Introduction

Globally, over the last four decades, the world has witnessed increase of man-made and natural disasters which have affected more than five billion people (Andersson, Jordahl & Josephson, 2019). The perpetual increase in these man-made and natural disasters globally continues to exert pressure on emergency relief organisations and their respective management to keep abreast with efficient relief response strategies while always ensuring quality emergency goods and service delivery and quick emergency services and goods availability. Elinder & Jordahl (2013) postulate that the negative aspects of outsourcing in emergency relief involve a more long-term strategic loss of internal control, high operations costs and development growth. In fact, over the last four decades, the world has witnessed over 6500 man-made and natural disasters which have affected more than five billion people (World bank, 2015). According to Susman, O’Keefe & Wisner (2019), the cumulative loss from all disasters has surpassed USD150 trillion and displacing 180 million people. The number of disasters affecting the world has climbed dramatically over the previous decade, from around 220 per year in the mid-1990s to around 400 per year now (Fosso Wamba & Samuel, 2020). Over the last twenty years, United States Foreign Aid system has become increasingly reliant on outsourcing private contractors (Andersson, Jordahl & Josephson, 2019). USAID has lost 40% experienced staff, and funds as their responsibility skyrocketed (Aldelsberger et al., 2018). Billions of dollars have been shifted to private contractors (Hilary, 2018). According to Elinder & Jordahl (2013), more than USD1.3 billion was awarded to Washington based 3PLs rather than the Haitian government since the earthquake. They were high
profile failures by 3PLs in both North and South American continent through inefficiencies, lobbying groups and non-accountability (Davis, Mayberry, Slaughter & Cerovski-Darricau, 2021).

According to Matsika (2019), one of the leading non-governmental organisation in Zimbabwe’s current outsourcing set up has been increasingly causing austere services and projects delays, confidential information leakages, high operating costs and risks, severe exploitation by suppliers, lack of top management involvement. According to Chatiza (2019), lack of coordination, augmentation and communication are the major challenges for a leading non-governmental organisation in Zimbabwe in the aftermath of the 2019 cyclone Idai in Manicaland province. Furthermore, a leading non-governmental organisation in Zimbabwe has been encountering difficulties in augmenting their emergency response activities and operations in many communities in Zimbabwe due to ineffective outsourcing management (Nyahunda, Tirivangasi & Mabila, 2022.). In view of the foregoing, it is evident that more research needs to be undertaken focusing on the strategies to enhance outsourcing of emergency relief at a leading non-governmental organisation in Zimbabwe. Strategies that enhance outsourcing are sacrosanct in achieving value addition, innovation and efficiency in emergency relief response (Gunasekaran et al., 2018).

The current predominant practice of outsourcing nearly failed a leading non-governmental organisation in Zimbabwe when the unanticipated catastrophe of Cyclone Idai and floods hit the Manicaland province in Chimanimani and Chipinge districts (Chari, Ngcamu & Novukela, 2021). All the outsourced services by a leading non-governmental organisation in Zimbabwe to 3PLs and 4PLs resulted in severe supplies delivery delays, poor quality service delivery, incomplete and poor contract performance, costly supplier relationships, high operational costs, loss of money, high risks, and unfulfilled targets (Nhamo & Chikodzi, 2021). The organisation run out of control mechanisms and strategies to manage outsourcing effectively. Consequently, there was loss of life, damage to homes, fields, schools and roads, and disruption to livelihoods (Chikodzi, Nhamo & Chibvuma, 2021). This resulted in a leading non-governmental organisation in Zimbabwe’s loss of emergency response competitiveness, loss of credibility and corporate image being put into disrepute when it comes to emergency relief response in Zimbabwe’s communities (Chari, Ngcamu & Novukela, 2021). It is against this backdrop that this study sought to establish key strategies that enhance outsourcing for emergency relief services. The study also sought to investigate the impact of key strategies of outsourcing on enhancing emergency relief. In the following sections the paper covers the concept of outsourcing; strategies to improve outsourcing of emergency relief services; theoretical framework; methodology; main findings, discussion and concludes with key points, recommendations, limitations and future research directions.

Literature Review

Theoretical and Conceptual Background

Organisations are competing to produce affordable but high-quality goods and services in today's business environment (Leo, Bui & Adelakun, 2022). Due to this, demand for outsourcing of services by 3PLs has increased. Al-Ahmad & Al-Oqaili (2013) suggest that outsourcing is a business agreement, strategic management initiative for gaining a competitive advantage of a firm by contracting out their existing internal and external non-value-added functions and value-added functions. Leo, Bui and Adelakun (2022) state that outsourcing contains multiple elements, including multiple branches and sub-branches. Al-Ahmad & Al-Oqaili (2013) argue that the overall and most fundamental outsourcing element is a business agreement. They indicate that the buyer and supplier reach a consensus through either oral or written agreement. Outsourcing uses a contract-out firm’s both existing functions and core competencies to be competitive (Gorla & Somers, 2014). Outsourcing, however, can be a strategic management initiative if it is contracted out to qualified suppliers who can result in increased market share (Leo, Bui & Adelakun, 2022). Organisations can also source their business processes in order to increase productivity. Therefore, to implement strategic outsourcing, firms expected identify their non-core activities and the specialised or experts suppliers to whom they can contract out the desired services (Maltz & Ellram, 2015).

Many organisations in Africa especially local emergency relief organisations have little knowledge about the logistics operational strategy of outsourcing (World Health Organization, 2020). Furthermore, emergency relief organisations in African are faced with myriad of problems such as disruption due to unavailability of supplies, lack of donor funding, infrastructure, transportation capacity, supply chain experts, language barriers, trade embargos and different exchange rates (Sunyotoe et al., 2019). For instance, to estimate the needs of an affected population in Somalia, 3PLs had to operate remotely in Ethiopia, Sudan and other parts of Somalia (Dufour, LaPorte, Paquette & Rancourt, 2018). Zimbabwe is one of the countries within the African continent that has been facing economic challenges, insufficient infrastructure and lacks information technology investment which plays a pivotal role in enhancing outsourcing performance (Nyahunda, Tirivangasi & Mabila, 2022).

Strategies to improve outsourcing of emergency relief services

Continuous multi-supplier integration management

The development of strategic and continuous multi-supplier integration relationships is ideal to enhance outsourcing performance in the emergency relief activities. Abazi (2019) postulates that organisation success depend on the agility and strength on integrative supplier relationships. Strategic suppliers’ teamwork is impetus for emergency response when disaster takes places to reduce costs, ensure quality, delivery, time and other measures of performance (Rajamäki & Vuorinen, 2013). Organisations can engage suppliers
through collaborative relationships for critical and bottleneck products or services (Golpiра, 2020). The emphasis on long-term integrative relationship is two-sided, the mutual commitment and balance of power which are key features (Abazi, 2019). The commitment enables both parties to keep the relationship working overtime, and balance ensures mutual benefits (Arda & Henret, 2006). Selecting an appropriate vendor with a good cultural fit and shared values is essential to building a healthy, collaborative, and long-term successful vendor relationship (Golpiра, 2020). Collaborative relationships work with a limited number of suppliers that provide goods or services that are critical to the organisations. Buyers and suppliers in this case may work together to create joint development and other innovative processes (Holland, 2015). Some scholars refer to collaborative relationships as ‘strategic alliances’ in another research (Rajamäki & Vuorinen, 2013). Lemmens, Decouttere, Vandael & Bernuzzi (2016) describe strategic alliances as a partnership based, multifaceted, goal-oriented and formed between two organisations in which both risks and rewards are shared. Continuous integrative supplier relations enhance outsourcing through building strategic trust, team approach, cost modeling, broad evaluations parameters, evaluation of factual data, frequent communication, and improvement goals (Golpiра, 2020).

**Developing strategic procurement or sourcing management strategies**

Strategic procurement management is impetus when outsourcing to achieve maximum value for money, quality improvements, continuous supply, access to new technology and minimise inventory investment (Hofmann, 2013). Hugo et al. (2013) suggests that procurement or sourcing strategies should be derived from the procurement plan so as to achieve strategic goals of the firm. Accurate estimates of cost, quality access and quick product availability can be achieved by procurement strategies (Hofmann, 2013). Procurement strategies requires strategic approach which must be determined by the organisation for the various types of products, works and services when outsourcing, resulting in a procurement strategy portfolio (Dewulf & Wright, 2009). There are various procurement strategies that can be applied to enhance outsourcing such as user buy, value management and volume consolidation strategies (Hugo et al., 2013).

**Adoption of strategic procurement methods for products, works and services**

Strategic procurement methods are impetus in enhancing outsourcing in many public sector organizations. One of the most effective strategic procurement methods is competitive bidding (Chilunjika, Intauno, Uwizeyimana & Chilunjika, 2022). The competitive bidding method of procurement entails a process in which all eligible and qualified bidders are permitted without discrimination to submit their bids (Kagande, Madzikanda, Sandada & Taderera, 2022). All bids from eligible and qualified bidders are assessed according to the same criteria and the bidding is held in one stage (Chikwere, Chikazhe & Tukuta, 2023). The restricted bidding method of procurement entails a process in which the bidders are limited to those selected or invited by the procuring organisation (Machirori, Pande & Fundira, 2022). The restricted bidding method of procurement may be used when the time and cost of considering many bids is disproportionate to the estimated value of the procurement requirement (Kagande, Madzikanda, Sandada and Taderera, 2022).

**Developing strategic contract management processes and models**

In outsourcing, the client organisation and the vendor organisation engage in a relationship. When a decision is made to contract with an external 3PL, an organisation is expected establish a contract that meet performance expectations and manage the organisational restructuring required to ensure a smooth transition to the new contractor relationship (Changalima, Mchopa & Ismail, 2023). The following steps can enhance contract management of outsourced services and projects. Firstly, there is a need to establish a project implementation team to manage the service procurement process (Ferreira, Heitor, Caldas & Varela, 2023). The team reviews organisational performance objectives; relevant procurement guidelines; assess internal contract management capacity; define the required services and draft the Request for Proposal (RFP); execute the 3PL recruitment (Brunjes et al., 2021). Secondly, there is a need to build or hire contract management capacity. The ability to successfully manage a contract requires supplier specialisation in the following areas: logistics operations, performance management, contracting, and procurement regulations (Lu & Hung, 2023). The outsourced 3PL service provider is expected to be resourced and capacitated in order to provide ongoing management attention to the contracted services (Changalima, Mchopa & Ismail, 2023). Thirdly, recruitment of the 3PL need to be conducted by following all relevant local guidelines and best practices for oversizing and executing the invitation to tender, bid review, vendor negotiations, and signing of the contract (Ferreira, Heitor, Caldas & Varela, 2023). In a tender, carefully consider the bid evaluation criterion, price is important, but it should not be a trade-off for service quality or ability to comply with your regulatory requirements (Lu & Hung, 2023). Fourthly, there is need to negotiate a service level agreement (SLA) or Frame work of agreement. A service-level agreement (also known as a logistics service agreement) is the part of the contract that records a common understanding of basic expected performance levels of the contractor in quantitative terms (Brunjes et al., 2021).

**Strategic supply chain risk management**

De-Oliveira et al., (2017) point out that supply chain decisions are differentiated from the usual business decisions settings involving risk, in number of respects. One of the main objectives of supply chain risk management is to prepare companies to minimise the effects of failure associated with the use of integrated systems and integration of the supply chain (Pham et al., 2023). Waqas et al. (2023) present five major components of the supply chain risk management framework and these are: (a) risk context and risk drivers are aspects of the site under study and can be imposed by nature or consequence of disordered action of man in the occupation of spaces in the environment (Pham et al., 2023); (b) risk management influencers are defined as four key influencers, reward, supply
chain risks, timescale, and portfolio considerations; (c) decision makers are key players because at the time of emergency there are problems associated with the individual characteristics regarding the personal fears and group characteristics that influence the acceptance of the leadership of a deputy coordinator for the work (Waqas et al., 2023); (d) risk management responses which must consider two types of risk in relation to costs and deadlines, the risk of making the right or wrong decision, and the risk of not meeting the needs in the time available at the time of a disaster (Pham et al., 2023). (e) performance outcomes which can be directed to several outbreaks in accordance with organisational goals and profile of stakeholders (Shah et al., 2023).

**Adopting information technology and ERP software systems**

According to Trott & Hoecht (2014), there is rampant advancement in information technology and widespread usage of ERP systems. ERP system is a corporate business analysis and planning software which is typically a module of integrated applications that an organization can use to collect, store, manage and interpret data from many business activities including production planning, supply chain planning, costing, manufacturing, services, marketing and sales, inventory management and many other business processes (Milovanović, Janačković & Stanković, 2017). Organisational departments are integrated into a synchronized computerized system to act harmoniously to the achievement of organisational mandates seamlessly in an efficient manner to keep abreast with the highly dynamic business environment (Motwani, Mirchandani, Madan & Gunasekaran, 2002). ERP systems are designed around a single, defined data structure (schema) that typically has a common database (Abdelghaffar, 2012). This helps to ensure that the information used across the enterprise is normalised and based on common definitions and user experiences (Trott & Hoecht, 2014). These core constructs(modules) are then interconnected with organization activities driven by workflows across business departments for example finance, human resources, logistics, and operations (ZHU, 2017). Information technology can be used to remove problems of ineffective coordination and collaboration during relief operations resulting from different humanitarian organisations (Peslak, Subramanian & Clayton, 2008).

**Application of supply chain network modelling and programming techniques.**

Aldrighetti, Battini, Ivanov & Zennaro (2021) state that the techniques are used to determine the following: (a) strategic decisions about the facilities to be established in given locations; (b) Tactical operation decisions regarding the quantity produced for each product at each factory; and (c) Financial decisions for determining the amount of donor fund. According to Aldrighetti, Battini, Ivanov & Zennaro (2021), there are five basic types of supply chain network modelling and techniques that improves outsourcing, these are: i) supply Chain Network Design Method requires determination of the production location, locations of stocking and sourcing facilities, channels the products take through them. This model aims to optimise finished product flows from plants to the distribution centers and customers (Mula, Peidro, Diaz-Madroñero & Vicens, 2010); mixed-Integer Programming Optimisation Modelling includes various important supply chain models such as models for vehicle routing and scheduling, facility location and sizing, shipment routing and scheduling, freight consolidation and transportation mode selection (Lemmens, Decouttere, Vandeae & Bernuzzi, 2016); Stochastic Programming and Robust Optimization Methods deals with a class of optimisation models and algorithms in which there is data uncertainty (Aldrighetti, Battini, Ivanov & Zennaro, 2021). In robust optimisation, the uncertainty about problem data is treated as deterministic, unknown but bounded (Lemmens, Decouttere, Vandeae & Bernuzzi, 2016).

**Adopting strategic supply chain data analytics**

The growing interest of humanitarian organisations in the use of supply chain data analytics tools to tackle complex challenges may have a positive and significant effect on building resilience in the humanitarian supply chain (Nguyen et al., 2018). Zeng, Lin & Xu (2011) found out that new organisations are generally positive towards, and show a great deal of enthusiasm for, embracing the potential of supply chain data analytics. Supply chain data analytics managers may bring about better creative and innovative solutions (Nguyen et al., 2018). Rozados & Tjahjono (2014) argue that despite slowness in adopting supply chain analytics into practice, there is high level of interest by firms in adopting big data analytics to improve their decision-making capabilities.

**Supply chain logistics information systems and transaction control**

Supply chain logistics information systems and transaction control enable commercial and non-profit making organisations to move away from intuitive to data-driven decision-making (Nguyen et al., 2018). Organisations will use information systems to help create value by tackling complex issues in less time and at a relatively low cost. It helps to capture structured interpretations of large unstructured data sets which constitute nearly 85% of the total volume of big datasets (Sahaya & Ranjan, 2008). Rozados and Tjahjono (2014) argue that firms have enormous opportunities to improve their transaction control using supply chain information systems. Supply chain information systems have redefined the way crises are identified and tackled, and how information is gathered, analysed and shared among the various stakeholders (Nguyen et al., 2018).

**Supply chain network design optimisation model for multi-services outsourcing**

The supply chain network is mathematically modelled in a mixed integer linear programming (MILP) form considering multi-services, multi-period, multi-echelons, and associated cost elements (Mula, Peidro, Diaz-Madroñero & Vicens, 2010). The model represents both location and allocation decisions of the supply chain which maximises the efficiency. Model outputs have proved its ability to design multi-services, multi-period, and multi-echelons networks (Aldrighetti, Battini, Ivanov & Zennaro, 2021). The model
has been verified through a detailed example and the implementation of the proposed model has been demonstrated using some numerical means. Mula, Peidro, Díaz-Madroñero and Vicens (2010) develop a multi-period multi-echelon forward–reverse logistics network design under risk model. The proposed network structure consists of three echelons in the forward direction, (suppliers, facilities and distribution centers) and two echelons, in the reverse direction (disassembly and redistribution centers), first disaster effect zones in which the demands are stochastic and second customer zones in which the demand is assumed to be deterministic, but it may also assume to be stochastic (Lemmens, Decouttere, Vandaele & Bernuzzi, 2016). The problem is formulated in a stochastic mixed integer linear programming (SMILP) decision making form as a multi-stage stochastic program to maximise the total expected profit (Aldrighetti, Battini, Ivanov & Zennaro, 2021).

**Theoretical theory**

The study is guided by the resource-based view theory. According to Ndungu and Ismail (2020), the resource-based view is based on the concept of productive resources. In view of RBV theory of the firm, outsourcing is taken as a strategic decision which can be used to fill gaps in the firm's resource and capabilities (Sayed & Agndal, 2022). Sirmon, Hitt and Ireland (2007) postulate that the resource-based theory emphasises that organisation core competences differ from one organisation to another with its unique collection of resources of core competences. Organisations must come up with dynamic capabilities which are adaptable to the environmental changes (Leo, Bui & Adelakun, 2022). The theory maintains that to generate sustainable competitive advantage a resource must provide economic value and must be presently scarce, difficult to imitate, non-substitutable and not readily obtainable from markets (Olavarrieta & Ellinger, 1997). The theory also relies on two key points; first that resource are determinants of firm performance and second that resources must be rare, valuable, difficult to imitate and non-substitutable by other rare resources (Sirmon, Hitt & Ireland, 2007).

**Research and Methodology**

**Research design and approach**

The study adopted a descriptive research design and quantitative research approach. The descriptive research design was used by the researcher to systematically describe the population's facts and characteristics. According to Saunders, Lewis and Thornhill (2012), a descriptive research design tries to discover answers to the questions who, what, where and sometimes how. The descriptive research describes what exists and may help to uncover new facts and meaning.

**Target population, sampling and sample size**

The population target population of this study consists of 300 employees engaged in supply chain department from a leading non-governmental organisation based at its head office in Harare, Zimbabwe. The managerial and non-managerial staff who are involved in supply chain activities were selected primarily because they are the ones who have experienced the effects of outsourcing and they understand changes brought about. The sample size/estimation was derived from using the formula below recommended by (Mugenda and Mugenda, 2003). Closed-ended questionnaires used in this study because they are easy to administer (Zhou & Utete, 2023; Utete, 2021) The formula yielded a sample of 30 respondents. This represents 10 percent of the target population of 300. According to Mugenda and Mugenda (2003) a sample size of 10% of a target population is adequate for a survey.

\[
n = p (1-q) (z/e)^2
\]

Where \(n\) = desired sample

\(z\) = standard normal deviate at the required confidence level

\(p\) = the proportion in the targeted population estimated to have characteristics

\(q = 1 - p\)

\(e\) = Margin of error

Sample size will thus be 0.5(1-0.5). (1.30/0.1) 2 =30 or 10% of 300 (Target Population) = 30 (Sample size) (Mugenda and Mugenda, 2003). The respondents participate in this study voluntarily. Although the recommended sample size was 30, the researcher distributed 80 questionnaires.

**Data collection and analysis**

As done by earlier studies (Manjoo, Rajlal & Utete, 202; Utete, 2023), the researchers physically and personally distributed the questionnaires to the respondents to collect data. Stewart (2022) recommended that questionnaires are easy to administer although they are inflexible. Closed ended questionnaires were sent through physical distribution to the participants. The quantitative data was analysed using SPSS version 29. Both descriptive and inferential analysis were used to analyse the data. Regression analysis was used to answer hypothesis.
Findings and Discussions

Findings

The researcher distributed 80 questionnaires, and all were collected. After data cleaning, only 75 were found to be valid and were subsequently used for data analysis. This gave a response rate of 94%. In addition, this high response rate can be attributed to the fact that the respondents were enthusiastic about the topic under study. For this study, Cronbach’s alpha was used to check the reliability of the data collected for the variables under study. Ilsemann (2022) opines that an alpha value above 0.7 is regarded as reliable. The “key outsourcing strategies” variable scored 0.818 and “emergency relief” variable obtained 0.811. The data gathered through the questionnaires for the study variables is reliable as the alpha values were above the threshold of 0.7 (Tanalp, 2022). The section presents results in relation to the objectives of the study.

For this study, majority of the participants (60%) were males. The age range 32–36 dominated the study, as noted by 46%, followed by 37–41 years with a total of 27%. The least-aged group was 19 years and below, with 7%. These results can be used to conclude that the organisation under the study has a fair human resource policy as it employs workers of different ages. A total of 61% had a degree as the minimum qualification. The results show that, on average, the organisation employs educated employees. The majority of the participants of this study had over 8 years and above of experience. These results show that on average employs educated employees.

Objectives number 1: Key strategies for enhancing outsourcing of emergency relief

Respondents were asked to rate the key strategies that the selected organisation is currently adopting to enhance its outsourcing capabilities. Different key strategies were listed, and the employees were asked to rank the extent to which they agreed or disagreed using the key ranging from 1 being strongly disagree to 5 being strongly agree. A summary of these results is shown in table 1 below. The mean score above 3.5 indicates that more employees agree with the statement, and the standard deviation below 1.0 indicates that the sample results would be the same even if the entire population was used.

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous multi-supplier integration management</td>
<td>75</td>
<td>4.0933</td>
<td>.79140</td>
</tr>
<tr>
<td>Strategic procurement methods of products, works and services</td>
<td>75</td>
<td>4.0667</td>
<td>.77692</td>
</tr>
<tr>
<td>Adopting Information Technology and ERP software systems</td>
<td>75</td>
<td>3.6933</td>
<td>.91494</td>
</tr>
<tr>
<td>Top management involvement, control and planning</td>
<td>75</td>
<td>3.7200</td>
<td>.72708</td>
</tr>
<tr>
<td>Application of supply chain modelling, algorithms and programming</td>
<td>75</td>
<td>3.6933</td>
<td>.63615</td>
</tr>
<tr>
<td>Adopting supply chain data analytics</td>
<td>75</td>
<td>3.7333</td>
<td>.70391</td>
</tr>
<tr>
<td>Develop strategic contract management processes and models</td>
<td>75</td>
<td>4.0933</td>
<td>.59669</td>
</tr>
<tr>
<td>Proactive building of strategic alliances, partnerships and collaborations</td>
<td>75</td>
<td>3.5600</td>
<td>.59820</td>
</tr>
<tr>
<td>Design framework for 3pls or 4pls service configuration decisions for multi-services or single outsourcing</td>
<td>75</td>
<td>3.7333</td>
<td>.85950</td>
</tr>
<tr>
<td>Implementing supply chain network design optimisation for multi-services outsourcing</td>
<td>75</td>
<td>3.8933</td>
<td>.83137</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ analysis

The table results show that the organisation's key strategies for improving its outsourcing capabilities are continuous multi-supplier integration management and investing in training and development, as indicated by a mean score of 4.09. The mean score of 4.06 indicates that strategic procurement methods of products, works, and services are another key strategy that the organisation is implementing. Implementing supply chain network design optimization for multi-services outsourcing as required is another important strategy that can be implemented by organizations to enhance outsourcing endeavors. The conclusion was made based on the means core of 3.89 obtained from the statement "implementing supply chain network design optimization for multi-services outsourcing as required." Designing of a framework for 3pls or 4pls service configuration decisions for multi-service or single service outsourcing are key strategies being adopted by the organisation, as shown by the mean score of 3.73. The least-key strategy that is...
being adopted by the organisation is proactive building of strategic alliances, partnerships and collaborations, as indicated by a mean score of 3.56.

Table 2: The impact of outsourcing strategies on performance of emergency relief performance

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing strategies enhances trustworthiness and corporate good will by</td>
<td>75</td>
<td>3.9600</td>
<td>.76122</td>
</tr>
<tr>
<td>engaging with emergency relief service providers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outsourcing strategies minimises cost of acquiring works, products and</td>
<td>75</td>
<td>3.8400</td>
<td>.80606</td>
</tr>
<tr>
<td>services, providing opportunity to focus on core services.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency is gained through outsourcing strategies by moving resources or</td>
<td>75</td>
<td>3.6933</td>
<td>.80494</td>
</tr>
<tr>
<td>assets to service providers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organisation achieves efficient quick response and high-quality</td>
<td>75</td>
<td>3.7467</td>
<td>.77273</td>
</tr>
<tr>
<td>emergency service delivery by taking advantages of the service providers'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>supply chain networks.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth can be achieved through outsourcing by taking advantage of the</td>
<td>75</td>
<td>3.6933</td>
<td>.85382</td>
</tr>
<tr>
<td>emergency relief providers technologies and processes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploitation of available specialised skills is assured through outsourcing.</td>
<td>75</td>
<td>3.8933</td>
<td>.74568</td>
</tr>
<tr>
<td>By engaging reputable emergency relief service providers, costs are</td>
<td>75</td>
<td>3.7467</td>
<td>.77273</td>
</tr>
<tr>
<td>ultimately minimised, and efficiency is achieved.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Valid N (listwise) 75

Source: Authors’ analysis

Results in the table show outsourcing strategies enhances trustworthiness and corporate good will by engaging with emergency relief service providers.; the conclusion was made based on the mean score (3.96) obtained from that statement. Exploitation of available emergency relief skills is assured through outsourcing, and this has an influence on the performance of organisation. The conclusion was based on the mean value of 3.89 obtained on the statement. Generally, outsourcing has been known to be the major antecedent of cost reduction, and according to the workers at the organisation, they all seem to concur with that fact, as noted by the mean score of 3.84 on the statement. Outsourcing strategies minimises cost of acquiring works, products and services, providing opportunity to focus on core services. The organisation under the study achieves efficient quick response and high-quality emergency service delivery by taking advantages of the service providers’ supply chain networks, and this has an influence on the performance of the organization. Therefore, based on the results, the study can conclude that outsourcing strategies influenced the performance of the selected organisation.

Regression results

Regression was performed to quantify the impact of outsourcing on performance.

Table 3 shows the model summary.

Table 3: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin -Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.827a</td>
<td>.684</td>
<td>.679</td>
<td>.33894</td>
<td>1.986</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Outsourcing _Strategies

b. Dependent Variable: Performance

Source: Authors’ analysis

The model summary shows the quality of the model in predicting performance from outsourcing strategies. The R=0.827 indicates that outsourcing strategies and performance have a positive relationship. The R-square value of 0.684 shows that 68.4% of the variation in performance is being caused directly by outsourcing strategies, while the remaining 31.6% is being caused by other exogenous factors that are not included in this study.

ANOVA

The ANOVA table shows how reliable or significant the model predicting performance from outsourcing strategies is. The F-statistic and significance are important to determine the model's validity.
Table 4: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>18.132</td>
<td>1</td>
<td>18.132</td>
<td>157.842</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>8.386</td>
<td>73</td>
<td>.115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26.519</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance The F-statistic (1, 73) =157.842, p<0.05, this therefore implies that the model is significant as the p-value is below 0.05.
b. Predictors: (Constant), Outsourcing Strategies

Source: Authors’ analysis

Coefficient table

Table 5: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>I</td>
<td>(Constant)</td>
<td>.662</td>
<td>.251</td>
<td>2.637</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>Outsourcing Strategies</td>
<td>.813</td>
<td>.065</td>
<td>12.564</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance

Source: Authors’ analysis

The model predicting performance from strategic outsourcing is:

\[
\text{Performance of emergence relief programme} = 0.662 + 0.813 \times \text{Outsourcing Strategies} + 0.33894
\]

In the absence of outsourcing, 66.2% variation on performance is influenced by other exogenous factors which are not included in this study. 1% increase in outsourcing strategies there would 81% increase in performance. The result was significant at p<0.05.

Discussion

The first objective of the study was to identify key strategies for enhancing outsourcing. The key strategies being implemented by a leading non-governmental organisation in Zimbabwe to enhance its outsourcing capabilities are continuous integrative supplier or vendor management and developing strategic contract management processes and models; strategic procurement methods of products, works, and services are another key strategy that a leading non-governmental organisation in Zimbabwe is implementing. Investing in Information Technology and ERP software systems and adopting supply chain modelling, algorithms and programming are impetus strategies that can be implemented by a leading non-governmental organisation in Zimbabwe to enhance their outsourcing. Investing in Information Technology and ERP software systems, adopting supply chain modelling, algorithms and programming and adopting supply chain data analytics are some of the strategies being adopted by a leading non-governmental organisation in Zimbabwe. The least-key strategy that is being adopted by a leading non-governmental organisation in Zimbabwe is building proactive relationships. These results are in tandem with conducted by Thai, Rahman & Tran (2022) on outsourcing of trucking activities by relief organisations which found that relief organisations mainly used subcontracting, commercial contracts; and letters of assist. The results of the current are in congruent with a study carried out by Musarandega & Masocha, (2023) on best practices for outsourcing logistics in disaster relief which found that detailed written contracts and issuing detailed requests for proposal or quotation are key strategies to performance. Humanitarian organizations require sustainable relationships with suppliers to achieve cost management and improve efficiency. Furthermore, the study of Musarandega & Masocha (2023) hypothesised that the agility and strength of integrative supplier relationships are critical to the success of humanitarian organizations. However, both studies of Thai,Rahman & Tran (2022) and Musarandega & Masocha, (2023) could not identify the key strategies for stimulating outsourcing hence the study contributes to new knowledge.

55
The second objective of this study was to determine the impact of outsourcing strategies on the performance of emergency relief at the selected organisation. The study revealed that outsourcing strategies have positive significant impact on performance emergency relief programme. The regression results, particularly the R-square value of 0.684, showed that 68.4% of the variation in performance is being caused directly by outsourcing strategies, while the remaining 31.6% is being caused by other exogenous factors that are not included in this study. Furthermore, a 1% increase in outsourcing strategies results in an 81% increase in performance. The result was significant at p<0.05. Therefore, based on these results, the study concluded that outsourcing has been positively influencing the performance of the organization. These results are in line with a study by a study conducted by Leo, Bui & Adelakun (2022) on outsourcing logistic service and relief supply chain found that the logistic service outsourcing method can improve the efficiency of a relief supply chain. In addition, the results agree with the work of Li, Han, Zhou & Gu (2023) who conducted a study on service outsourcing and disaster response methods in a relief supply chain and found that the proactive outsourcing strategy can make a relief supply more efficient. A study carried out by Luo,Yang, Zhang & Pan (2022) further found that proactive or reactive outsourcing would improve the benefits of buyer and supplier simultaneously. Furthermore, Luo, Yang, Zhang & Pan, (2022) on service outsourcing of relief material supply chain found that unit inventory cost, reactive price, risk of supply shortage, salvage value and expected perishable rate have significant impact on the optimal amount of propositioned inventory. Nevertheless, all the studies conducted Leo, Bui & Adelakun (2022), Luo,Yang, Zhang & Pan (2022) and Li, Han, Zhou & Gu (2023) did not specifically address the impact of outsourcing strategies on the performance of emergency relief at the selected organisation. Therefore, the results of the current study contributes to new knowledge.

Conclusion

Since the objectives of this study managed to establish the key outsourcing strategies and their impact on performance of emergency relief. The main objective of the study was to establish the key strategies to enhance outsourcing of emergency relief by a leading non-governmental organisation in Zimbabwe. The study revealed that investing in Information Technology and ERP software systems and adopting supply chain modelling, algorithms and programming are impetus strategies that can be implemented by a leading non-governmental organisation in Zimbabwe to enhance their outsourcing. However, continuous integrative supplier or vendor management and developing strategic contract management processes and models; strategic procurement methods of products, works, and services are another key strategy that a leading non-governmental organisation in Zimbabwe is executing. The study also established that outsourcing strategies has a positive significant impact on emergency relief performance. Since outsourcing comes with some problems such as poor products, services and community project delays, therefore, a leading non-governmental organisation in Zimbabwe should consider adopting information technology, artificial intelligence and data analytics. Furthermore, a leading non-governmental organisation in Zimbabwe should not compromise quality of products and services with effort to lower costs thorough poor outsourcing strategies. This has long term consequences as it affects their strategic goal of providing quality emergency response services to the affected communities. The leading non-governmental organisation should be very cautious when choosing appropriate supply chain partners and supply chain networks to be able to realize the intended benefits of business process outsourcing. The due diligence process is also a worthy endeavor to guarantee success and to make sure that business process outsourcing is not conduit for financial risk of donor fund. The study focused on a leading non-governmental organisation in Zimbabwe neglecting other emergency relief organizations and thus making it difficult to make inferences to other players. Therefore, the researcher recommends that further studies should consider taking all humanitarian organisations to have a comprehensive understanding on the issue under study.

Acknowledgement:
We would like to thank University of Zimbabwe and University of Zululand for their support.

All authors have read and agreed to the published version of the manuscript.


Funding: This study was not funded

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to restrictions.

Conflicts of Interest: The authors declare no conflict of interest.

References


Al-Ahmad, W., & Al-Oqaili, A. (2013). Towards a unified model for successful implementation of outsourcing and reversibility of information systems. *Journal of King Saud University-Computer and Information Sciences*, 25(2), 229-240. https://doi.org/10.1016/j.jksuci.2013.03.003


57


Tanapal, J. (2022). *A critical analysis of research methods and experimental models to study apical extrusion of debris and irrigants*. s.l.: s.n.


**Publisher’s Note:** SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

© 2023 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).

International Journal of Research in Business and Social Science (2147-4478) by SSBFNET is licensed under a Creative Commons Attribution 4.0 International License.