



HUMANITARIAN-BUSINESS ORGANISATION COLLABORATION IN AFRICA: A REVIEW PERSPECTIVE

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Abstract

This systematic review study collects and summarises current studies outcomes, methods, and theories in understanding the correlation between business firms and humanitarian organisations to addressing humanitarian relief or societal issues in African countries. These findings indicate that business entities engagement in humanitarian action collaborations are

prompted by their internal and external inclination for value creation, while non-profit organisation's propensity to collaborate is due to donor and normative pressures. These results also reveal that more emphasis is placed on qualitative studies rather than quantitative and mixed-method studies. Key collaboration dimensions, methodological, and theoretical issues are discussed with their contributions. The authors propose that this study serve as a foundation for further study in humanitarian-business collaboration research on Africa.

Keywords: Systematic Review; Humanitarian - Business Organisation Collaboration; Humanitarian Logistics; Africa

INTRODUCTION

Humanitarian-business organisation collaboration (H-BOC) in Africa has gained much audience in the recent two decades, due to its vital propensity to save lives and sustain businesses; offering social, environmental, and economic benefits. H-BOC, is a societal or corporate engagement employed in the soliciting for financial support and the harnessing of actors resources to address challenges and needs identified in society and organisations. It has diverse benefits in the African society; and has been ascribed as a potential developmental engine in supplementing governments efforts (Ngqwala et al., 2017). In addition to the norm of the supporting financial, expertise, and resources assistance wise, the employment of new technologies in curbing disaster issues are added supports rendered (Connecting Business Initiative (CBI), 2018; OCHA, n.d.). However, such collaborative efforts among humanitarian and business actors has been found as quite minimal despite the humanitarian needs in many African countries.

Some researchers have reiterated that collaboration is established between humanitarian and business organisations to gain legitimacy in area of operation, and to exert normative pressure on industrial associations, corporate social responsibilities, and others (A.-L. Kühn et al., 2018). For example, companies operating in South Africa are admonished to subscribe to Broad-Based Black Economic Empowerment (B-BBEE) for a rating that enables them to have government related contracts (South African Government, 2014). B-BBEE is a legislative instrument to encourage companies to develop the local industries and operating areas as seen with logistics companies utilising that to support the community (ALSTOM, 2017; DACHSER, 2020; IMPERIAL LOGISTICS, 2019; Tulsawiz logistics, 2018). However, although it is widely understood that government and Non-Government induced effect prompts H-BOC in Africa, little attention has been focused on understanding the full nature of the correlation between business firms and humanitarian organisation collaboration as cited in the literature in addressing humanitarian and societal issues in African countries.

The aim of this literature review is to collect and summarise current studies outcomes, methods, and theories in order to understand the full nature of the correlation between business firms (such as logistics companies, and others) and humanitarian organisations in addressing humanitarian relief or societal issues notably in African countries. In addition, this paper will probe into the technology innovations that prompt as enable such collaborations. Subsequent sections give an overview of the study's literature review method, previous and recent works of literature related to the collaboration of humanitarian relief operators and business firm's concepts.

MATERIALS AND METHODS

The online research inquiry was conducted from databases retrieved from Shanghai Maritime University Library online lists of databases. Elsevier, Emerald insight, Web of Science, and google scholar were the database literatures were searched for this studies. This review focused on papers using these search strings. Please, see search string below.

It is known that with humanitarian response, logistics operations takes up over 70% of disaster relief funding which prompt for a more consensus effort in addressing this issue (Skou, 2020). Because of that, a focus was placed on searching for humanitarian logistics and business related entities collaboration in addressing such concerns. Also, as H-BOC engages in multi-stakeholders efforts among diverse actors an ecosystem perspective iterates concerns about how the use of technology should be an integrated part of the solution; thereby prompting the inclusion of business ecosystem/ digital business ecosystem in the search string (Jahre et al., 2016; Lai et al., 2018; Nurmala et al., 2018; Rice, 2020; SGH Warsaw School of Economics & Cichosz, 2018; Tofighi et al., 2016; Trunick, n.d.; Van Wassenhove, 2006; Zokaee et al., 2016). Moreover, due to internal or external inducement prompting humanitarian and business actors to collaborate, these theories were employed to ascertain if a technology innovation or business model that centred on homogenisation also may have prompted these engagements in the African settings. As a result, diffusion of innovation theory (DOI), technology-organisation-environment (TOE) framework, and institution theory were also part of the search string (DiMaggio & Powell, 1983; Rogers, 1983, 1995; Tornatzky & Fleischer, 1990). Though other theories are plausible in this context, only these theories were used in this study.

The search query timeframe was limited to the 2015-2020 year period. This study examines the effects of collaboration between humanitarian relief operators and businesses, the predictors of collaboration among these stakeholders, methodological issues with it and unexplained inconsistencies in the study, conceptual framework/theories employed in the study, and future research directions.

Search strings

- (((("Humanitarian logistics" OR "Disaster Logistics" OR "Relief Logistics")AND(("Private" OR "Commercial")AND ("Business"))AND "Africa"))))
- ("Humanitarian logistics" OR "Disaster Logistics" OR "Relief Logistics") AND "Africa"
- ("Business collaboration" OR "Business cooperation" OR "Business Integration") AND "Africa"
- (((("Profit company" OR "Profit organization") AND ("non-profit organization" OR "non-profit company")) AND ("collaboration" OR "integration" OR "cooperation")) AND "Africa")
- (("Business Ecosystem" OR "Digital Business Ecosystem") AND "Africa")
- (("Humanitarian technolog*" OR "humanitarian innovation" OR "Disaster technolog*" OR "Relief technolog*") AND "Africa")
- (("Diffusion of innovation theory" OR "Technology-organisation-environmental framework" OR "institutional theory") AND "Africa")

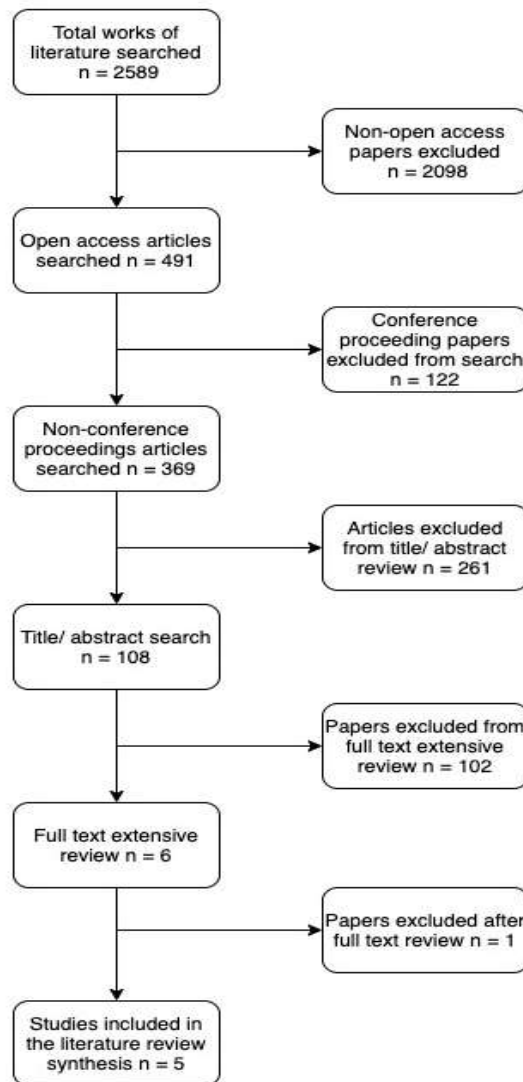


Figure 1. Literature search flow diagram. Source: Developed by the Author

This study is based on the following criteria. First, the research used in the study, focus on business collaboration with humanitarian actors in addressing humanitarian and societal issues hampering the development of societies in Africa. In addition, research that focused on measuring the collaboration of humanitarian actors and businesses were used. Only open access peer-reviewed articles written in English were selected. Works that related to businesses collaboration with business entities without a focus on societal or humanitarian relief support were not added. See Figure 1 for details of inclusion and exclusions in the search process used in for the literature review.

RESULTS

Collaboration/ Engagement of Humanitarian Actors and Business Actors: Research Findings

The most valuable variables used to predict the engagement/ collaboration between humanitarian organisations and business entities are financial sustenance, legitimacy, and corporate social responsibility. Several other studies have focused on the value actors who obtain benefits from the engagement/ collaboration as a means for addressing societal or relief related issues. In addition, limited studies have been conducted on the rationale for collaboration/ engagement among humanitarian organisations and business entities in Africa.

Financial Sustenance

Business entities aiding humanitarian organisations in their financial sustenance comes from four studies that focuses on humanitarian - business engagement and corporate social responsibility works. Two of the studies related their organisation continuous operations and engagement to the financial supports they get from donors and firms (Gupta et al., 2015; Kamstra & Schulpen, 2015). A vice versa reason is noted from humanitarian organisations assisting business firms with expertise in disaster situations. Several works reiterated that companies invest/ contribute to the society via the support of humanitarian actors activities as a social responsibility measure (Hotho & Girschik, 2019; A. L. Kühn et al., 2018).

Data on businesses assisting humanitarian organisations come from two interview conducted by Gupta et al. (2015), and 47 in-depth interview by Kamstra & Schulpen (2015), with their supporting secondary data obtained from works of literature taken from their reports, websites, and others. These studies examined senior executives, researchers, and NGO members on humanitarian – business engagement and how it impacts their organisations. The literature on business entity financial/ investment support of societal/ humanitarian organisation data used, were obtained from websites Hotho & Girschik (2019), literature review and policy reports (A. L. Kühn et al., 2018). Additionally, A.-L. Kühn et al.(2018) examined 211 websites for

corporate social reporting and their contribution and engagement on societal impacts in seven Sub-Saharan African countries. In addition, literature review and policy reports were used in examining diverse fields on corporate engagement in humanitarian actions.

The result from one study on corporate/ business engagement in humanitarian contribution for societal impact indicated that, corporate social responsibility (CSR) report contribution to the society in the seven sub-Saharan African countries had a 58% indicating a positive contribution of businesses to societal investment.

The other three authors works were based on qualitative research approaches in examining the humanitarian/societal -business collaboration/ engagement. While subsequent section focuses the acquisition of resources as another collaboration/ engagement means. Studies addressing this question is found in the next section.

Resources

Hotho & Girschik (2019) reiteration on the impact of business-humanitarian collaboration/ engagement to complement each other's resources and expertise. Corporate entity engagements in delivering humanitarian assistance during a crisis not only help in capacity building and sharing but also aid in cost reduction and minimisation of risk (Hotho & Girschik, 2019). This is typically found in complex disaster situations where the expertise resources of humanitarian organisations can complement corporate operations and vice versa. Although such collaborations and engagements among humanitarian organisations and business entities could be direct, there are indirect ways resources are also administered or utilised via donation (financial, in-kind donations, expertise, human resources, and others) in supporting the operations of relief of a society development organisations.

Despite the positive effects of humanitarian/ societal development organisations collaboration/ engagement with private companies, there are concerns of such engagement having an influence on their mission or objectives. According to Kamstra & Schulpen (2015), donors who serve as financiers to societal/ humanitarian organisations sometimes influence an organisation or several organisations to conforming to a homogeneous sets of operations in search for financial sustenance. Failure in complying to such adherence may result in the loss of resources or legitimacy. Though this may serve as a survival means for organisations, it also can limit the operational objectives or mission of the societal or humanitarian organisation for achieving its primary goal. The unanswered question from the above contribution of collaboration/ engagement between humanitarian/ societal development organisation and businesses firms is how it encourages the connections of other actors in the supply chain due to their homogenisation of operations.

Connections/ Network

Humanitarian/ societal organisation and business firms (logistics companies) networks and connections encourages the acquisition of resources and attainment of organisational objectives. Evidence from the four research studies outlines the importance of these connections and the networking of different actors in addressing both humanitarian and business related issues. For example, the BroadReach and Kickstart organisations serving as a case study in Gupta et al. (2015), through leverage on their local networks were able to find a cost effective way to obtaining beneficial health results for patients in South Africa and other 10 countries (in the case of the BroadReach organisation). Additionally, leveraging on connections between private companies, the Kickstart organisation was able to improve the process of delivering goods and services in four African countries via its use of local supply chain facilities of a private supply chain firm who understand the local demographics as a means of sustaining their operations and reducing cost. Moreover, businesses networks can also serve as support mean to mediation teams during conflict resolution, (Hotho & Girschik, 2019).

Despite the importance of connections and networks of different actors (thus, non-profit and profit organisations) in supporting their operations, not all organisations depend on other for survival in a comparative study of Ghanaian and Indonesian NGO's, Kamstra & Schulpen (2015), found that a dependence on another entities would depends on if the other entity has access to this resources and fundings vital to the survival of the connected organisation. Distinction made between local networks of like-minded and trusted organisations whose resources are limited prompts a co-dependence or connection among each other for survival as opposed to large multinational or national organisations with adequate resources that not rely much on outside networks or connections for its existence. Although, network connection prompt collaboration and engagement of humanitarian-business actors in addressing their operational issues, concerns are raised on the unclear definition of roles in the supply chain or network between small size operational entities and larger operational entities (Jensen & Hertz, 2016). A challenge seen in different actors with different objectives engaging in a societal and value driven activities and development.

The ensuing question to what degree do national & multinational companies influence the collaboration or engagement of humanitarian organisation and business companies. The subsequent section addresses this question.

Law, Stakeholders Influence and Legitimacy

Findings from four of the searched works of literature reiterates the engagement or collaboration of profit companies with non-profit organisations due to the influence of

international law, donor/stakeholder influence and the establishment of legitimacy in area of operations (Gupta et al., 2015; Hotho & Girschik, 2019; Kamstra & Schulpen, 2015; A.-L. Kühn et al., 2018). Private companies engaging in humanitarian activities or corporate social activities aim to gain good reputation and legitimisation among different stakeholders, such as, government, community, and others. Not only does that help in boosting the external relationship of the organisation but also assists in the internal motivation of their employees perception of the firm (Gupta et al., 2015; Hotho & Girschik, 2019). Adversely, multinational companies are influenced on their disclosure of their corporate social responsibility (CSR) activities to global business bodies such as the Organisation for Economic Co-Operation and Development (OECD) in the society they operate in (A. L. Kühn et al., 2018). Not only does the engagement of CSR, but donors also prompt societal/ humanitarian organisations to collaborate with other private firms to ensure legitimacy, accountability, and transparency a yardstick for provision of more finance to sustain the organisation (Kamstra & Schulpen, 2015). This sometimes serves as a paradox for organisations as their core mandates are diverted in meeting the objectives of donors. Concurrently, due to international laws, businesses operating in disaster/ conflict related areas are obliged involuntarily to engage or collaborate in humanitarian relief activities with other stakeholders. This was communicated in Hotho & Girschik's (2019) work on the migrant crisis prompting shipping companies plying the route to divert to save human lives. Although, stakeholders influence a hybrid engagement/ collaboration between humanitarian/ societal development organisations and businesses it had positive and negative impact on the organizations. The question left to address is how multinational companies/organisation collaboration encourages the internationalisation of their operation.

Internationalisation

Evidence from one of the reviewed works of literature for this study, indicated the importance of having an international outreach to other domestic areas as a source of securing critical supply chain collaborations/ partnerships with local suppliers (A. L. Kühn et al., 2018). Though, the study focused on CSR reporting, salient information was obtained on how companies in sub-Sahara Africa leverage their CSR to collaborate/ engage in societal/ humanitarian development as a means for expanding their organisation's reputation, legitimacy, and operations in the local community they operate in.

Summary on Research Findings

The research findings relating to the reasons for humanitarian- business engagement/ collaboration suggests that there are internal and external factors that influence the decision to

collaborate in a hybrid humanitarian-business system. External factors such as institutional law, stakeholders, and others influences prompt businesses and societal/ humanitarian organisation to collaborate or engage with each other for addressing business or societal issues. Moreover, internal factors prompting a hybrid collaborations for the purpose of acquiring resources, connections, financial sustenance, and others.

Key Dimensions of Humanitarian-Business Engagement/ Collaborations Identified from the Reviewed Literatures

Findings from the study outlined some predictors that were used in the five reviewed studies as outlined in the Table 1.

The dimensions used by the authors describes factors that focused on the macro and micro economic indicators that may influence the decision to collaborate/ engage in a hybrid humanitarian-business operations. Macro level dimensions or external influences on humanitarian organisation and businesses were taken from the level of GDP, life expectancy, corruption, education and infrastructure. Concurrently, elements from the micro-level perspectives are recorded as having an influence on the organisation (humanitarian/ businesses) internal operations and affairs, stakeholders, beneficiaries/ consumers impact. Emphasis was based on the characteristics of the organisations that may engage/ collaborate with each other to address societal or business related issues. The key dimension focused on were company size, structure, objectives (profitable or non-profitable), voluntary or coerced, directly assisting or indirectly supporting a course, engaging in a short or long term network collaboration and others. Though all this were stressed by the reviewed works of literature without the element of trust and value creation from the network of collaborators may render the hybrid humanitarian-business collaboration unsuccessful and relevant in addressing societal and business related issues.

Methodological Issues Identified from the Reviewed Works of Literature

The five reviewed study indicates that four of the studies were primary focused on qualitative research approach while only one focused on a quantitative research approach. Predominately among the qualitative studies were studies conducted using in-depth/ semi-structured interview, content analysis, and literature review. Logistic regression was the only quantitative method employed in a single study to ascertain the salient factors on how country and company-level determinants has an influence on the seven sub-Saharan African countries CSR reporting.

Despite the interesting findings from the studies, there were some methodological issues that marred the studies conducted. Methodological issues observed were related to the choice of sampling method, generalisation, reliability, and validity issues.

Three studies employed non-probability sampling methods, thus, snow balling, convenient, criterion sampling (Gupta et al., 2015; Jensen & Hertz, 2016; Kamstra & Schulpen, 2015). Though these sampling methods aids in capturing useful information from the target population, the challenge is the study cannot be generalised thereby limiting the propensity of it to be used by practitioners, and policy-makers in important decision making. Thus, validity is also compromised. Nevertheless, such studies may serve as a point of reference useful to gather useful information of target population for further studies. Concurrently, only one study was recorded as employing a systematic sampling method for their website information search for companies CSR information based on companies listed on the Stock/ Securities Exchanges in the study scope countries used (A. L. Kühn et al., 2018). One study did not employ any sampling method as the study's focus was based on a literature review (Hotho & Girschik, 2019a).

Issues relating to the reliability, stems from how the study was conducted. The three qualitative study, thus, Gupta et al. (2015),; Jensen & Hertz (2016) and Kamstra & Schulpen, (2015) gave little information on how their interview questions were developed. And an institutional review board or an independent ethics committee was not noted. Also, with the study conducted by A. L. Kühn et al. (2018), little was mentioned on how on the website data collection protocol was conducted. For example, were the website automatically scrapped with a web scrapping software or were assigned research(s) were tasked to look for all these information from all the 211 websites where there may be a probability of a researcher error.

Conceptual/ Theoretical Framework Employment and Issues Identified from the Literature

Evidenced from the five studies, two of the studies focused on utilising works of literature to build a framework/ theory (Gupta et al., 2015; Jensen & Hertz, 2016). While the following two focused on the employment of institutional theory (Kamstra & Schulpen, 2015; A. L. Kühn et al., 2018). Institutional theory is a means for assessing similarities among different institution/organisations on whether there is a likelihood of homogenisation. Hotho & Girschik (2019), was the only study that did not utilised a theory or conceptual framework in support of their study, thereby raising some concern on the scholarship of the study in terms of how the study was conceived.

Table 1. Literature Review Summary

No.	Author(s)	Dimension(s)	Research Design Approach	Methodology	Conceptual Framework/Theoretical Framework
1	(Gupta et al., 2015a)	<ul style="list-style-type: none"> • Comprehension of context • Products/ services, market, infrastructure, and scale innovative creation • Connection of diversity of stakeholders • Capacity-building and education engagement • Trust cultivation with community actors 	Qualitative	Semi-structured interview	Grounded theory
2	(A. L. Kühn et al., 2018)	<ul style="list-style-type: none"> • Country level <ul style="list-style-type: none"> ○ Gross Domestic Product (GDP) ○ Life expectancy ○ Corruption • Company level <ul style="list-style-type: none"> ○ Company nationality ○ Size ○ Industrial membership ○ Internationalisation 	Quantitative	Content analysis and logistics regression analysis	Institutional theory
3	(Hotho & Girschik, 2019a)	<ul style="list-style-type: none"> • Profit~ non-profit • Voluntary~ involuntary • Direct~ indirect • Independent~ collaboration 	Qualitative	Literature review	None
4	(Jensen & Hertz, 2016)	<ul style="list-style-type: none"> • Permanent and temporary networks • Central and decentralised structures • Coordination 	Qualitative	Semi-structured interviews	Developed framework on roles and coordination issues
5	(Kamstra & Schulpen, 2015a)	<ul style="list-style-type: none"> • Mission statement • Appropriate strategy • Organisational structure • Staff/ human resource 	Qualitative	In-depth interviews	Institutional theory

Source: Compiled by Author

Suggestions on Methodological and Theoretical/ Conceptual Framework Issues

Review from the five works of literature used for this study, indicates that attention on methodology and theoretical/ conceptual framework should be looked at. Based on methodology, with the important nature of a hybrid humanitarian-business organisation

collaboration in addressing societal and business issues, focusing more on probabilistic sampling would be of more great worth to practitioners, policymakers, and academicians as it would aid in developing more innovative programs for a coevolutive actors. Additionally, the ethics of conducting interviews, data collection, and reliability based on instrumentation should be looked at for credibility and generalisation of the studies to improve the humanitarian and business research field in Africa.

Also, the theories contained in this literature review here in, indicates that scholarly studies on humanitarian-business engagements/ collaboration in Africa is predominantly based on qualitative methods and less quantitative work. This lack of quantitative research may pose as a limitation for Africa's progression in forging for a sustainable collaborative system of humanitarian and business ecosystem actors.

MATLAB Word Cloud of the Reviewed Literatures

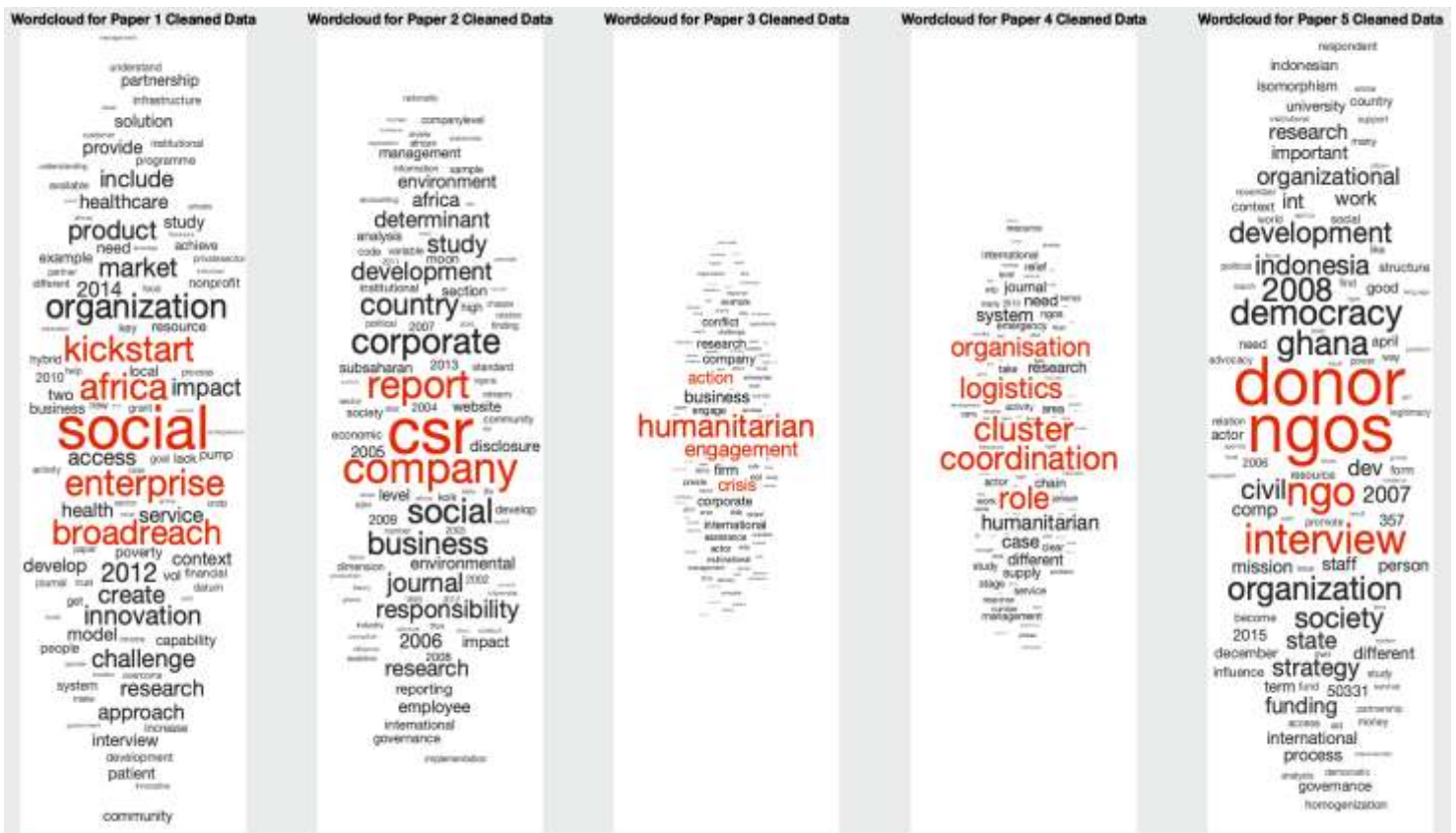


Figure 2. Wordcloud for searched literatures.

Source: Developed by Author using Matlab 2020a

From Figure 2, the dominant keywords from the screen articles written were “Enterprise”, “Humanitarian”, “logistics”, “donor”, “Company”, “Social”, “CSR”, “Africa”, “Engagement”, “NGOS”, and others. All these keywords fall within the scope of this study. See Figure 2 for the words. Please, see footnote for link to coding.¹

DISCUSSION AND CONCLUSION

Our findings indicate that private companies engage in a humanitarian action collaboration based on their value focus: CSR, legitimacy, voluntarily and involuntary obligations they may have within the area they operate in. Additionally, non-profit organisations, are also coerced into collaborating with corporate organisations in order to meet donor’s requirement so as to stay in operation.

Most of the studies were qualitative based with a single quantitative study, prompting for future studies on quantitative or mixed method study for in-depth knowledge on the study scope in Africa as they strive to achieve Agenda 2030 and 2063 goals, a prompting need for more research scholarship in these areas of study.

Based on the literature review conducted, it was observed that there are potential indication of more non-profit organisations and profit organisations coming together to address their related issues facing them be it societal or business if they can leverage on the resources and expertise, they both wield. Also, with the advancement of technology in the world and its proliferation in Africa, more empirical research should be forthcoming. In that regards, the contribution of this study was to identify current works of literature relating to humanitarian-business organisations collaboration, effects prompting such engagements, notable research methods and theories employed by researchers in encouraging future development on the gaps identified serving as a starting point in examining another means of creating a sustainable measure for the continent’s humanitarian and logistics needs.

Some limitations of our study come from the inability to access vast number of literatures due to the limitation of database access. Concurrently, the employment of these three theories (DOI, TOE and institutional theory) may also be a limitation as other theories may have additional value to this study . Future studies could focus on extending this study with focus on the current COVID-19 pandemic in perspective as many new humanitarian-business engagements may have been established.

¹ BAFFOE, BENJAMIN OHENE KWAPONG, (19th Jan, 2021), "Matlab Wordcloud code for five searched literatures", <https://doi.org/10.7910/DVN/TCRKM0>, Harvard Dataverse, V1,

REFERENCES

- ALSTOM. (2017). *Alstom in South Africa*. <https://www.alstom.com/alstom-south-africa>
- Connecting Business Initiative (CBI). (2018). *Humanitarian Private Sector Partnership Platform for East Africa*. <https://www.connectingbusiness.org/east-africa>, Retrieved Nov 11, 2020
- DACHSER. (2020). *Mediaroom*. <https://www.dachser.co.za/en/mediaroom/For-a-sustainable-society-More-and-more-NGOs-are-taking-action-around-the-world-8925>, Retrieved Nov 11, 2020
- DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147–160. <https://doi.org/10.2307/2095101>
- Gupta, S., Beninger, S., & Ganesh, J. (2015). A hybrid approach to innovation by social enterprises: Lessons from Africa. *Social Enterprise Journal*, 11(1), 89–112. <https://doi.org/10.1108/SEJ-04-2014-0023>
- Hotho, J., & Girschik, V. (2019). Corporate engagement in humanitarian action: Concepts, challenges, and areas for international business research. *Critical Perspectives on International Business*, 15(2/3), 201–218. <https://doi.org/10.1108/cpoib-02-2019-0015>
- IMPERIAL LOGISTICS. (2019). *IMPERIAL LOGISTICS Sustainability Report 2019*. <https://www.imperiallogistics.com/reports/ar-2019/sustainability/support-relevant-social-imperatives-within-our-operating-regions.php#improve>, Retrieved Nov 11, 2020
- Jahre, M., Pazirandeh, A., & Van Wassenhove, L. (2016). Defining logistics preparedness: A framework and research agenda. *Journal of Humanitarian Logistics and Supply Chain Management*, 6(3), 372–398. <https://doi.org/10.1108/JHLSCM-04-2016-0012>
- Jensen, L. M., & Hertz, S. (2016). The coordination roles of relief organisations in humanitarian logistics. *International Journal of Logistics Research and Applications*. <https://doi.org/10.1080/13675567.2015.1124845>
- Kamstra, J., & Schulpen, L. (2015). Worlds Apart But Much Alike: Donor Funding and the Homogenization of NGOs in Ghana and Indonesia. *Studies in Comparative International Development*. <https://doi.org/10.1007/s12116-014-9169-8>
- Kühn, A. L., Stiglbauer, M., & Fifka, M. S. (2018). Contents and Determinants of Corporate Social Responsibility Website Reporting in Sub-Saharan Africa: A Seven-Country Study. *Business and Society*. <https://doi.org/10.1177/0007650315614234>
- Kühn, A.-L., Stiglbauer, M., & Fifka, M. S. (2018). Contents and Determinants of Corporate Social Responsibility Website Reporting in Sub-Saharan Africa: A Seven-Country Study. *Business & Society*, 57(3), 437–480. <https://doi.org/10.1177/0007650315614234>
- Lai, Y., Sun, H., & Ren, J. (2018). Understanding the determinants of big data analytics (BDA) adoption in logistics and supply chain management: An empirical investigation. *The International Journal of Logistics Management*, 29(2), 676–703. <https://doi.org/10.1108/IJLM-06-2017-0153>
- Ngqwala, N. P., Srinivas, C. S., Tandlich, R., Pyle, D. M., Oosthuizen, R., Environmental Health and Biotechnology Research Group/ Division of Pharmaceutical Chemistry and Division of Pharmacy Practice, Faculty of Pharmacy, Rhodes University P.O. Box 94, Grahamstown 6140, South Africa, & School of Disaster Management, Stenden South Africa, Port Alfred, South Africa. (2017). Participatory Multi-Stakeholder Platforms in Disaster Management in South Africa. *Journal of Disaster Research*, 12(6), 1192–1202. <https://doi.org/10.20965/jdr.2017.p1192>
- Nurmala, N., de Vries, J., & de Leeuw, S. (2018). Cross-sector humanitarian–business partnerships in managing humanitarian logistics: An empirical verification. *International Journal of Production Research*, 56(21), 6842–6858. <https://doi.org/10.1080/00207543.2018.1449977>
- OCHA. (n.d.). *Engagement with the private sector*. <https://www.unocha.org/es/themes/engagement-private-sector>, Retrieved Dec 11, 2020
- Rice, J. B. (2020, February 27). *Prepare Your Supply Chain for Coronavirus* [Crisis Management]. Harvard Business Review. <https://hbr.org/2020/02/prepare-your-supply-chain-for-coronavirus>, Retrieved May 06, 2020
- Rogers, E. M. (1983). *Diffusion of innovations* (3. ed). Free Press [u.a.].
- Rogers, E. M. (1995). *Diffusion of Innovations, 4th Edition*. Free Press.
- SGH Warsaw School of Economics, & Cichosz, M. (2018). Digitalization and Competitiveness in the Logistics Service Industry. *E-Mentor*, 77(5), 73–82. <https://doi.org/10.15219/em77.1392>

Skou, S. (2020, February 19). *The vital role played by logistics during humanitarian crises*. <https://www.weforum.org/agenda/2020/02/the-vital-role-played-by-logistics-during-humanitarian-crises/>, Retrieved Jan 11, 2021

South African Government. (2014). *Broad-Based Black Economic Empowerment Amendment Act 46 of 2013*. https://www.gov.za/sites/default/files/gcis_document/201409/37271act46of2013.pdf, Retrieved Nov 11, 2020

Tofighi, S., Torabi, S. A., & Mansouri, S. A. (2016). Humanitarian logistics network design under mixed uncertainty. *European Journal of Operational Research*, 250(1), 239–250. <https://doi.org/10.1016/j.ejor.2015.08.059>

Tornatzky, L. G., & Fleischer, M. (1990). *The processes of technological innovation*. Lexington Books.

Trunick, P. A. (n.d.). Special report: Delivering relief to tsunami victims. *Logistics Today*, 46(2), 1–3.

Tulsawiz logistics. (2018). *Tulsawiz logistics*. <https://www.tulsawiz.co.za/#features>, Retrieved Nov 11, 2020

Van Wassenhove, L. N. (2006). Humanitarian aid logistics: Supply chain management in high gear. *Journal of the Operational Research Society*, 57(5), 475–489. <https://doi.org/10.1057/palgrave.jors.2602125>

Zokaee, S., Bozorgi-Amiri, A., & Sadjadi, S. J. (2016). A robust optimization model for humanitarian relief chain design under uncertainty. *Applied Mathematical Modelling*, 40(17–18), 7996–8016. <https://doi.org/10.1016/j.apm.2016.04.005>