evaluate as the files were created through individuals of the agency. Ultimately, there are limits within the phase regarding the supply chains. The supply chain attention was set on the particular agency and was confined from their procurement thru to their deliveries in focused countries. Moreover, template evaluation permits cross checking of the information, smooth management of data thru a database and an in depth coding which was reviewed a couple of times to make certain consistency throughout the coding.

PART 4: FINDINGS

The findings spotlight the methods that each paper provides to the frame of scientific literature. This phase begins with a discussion of the contribution of every view toward a more knowledge of dynamic talents. Following this discussion in sections, one for every view that recommend the precise findings for the version in Theoretical framework and for the phenomenon studied in Procurement strengthening and Kit management. Moreover, the sections for Procurement strengthening and Kit management encompass propositions derived from the research that provide guidance for assessing the findings of each view.

4.1 Improvement to Dynamic Abilities

This thesis is going beyond information of the way acting supply chains are carried out in humanitarian companies. Certainly, all 3 views assist make a contribution to dynamic abilities as they push ahead the relevance of dynamic abilities in a context distinctive from fast generation exchange with a focal point on wealth introduction. Rather than income, the final goal of humanitarian agencies is to alleviate struggling and enhance the scenario of the resource recipients. Thru their supply chain, humanitarian agencies flow items to gain this aim and, as such, the overall performance of those supply chains is also applicable with postpone cost, quantity of shipment, vital commodities, equality in achieving beneficiaries and achieving inclined populace (Gralla et al., 2014; Huang et al., 2015). Humanitarian agencies do not searching for income neither do they compete thru their supply chains and alternatively occasionally cooperate and coordinate to enhance resource transport. This thesis in addition contributes to dynamic abilities as it identifies a result that may be anticipated from the lower supply chain competition and interest in coordination and cooperation through humanitarian agencies: facilitating get entry to skills in among agencies thru particular consolidation activities. This thesis gives insights for managers of humanitarian agencies on consolidation of materials thru distinctive approach. It provides certain problems about consolidation and the way agencies can cope with them with the correct sources to construct their inner abilities. Those abilities in turn can assist obtain the performance degrees the agencies goal for of their supply chain.

Theoretical framework sets the level for the 2 others and develops a center level abstraction version that explains a confined set of phenomena and it specializes in descriptions of applicable ideas. From the point of view of dynamic abilities, consolidation will be the technique supported through the distinctive sources that define the role of the agency whilst the focal point and area of the agency represents the direction of the employer. The disaster context and stakeholder surroundings constitute capacity resources of disruptions. From the point of view of humanitarian logistics literature, the paper solutions a name for extra idea constructing in line with the size of network, coordination and shape and gives an extra in-depth information of ability resource use to assist the technique of consolidation. This study highlights the distinctive sources and impediments associated with consolidation for humanitarian agencies and may assist managers apprehend what the fundamental useful resource necessities for consolidation are and the way distinctive troubles in humanitarian agencies is probably boundaries to accomplishing it.

Procurement strengthening addresses a particular sort of consolidation recommend within the framework of Theoretical framework: procurement consolidation. It gives each insights on dynamic abilities in addition to at the phenomenon of procurement consolidation. Procurement strengthening puts ahead that dynamic skills may be utilized in a non-profit putting and that procurement consolidation can assist proportion abilities while their goals are aligned. It indicates a manner for certain agencies to cope with the resource associated barriers of consolidation through counting on some other agency to manage various procurement activities. Whilst it involves procurement consolidation Procurement strengthening contributes an in-depth information of public procurement. It highlights the competency aggregating function of a purchasing organization in addition to the significance of supplier relationships applications. This study identifies the sources to gain procurement leverage thru worldwide procurement consolidation. The findings can provide the possibility for managers to recognize what expertise and relationships they want to increase in an effort to assist companions and gain their desires. Kit management addresses a sort of material consolidation that may be carried out thru procurement, transportation and warehousing: kits. Kits constitute a particular method that is frequently utilized by humanitarian agencies to cope with timeliness in disasters and, in effect, cope with one of the disruptions to which they have to face.

The pre-assembly and definition of kits is frequently carried out in a context of coaching wherein there's an possibility to plot as is recommended in Theoretical framework. Moreover, the abilities that provide agencies the choice to manage a couple of kit which have complicated use permits them to reply to dynamic disaster conditions. The study additionally contributes to the information of kitting in widespread because it goes beyond the kit assembly and discusses making plans and coaching of kits. It additionally contributes to literature on kits through discussing the case of kits outdoor of general assembly lines. This study identifies the specified sources for agencies to manage kits for emergency and improvement conditions and gives an information of the way a particular overall performance is carried out. The findings can act as a tick list for managers interested by growing their own kitting activities.

4.2 Findings of Theoretical Framework

Theoretical framework is based on a literature assessment of material strengthening. The findings on strengthening focus on the incentives and limitations to strengthening in humanitarian logistics. To efficiently manage material, strengthening requires distinctive sources identified within the literature and their presence or absence can create an obstacle or an incentive to strengthen. The sources for strengthening includes suitable infrastructure including warehouse and vehicles, information of strengthening decisions and relationships to manage the networks wherein strengthening takes place.

The shortage of sources may be an obstacle in addition to the growth in cost associated with the higher quantity of material dealt with. Any other difficulty that could prevent strengthening relates to the disaster levels. Whilst disasters have a quick on-set there might be much less possibilities to strengthen. Certainly strengthening frequently requires items to be held for a certain time period; this creates delays and is unacceptable for beneficiaries. But, the preparation, reconstruction phase or a slow on-set disaster may provide the opportunity to plan for strengthening.

Table 7. Potential impediments or opportunities to cooperate

Potential impediments or opportunities to cooperation	Opportunities	Impediments
Access	Multiple organizations operate in the same area and have access to the beneficiaries which creates more opportunities to strengthen.	Only one organization has access to the beneficiaries which reduces its opportunity to strengthen materials with partners.
	The high security threat limits the window of time to access the beneficiaries creating more incentive to strengthen during that time window.	
Number and size of actors	An important number of organizations creates more opportunities to find appropriate partners with whom to strengthen.	A small number of organizations reduces the number of organizations that would be compatible for strengthening.
	Organizations with important amount of materials can more easily implement strengthening practices with less disruption to their supply chains.	Organizations with small amount of materials would not gain as much from strengthening.
Organizational mandate and cultural context	An organisation with a mandate open to cooperation will help it find appropriate partners with whom to strengthen.	An organisation with a mandate that limits cooperation reduces the number of organizations that would be compatible for strengthening.
	Cultural similarities allow for a better understanding and communication between organisations, this can support strengthening.	Cultural differences hinder Communication between organisations which impedes potential strengthening activities.
Humanitarian goods	Well known standard materials and standard packaging makes managing materials together for strengthening easier.	Items with specific handling Considerations (dangerous, cold chain, etc...) or nonstandard packaging make regrouping materials together for strengthening difficult.

Two other elements are applicable for strengthening and include the stakeholder surroundings and the focal point and vicinity of the agency (Table 7). Those two elements are potential impediments or possibilities to cooperate. Troubles applicable to access, the variety of size and actors, the organizational mandate and the sorts of items can allow or prevent strengthening depending on the context wherein the agencies evolve. Regardless of those limitations, humanitarian agencies also can gain from strengthening and the primary incentives that make strengthening appealing are cost discounts, improved overall performance and improved efficiency (Figure 7).

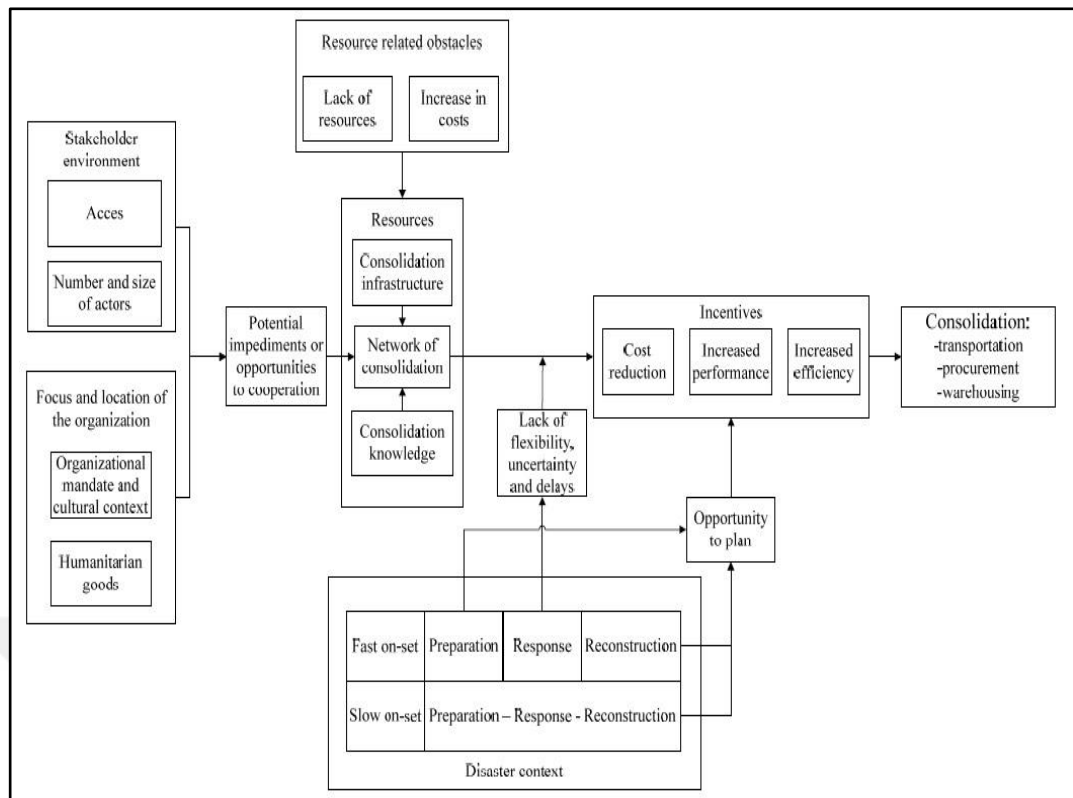


Figure 7. Framework for strengthening in humanitarian logistics

4.3 Findings of Procurement Strengthening

Procurement strengthening is focuses on the usage of procurement strengthening and its finding in this phenomenon provides both to the humanitarian topic in addition to procurement literature. Literature has proven that that there are two major techniques to acquire procurement strengthening: regrouping of providers and centralization of inner activities. The first locating is the impact of using desired providers via a contracting technique known as long term agreements (LTA). Those LTA permit answering the wishes of transparency and cost accountability all of the whilst decreasing the variety of providers to only depend on two or three providers for a sort of commodity. Contractual agreements with private companions are applicable for humanitarian logistics for planning function. The second locating is that strengthening is also accomplished via the use of purchasing companies which are standardized and prepared via the agency via either its programme activities or via procurement services for its enforcing companions.

The context of humanitarian logistics does play a function in defining the agency's procurement strengthening on a worldwide scale. Certainly, its procurement strengthening activities comply with business practices as they're achieved generally for long term tasks with unexpected disasters being quite small while considering their general activities. The agency still procures kits and safety stocks especially for emergencies. The agency's companions have unique desires which are assessed via their in-country activities which creates understanding of procurement desires. Those desires are then evaluated via procurement experts with information of the materials and their markets on the supply headquarters before being strengthened with the desires of different international locations and ordered in keeping with minimal order quantities. Those portions are either shipped immediately or sent to a centralized warehouse that holds safety stock and strengthen objects with different objects via custom packaging or standard kits. The propositions that may be derived from the findings of Procurement strengthening are:

Proposition 1: Strengthening procurement abilities may be shared via a couple of agencies via links of their supply chains so as to enhance all non-profit actors' overall performance.

Proposition 2: Strengthening procurement abilities require a growth in information and relationships to enhance dynamic abilities as organizational desires widen.

Proposition 3: Intergovernmental humanitarian agencies can manage procurement strengthening and broaden it so as to appeal to and assist companions that adhere to its desires.

Proposition 4: Supplier relationship programs in intergovernmental humanitarian agencies require in-depth information and partnerships to mitigate the tradeoffs between flexibility and accountability.

4.4 Findings of Kit Management

Kit management research a particular sort of material strengthening: using kits. Kit management and introduction are explored via a case study analyzing numerous sorts of kits. Kits within the context of humanitarian activities permit similar advantages which are found within the use of kitting for private sector line management. But, to gain the distinctive sorts of advantages whilst taking into consideration the tough working situations, the characteristics of the supply chain and the objects managed requires distinctive sources to correctly manage the kits. The kits are constructed alongside particular tips which may be described via the agency throughout a kit planning section. This planning section will affect the strengthening of objects into kits on the distinctive kit strengthening factors within the supply chain (figure 9). The supply chain for the kits on this agency has a couple of strengthening factors, one on the supplier, one at a hub in Shanghai, one on the central warehouse in Copenhagen and one at particular in-country warehouses. At every of those factors planning, assembly or storing activities enhance quality, flexibility and timeliness. Those performances are generally ensured within the preparedness phase of activities as kits are frequently used for reaction in disasters. But, in improvement activities, the advantages of kits palliate for the poor local potential for supply chain management as properly and custom kits may be organized as a particular manner to reply to a country's particular need.

The advantages of kitting are received via distinctive sources which are available to the agency at distinctive steps. Throughout the planning of kits, the information of the workforce in addition to the relationships with other agencies allows to design a particular kit and make sure that it performs properly according to the necessities it desires to fulfil. This in-depth understanding of the markets, the materials and the local desires are supplemented via the information of the workforce assembling the kits. The steps of assembly also are significantly helped via the standardization of dealing with material in addition to the fairly automated warehouse infrastructure within the central warehouse. Figure 8 provides the numerous kitting points of the agency. Altogether those sources provide the agency the competence to kit efficiently for its distinctive desires. The propositions that may be derived from the findings of Kit management are:

Proposition 1: Strengthening via kits in humanitarian agencies permits sharing the overall performance profits of one agency with other agencies in addition down the supply chain.

Proposition 2: Strengthening via kitting offers the opportunity to assist overall performance in supply chains without a complete infrastructure or material management functionality on the point of use in both disasters and improvement contexts.

Proposition 3: The strengthening of objects in kits requires agency to stand trade-offs between flexibility and ease while designing a kit and overall performance and costs whilst organizing a portfolio of kits to match with their desires.

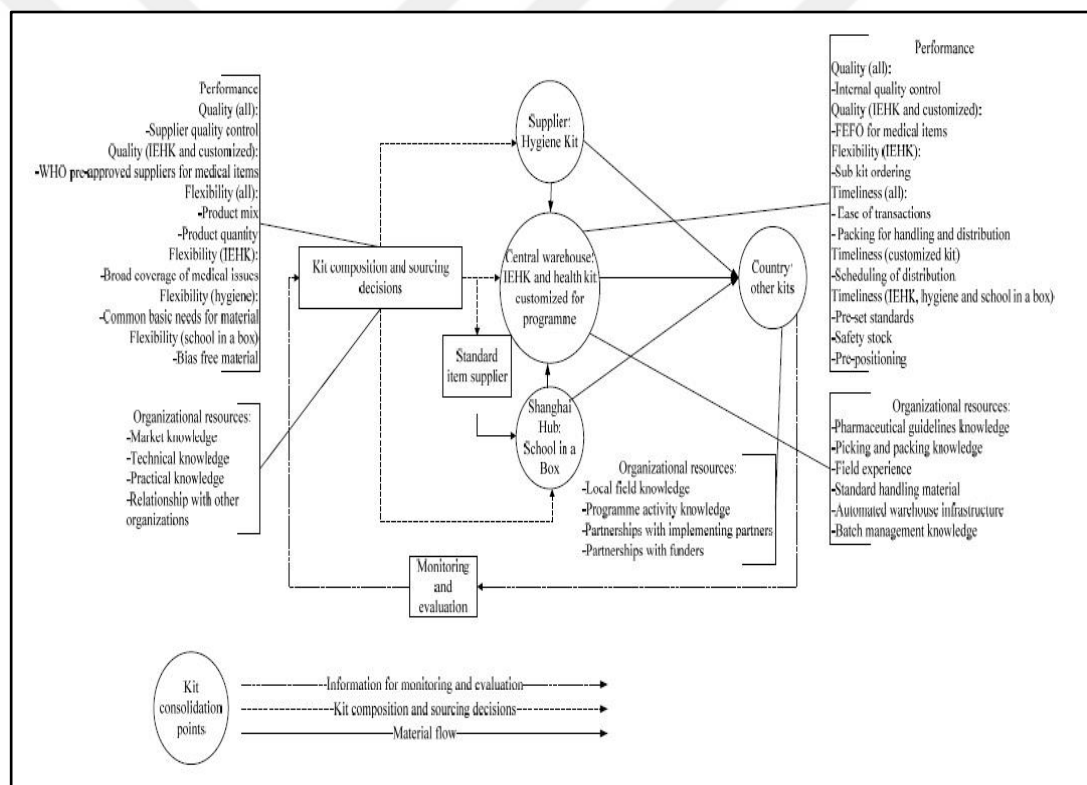


Figure 8. Kit strengthening points across the organization

PART 5: CONCLUDING DISCUSSION

This thesis provides purpose to apprehend the abilities and underlying sources for strengthening of materials in supply chains via humanitarian agencies. Despite the fact that standard logistics practices consist of strengthening, the humanitarian context has a few particular concerns to keep in mind. Every view offers a perception into distinctive concerns for material strengthening either via procurement, warehousing or transportation and the right sources required for each of those activities. The thesis expands theoretical concerns for better perception on strengthening which includes a particular sort of collaboration and coordination which other humanitarian logistics identify as applicable. Procurement strengthening and Kit management additionally expands the information of the phenomenon of procurement and kitting. The thesis as an entire elaborates concerns for the dynamic abilities in a non-profit placing that's generally concerned with rent-seeking activities. Material strengthening gives the opportunity to growth overall performance and achieve economies of scale. That is relevant for humanitarian agencies due to their vital logistics costs, the vital quantity spent on humanitarian aid every year and the continual underfunding of humanitarian appeals. With material strengthening, they could address the excessive logistics costs whilst additionally accomplishing other overall performance desires to enhance the assist given to beneficiaries whether or not it is for improvement activities or disaster reaction.

This thesis that make it up assist further the information of dynamic functionality within the non-profit sector. Certainly, the package of sources that is prepare within the shape of infrastructure, information, networks and relationships provide the competence to gain strengthening. Within the context of humanitarian agencies, the abilities required for material strengthening may be configured to maintain costs low, enhance productiveness in addition to deal with delays and poor cooperation that could prevent strengthening. This thesis gives deeper information of a further organizational competence: material strengthening. It is exciting to notice that in Procurement strengthening and Kit management, similar sources which includes local partnerships and material information may be used to acquire two distinctive sorts of strengthening within the agency. This factors to the underlying concept of dynamic functionality that sources may be reorganized internal distinctive sorts of

clusters to offer distinctive sorts of abilities. But, in both views every sort of strengthening additionally depend on sources that aren't utilized by the other, for example the information required to pack kits or the information of public procurement techniques. This indicates how organizational routines and abilities may be evolved via a mixture of inner sources.

Moreover, those views provide an average portrait of consolidation practices for humanitarian logistics. Theoretical framework with it's evaluate gives widespread issues at the management of material consolidation. Material consolidation is then taken up through the two different views in deep fashion thru case studies. In impact, those case studies in Procurement strengthening and Kit management examine a better a number of the factors raised in Theoretical framework. Procurement strengthening identifies the significance of sources in facilitating consolidation for procurement. As procurement delays are instead long for the agency studied, procurement consolidation specializes in impediments to cooperation thru distinctive strategies. Get entry to informed personnel, a clear mandate and manage of which actors it really works with approach the agency can lessen impediments to cooperation. To gain this, it is supported through a centralized warehousing infrastructure and centralized procurement information. Organizational expertise of local desires and activities additionally performs a vital function and was not highlighted within the framework for consolidation in humanitarian logistics in Theoretical framework.

Kit management additionally contributes to a better knowledge of material strengthening in humanitarian logistics via addressing the particular management of kits. Kitting permits the agency to deal with both delays and cooperation troubles and for this reason addresses limitations to strengthening. Via strengthening through kits, improved productiveness and overall performance is acquired within the following steps of the supply chains whether or not it is transportation, distribution or warehousing; both the factor of timeliness and flexibility provide the overall performance required while delays are unacceptable. High-quality testing in advance additionally allows to lessen delays and make sure that right requirements are met via the material before an emergency even happens. Kitting additionally allows in decreasing impediments to cooperation. Certainly, those impediments are addressed

via the kitting of the proper sort of items within the proper amount in a standardized way. This standardization and preference of products match the mandates and needs of the agencies concerned within the reaction; sometimes those kits are even designed via consultations with those agencies and this allows enhance cooperation while deploying kits. For each kits and procurement, information, infrastructure and relationships play a vital function as sources. But, a lot of the information of the markets and surroundings isn't diagnosed by using the framework provided in Theoretical framework. on this sense both Procurement strengthening and Kit management have allowed a better knowledge of the troubles and provide complementary consequences to the framework for strengthening in humanitarian logistics (Figure 9).

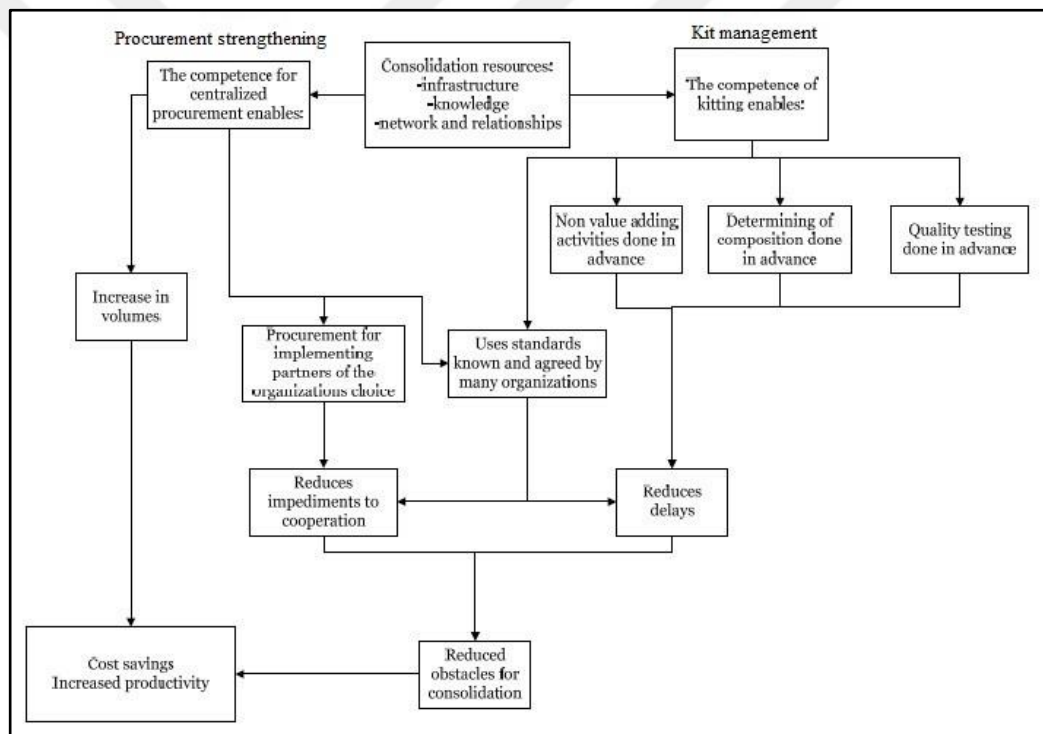


Figure 9. Procurement strengthening and Kit management's complimentary results to theoretical framework

5.1 Boundaries of the Research

The most vital restriction is the exploratory nature of the views despite the fact that this permits accumulating information on a subject that isn't properly covered within the scientific literature. Exploratory research limits the generalizability of the findings. The findings are in addition confined via their information resources. The

information for Theoretical framework limits its findings to the literature reviewed whilst the findings in Procurement strengthening are confined within the use of a single case study. Though, using the units of observation for Procurement strengthening and a couple of instances in Kit management allowed a move evaluation of products which are of commonplace use in humanitarian logistics. The agency from which the case studies stemmed is also a main actor within the field of humanitarian agencies and its activities affect several international locations and imposing companions in addition to providers.

Theoretical framework has others limits which are precise to its technique via coding and content evaluation. The evaluation uses other framework which may constrain the information in spite of the addition of in addition classes. The dialogue of information of the surroundings as a resource isn't a subject that was found in each Procurement strengthening and Kit management but it may assist improve the framework. Any other problem in Theoretical framework is the shortage of an empirical test. To a degree, exploration was carried out within the context of Procurement strengthening and Kit management and the underlying dynamic functionality at the back of every view gives the opportunity to better apprehend how the organizational competence to consolidate thru procurement, warehousing and transportation may be prepared.

Procurement strengthening and Kit management have some similar limits because the information was accumulated from the same agency throughout the same time frame. This sort of limits was the time-frame because the data accumulating occurred from 4th of November to the 22nd of November 2013 and represents a factor in time e of an evolving agency. Certainly, researchers that examine the agency at a later date may come across distinctive strengthening activities with strengthening being accomplished towards the suppliers or in the direction of the international locations where the agency operates. Any other issue is the area of where the information was taken for the interviews. Except one, all of the interviews had been carried out with personnel operating at the supply department headquarters which biases the factor of view to a primary area. But, this bias is particularly addressed thru other resources and getting access to the supply department headquarters gives the opportunity to recognize the worldwide supply chain and consolidation activities of the agency as

well as have get entry to a number of the top professionals of their discipline from the agency. Any other trouble that could arise is the applicability of the findings in another context as those views targeted on UNICEF. Within Procurement strengthening this is probably hard to reflect as not many other agencies put in force programmes thru companions and perform procurement offerings. If no other agencies have comparable practices, these factors to the distinctiveness of the case study carried out within the view. Kit management, using Kits is pretty commonplace and at the least 10 primary resource agencies use them (Berger, 2013).

5.2 Extra Research

This thesis provided in it lead us to perceive in addition research opportunities. A subject that could be exciting would be the function of strengthening in for-profit agencies that work within the same sort of turbulent environments as those concerned in humanitarian logistics. As those sorts of environments resemble those in which private agencies use dynamic abilities (fast changing technological environments in this situation), it can also be exciting to set up what the dynamic abilities are for global NGOs that work in disaster reaction and improvement and how they relate to activities of supply chains. This would make clear the link between supply chain and accountability. For Theoretical framework, this information can come as empirical information accumulated to check if the framework is steady. Whilst for Procurement strengthening and Kit management, analyzing other humanitarian agencies that manage materials should provide some in addition insights on the practice of procurement and kitting. As a result each view can on its own be the idea of in addition research.

The framework in Theoretical framework might be an amazing base to field-test how strengthening works and is managed in unique operations. Strengthening incentives and limitations in addition to their links need to be examined to decide if they really inhibit or limit material strengthening in agencies and in between agencies. An entire portrait of capability strengthening alternatives with all actors could assist better apprehend the underlying limitations and how they're managed and assist humanitarian agencies in enhancing their performance.

Procurement strengthening could need more in-depth research focused on procurement in humanitarian agencies. Certainly the agency that was used on this research was uncommon for humanitarian logistics bodies within the context of its mandate as a UN agency. This particular consideration implies little use of e-procurement in addition to very excessive transparency necessities. Those situations might not be found in other agencies with less binding legal settings in which to perform their procurement activities. Further analyses could additionally be required for local procurement strengthening. Further research may also be carried out on the idea of Kit management to talk about the management of kits. Kitting is mentioned in management literature usually within the context of line manufacturing. but, using kits in commercial enterprise to client and enterprise to enterprise supply chains isn't uncommon and extra research might be carried out within the private area on kits in supply chains. Because kitting in a humanitarian context may be carried out for a huge sort of items, the evaluation of various different kits which have special traits as those studied might be exciting. Consequently winterization kits that are seasonal or kitchen kits that have a cultural measurement may have exciting variations that complicate the management of kits for humanitarian agencies and are well worth analyzing.

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