

Cause – effect relationship of trust of buyer – suppliers’ integration on procurement performance in large manufacturing firms in Tanzania

Large
manufacturing
firms in
Tanzania

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Abstract

Purpose – The purpose of this study was to establish the cause-effect relationship between determinants of trust in the buyer-supplier integration and the procurement performance of large manufacturing firms in Tanzania.

Design/methodology/approach – The study surveyed 52 firms from Temeke Municipality, Tanzania using questionnaire subjected to one procurement manager and one stores manager tallying a sample size of 104 respondents. Explanatory design was employed due to the presence of cause-effect relationship and the null hypotheses were tested using binary logistic regression technique at p values < 0.05 and $ExpB > 1$.

Findings – Mutual goals, geographical vicinity among partners, and supplier reliability are significant for the procurement performance of the manufacturing firms in Tanzania, whereas interpersonal and inter-organizational trusts and perceived buyers’ confidence are of no significant impact.

Research limitations/implications – Buyer-supplier integration is a recently embraced and paramount practice for the manufacturing firms in Tanzania. Therefore, longitudinal study would further add value. The presence of the causality from the tested hypothesis appeals for the necessity of progress tracking.

Practical implications – Causality has been established, and a framework has been developed for the performance of large manufacturing firms using trust of buyer-supplier integration.

Social implications – There shall be creation of more employment opportunities and timely availability of materials from large manufacturing firms in Tanzania.

Originality/value – Anchored on transaction cost economics and resource dependency theories, the study disclosed the root cause of procurement performance in the context of manufacturing firms in Tanzania whilst considering trust as a resource advantage of buyer-supplier integration.

Keywords Trust, Buyer – supplier, Procurement performance

Paper type Research paper

1. Introduction

1.1 Background to the problem

Procurement is widely renowned as a major determinant of organizational performance (Lysons and Farrington, 2012). In recognition of its undisputed importance, various organizations are currently investing in strategic buyer-supplier integrations with the intent to enhance performance (Zhang and Huo, 2013). Trust is important for the



buyer–supplier integrations as it brings success for the actors (Hudnurkar and Rathod, 2017). In developed countries such as Finnish speaking countries, it is argued that trust is a measuring yardstick for operative buyer–supplier integrations (Shahzad *et al.*, 2015). The authors also recommend that similar comparative studies should be conducted in developing countries, as was intended in the current study. Matevž and Maja (2013), who did studies in Slovenia, Russia, Serbia and the United Arab Emirates, specifically stress that inter-organizational trust is of great essence if organizations are to flourish, and its absence is a hindrance to performance. A study from South Korea further reveal that geographical vicinity is a major influence on buyer–supplier integration and consequently its outcomes (Sung and Kang, 2013). O’Toole and Donaldson (2002) found that perceived buyer’s confidence has implications for integration performance in the context of developed countries, including the United Kingdom (UK), and hence a need for the same aspect to be evaluated in the context of third-world nations.

Procurement is also regarded as crucial in the organizations of developing countries such as Uganda (Basheka, 2008). Inadequate material procurement systems, on the other hand, pose a challenge to private firms (Banda, 2009). With broad awareness that strategic buyer–supplier integration is an integral part of procurement performance, the majority of firms are making a strategic shift to collaborative buyer–supplier integration (Kimario *et al.*, 2021; Salema and Buvik, 2016). A study from Tanzania found that geographical vicinity of the buyer–supplier integration actors actually determines suppliers’ logistic performance in the health sector. However, this study focused on procurement performance in the manufacturing sector, and the same predictor variable was analyzed against procurement performance in the context of large manufacturing firms in Tanzania. Apart from that, supplier reliability is highlighted as a critical component of trust that influences procurement performance in Kenya (Oyando *et al.*, 2014). Recognizing the wide range of differences between countries, this study analyzed the contribution of the supplier’s reliability with reference to trust in the buyer–supplier integrations on procurement performance in Tanzania.

Chao and Kato (2014) from Tanzania concluded that perceived buyer’s confidence significantly contributed to the buyer–supplier integration performance in Tanzania. The same authors recommended that further studies be conducted in other dimensions. It is in honor of Chao and Kato’s (2014) recommendation which perceived that buyer’s confidence was analyzed against procurement performance dimensions of delivery time and quantity. Mboghoina *et al.* (2014) from Tanzania found that organizations that performed well had equally established mutual trust with suppliers who reliably supplied them with materials. Theoretically, Handfield *et al.* (2000) argue that both parties should strive to achieve mutual trust for the buyer–supplier integration to flourish. Equally important, Lysons and Farrington (2012) described reliability as indispensable during procurement decision-making. Based on the fact that in Africa, private sectors are grappling with the set up systems of procurement processes (Banda, 2009).

Performance of buyer–supplier relationships can be analyzed from any of the three perspectives; the buyer’s perspective, supplier’s perspective or the facilitating agency’s perspective. However, this study analyzed the performance of buyer–supplier relationships from buyer’s perspective. It was important to focus on this area because the procurement function (buying side) of the surveyed firms is eyeing the scientific key to unlocking themselves from unreliable supply of procured materials (Mboghoina *et al.*, 2014). Empirically, the study of Matevž and Maja (2013) recommended future related study on buyer–supplier relationships stick to the buyer’s side (procurement function). Besides that, procurement is a driving engine for other functions by enhancing timely delivery of the right quality materials in the right quantity at the right cost (Lysons and Farrington, 2012).

Tanzania has developed a framework strictly confined to managing the relationship between buyers and suppliers in public procurement setting (United Republic of Tanzania, 2011b, 2013). Also, sustainable industrial development policy (SIDP) (United Republic of Tanzania, 2011b) and integrated industrial development strategy (IIDS) (United Republic of Tanzania, 2011a) have been put in place to encourage binding strategy among buyers and suppliers, but the ability to deliver materials on time and in the required quantity has remained unaddressed. The ability to deliver materials at the right time and in the right quantity to the manufacturing firms has a consequent impact on the social wellbeing, mainly because of the increasing employment opportunities from the manufacturing firms and timely availability of the required supplies produced by those firms to the society, and hence serves part of the environmental social governance (ESG) agenda. Further, due to the practical situation and lack of enough literature in the local context of Tanzania, it remained very imperative to establish causality centered on trust of integrations on the procurement performance to grasp whether there is self-guile of the actors of the integrations as advocated by transaction cost economics theory (TCET) and how powerful is the integration taking care of the performance as assumed by resources dependency theory (RDT).

1.2 Statement of the problem

Manufacturing firms in Tanzania have for long faced the drawback of unreliable material supply (Mboghoina *et al.*, 2014). Specifically, prompt delivery of materials of the right quality, in the right quantity and at the cost remained a challenge (Saraja, 2013). Different interpolations have been undertaken to alleviate this situation. First, the SIDP (United Republic of Tanzania, 1996) was introduced, and second, IIDS (United Republic of Tanzania, 2011a). However, despite those initiatives, the performance remains questionable in terms of the ability of the materials to be delivered on time and in the required quantity (Wilium, 2016).

The manufacturing sector is envisioned to contribute about 40% to the GDP of the URT by 2040 (United Republic of Tanzania, 2017). TCET and RDT uphold trust of buyer–supplier integration as resources advantage for the performance of firms. Trust in the buyer–supplier integrations featured by mutual goals, geographical vicinity, supplier reliability, interpersonal trust, inter-organizational trust and perceived buyer’s confidence is well documented and regarded as significant in influencing organizational performance in other contexts other than specifically the one under study (Matevž and Maja, 2013; Lysons and Farrington, 2012; Stuart *et al.*, 2012; O’Toole and Donaldson, 2002). As a result, having questionable procurement performance in the context of existing buyer–supplier integrations necessitates knowing what is not occurring for the survival of Tanzania’s manufacturing industry. Little has been documented on how trust attributes of buyer–supplier integrations determine the procurement performance in the context of large manufacturing firms in developing nations, specifically Tanzania. Consequently, due to the strength of the cause–effect integrations in determining the root cause of the problem, this study aimed at establishing cause–effect relationship between trust in buyer–supplier integration and the procurement performance in the context of Tanzania.

2. Literature review

2.1 Theoretical discussion on conceptualization and discussion of variables

Based on TCET and RDT variables of the current study were conceptualized. TCET suggests buyer–supplier integration’s is emerging as an alternative to dealing with performance under the assumptions of TCET. Trust in the relationship is resource advantage for reducing transaction costs and, consequently, performance compared to

contractual terms (Coase, 1937). TCET further cherishes that actors involved in the give-and-take are subjected to self-righteousness of relationship in the upfront rather than demanding contractual management (Williamson, 1981). Moreover, based on Williamson (1981), trust of buyer–supplier integration guided this study while acknowledging its bounded rationality. Different ideas are assumed as follows: Highly procedural goal setting by the actors is associated with strict contractual transaction costs, which are part of the organization cost (Dyer and Chu, 2003). It is further noted that having governance with mutual goals outside the contractual terms is a big milestone in the integration. It is, however, cautioned that existing trustworthiness of the inter-organizational integrations should be weighed (Kaufman *et al.*, 2000). It has been noted that while dealing with transactions, some of the actors might be unreliable as they are likely to make false promises, rendering them difficult to perform (Coase, 1937). Also, the distance-based transaction cost has almost no effect where the geographical vicinity of the trade partners is close (Venkat and Wakeland, 2006). Also, TCET serves a chief role in business synergy and offers possible botches that ascend in the market (Coase, 1937).

However, this theory is challenged on the ground that it has been commonly used in describing cost-related performance (Faulkner, 1995). In the same trend, TCET has been focusing only on one side of a transaction costs and appears to snub the paybacks of a transaction, which habitually cater to the social needs of the society (Boudreau *et al.*, 2007). Bearing in mind that the firms under study is challenged by its performance in the social part of it that is the ability to deliver to materials on time and in the required quantity, TCET was used in this study to describe the cause-effect relationship of buyer–supplier integration on procurement performance in its non-financial aspect. TCET is silent on the control power of the resources, hence the need for RDT.

Interestingly, RDT holds that the resources are very scarce and organization sustainability is vested in the capability to control critical resources from the external sources, thus increasing its performance (Pfeffer and Salancik, 1978). Resource control is fundamental power for understanding internal and external actions of organizations (Emerson, 1962). The most powerful actor can influence others; however, mutual dependency is very vital. In this regard, interpersonal trust is linked with power, information flows and ultimately performance in terms of social support for the integration (Salancik, 1995). Social support in this study is conceptualized as the procurement performance indexed in terms of ability to deliver materials on time and in the required quantity. Trading firms are urged to build relationships for their performance under competition for resources (Salancik, 1995).

The perceived buyer's confidence in the trustworthiness of the relationship is also valued as a powerful tool for successful performance (Dyer and Chu, 2003). It is worth noting that having confidence in the established relationship between the buyer and the supplier is a psychological achievement for changing ideas into reality. Also, it is described that RDT emphasizes the importance of understanding the environment by focusing on the intraorganizational and inter-organizational relationships in connection with power (Pfeffer and Salancik, 2003). Average power goes with trust. Therefore, the way interpersonal trust and inter-organizational trust are connected to integration's performance. RDT is highly beneficial due to its ability to explain how scarce resources from the external environment can be assured to the buying firms (Pfeffer and Salancik, 1978). Along with what is advocated in the context of RDT, the following aspects are important to serve as predictor variables in this study: mutual goals of the relationship, interpersonal trust, inter-organizational trust and perceived buyer confidence in the relationship.

Likewise, it is strongly argued that RDT is the best theory to describe organizational behavior although is criticized for its ability to explain performance aspects on its own (Nienhüser, 2008). This study analyzed the cause–effect relationship between buyer–supplier integration and the procurement performance, whereby trust in buyer–supplier integration was comprised of behavioral aspects. The average power in terms of exhibited trust of buyer–supplier integrations as behavioral component of the causality of this study was comprehensively covered by describing the strength of average power for trustworthy relationship. The effect of the integration on the performance was taken care of in terms of transaction cost rationale using TCET. Moreover, RDT assumes that bounded rationality relates to managers alone (Nienhüser, 2008). Thus, to overcome this weakness, this study focused on approaching procurement and store managers due to the fact that they can inform on buyer–supplier relationship as a strategic tool for integration’s performance.

The theoretical discussion came up with conceptualized attributes that are presupposed to be the hypotheses of this study, bearing in mind that the cause–effect relationship of trust in buyer–supplier integration on the procurement performance was under investigation. Therefore, the aforementioned variables, namely, mutual goals, geographical vicinity of actors, supplier reliability, interpersonal trust and inter-organizational trust, were all identified as the results of theoretical discussion on the conceptualization and operationalization of variables.

2.2 Research hypotheses

Owing to empirical and theoretical gaps identified in this study, hypotheses were presupposed. The performance of procurement is measured by the ability of the firms to obtain materials of the right quality, at the right cost, in the right quantity and at the right time (Lysons and Farrington, 2012). The government made interventions to alleviate the burden. However, the ability of the manufacturing firms to obtain right quantity at the right time remained a challenge (Saraja, 2013). Therefore, out of the four indices, the two Rs, that is, the ability to deliver the right quantity of materials at the right time, are what are challenging the manufacturing firms in Tanzania, with due consideration to the existing trust of buyer–supplier integrations. Henceforth, it remained very imperative for each predictor variable of trust in buyer–supplier integration to be hypothesized against delivery time and quantity separately, hence the establishment of clear understanding of trust in buyer–supplier integration’s performance as follows.

2.2.1 Mutual goals of the actors. TCET values mutual focus of the integration, which reduces opportunism in favor of the performance. Moreover, highly procedural goal setting is associated with strict contractual transaction costs. Presence of mutual goals outside the contractual terms is fundamental for the integration (Dyer and Chu, 2003). Also, RDT’s holding average power, featuring the mutual dependence of the actors of the integration, is a useful tool for the performance (Molm, 1991). In spite of what has been theorized, worldwide reviews depict that there are different viewpoints concerning the role of mutual trust in procurement performance. Theoretically, integrations established around mutual goals enhance the development of trust in the buyer–supplier integrations and consequently better outcomes (Lysons and Farrington, 2012). Others, like Kamau (2013), realized problems resulting from lack of mutual goals in Kenya. Nevertheless, the study done by Kamau (2013) viewed delivered quantity and delivery time collectively, and the performance observed was that of the whole firm. However, Kamau (2013) employed descriptive design approach to collect data from 56 respondents for the cause–effect relationship, but the study at hand moved a step further to analyze the relationship using explanatory design with sample size of 104 respondents. Considering that procurement performance is a subset of the whole firm’s performance, the study witnessed the impact of mutual goals of the buyer–supplier

integration on the specific procurement performance, specifically on timely delivery and delivery of the materials procured in large manufacturing firms in Tanzania, where both aftermaths are measured distinctly. Such diverse findings guided the formulation of the following hypotheses:

H1.1 There is no significant influence of mutual goals of buyer–supplier integrations on the procurement performance in terms of delivery time of materials in large manufacturing firms in Tanzania.

H1.2 There is no significant influence of mutual goals of buyer–supplier integrations on the procurement performance in terms of the right quantity in large manufacturing firms in Tanzania.

2.2.2 Geographical vicinity of buyers and suppliers. TCET holds that distance-based transaction cost is linked with the geographical vicinity of the trade partners (Venkat and Wakeland, 2006). Empirically, the geographical vicinity between buyer and supplier has been pronounced as one of the determining factors of trust in the buyer–supplier integration’s performance in terms of sales (Sung and Kang, 2013). It is, thus, underscored that goals that are affiliated with each other will qualify the parties to reach the intents, such as delivery time and delivered quantity of supplies, in some user-friendly modus while promoting the success for both parties. Contrary to the study of Sung and Kang (2013), this study viewed the influence of geographical vicinity as one of the bases of trust in buyer–supplier integration on the procurement performance (buyer’s performance) with respect to delivery time and delivered quantity of the materials to realize whether it has the same inspiration in non-financial performance or not. Also, Salema and Buvik (2016) has conducted a study and braced geographical closeness amongst buyers and suppliers heightens suppliers’ logistics performance in health sector of Tanzania. Knowing that procurement is a subset of logistics management, this study envisioned determining whether the geographical vicinity of buyer–supplier integrations had a similar effect on the procurement performance on the buyer’s side in the milieu of manufacturing firms. However, none of those studies detailed the implications of buyers–supplier vicinity on procurement performance in the context of large manufacturing firms in Tanzania, hence justifying the formulation of the following hypotheses:

H2.1 There is no significant influence of geographical vicinity of buyer–supplier integrations on procurement performance in terms of delivery time of materials to large manufacturing firms in Tanzania.

H2.2 There is no significant influence of geographical vicinity of buyer–supplier integrations on procurement performance in terms of delivered quantity of materials to large manufacturing firms in Tanzania.

2.2.3 Supplier’s reliability. TCET assumes that some of the actors in the transactions are unreliable and hence make false promises, which render them difficult to execute as per the prospects of the integrations (Coase, 1937). Considering that this study is scrutinizing the performance of the buyer from the engaged suppliers who delivers materials to the manufacturing firms, it is very worthwhile to analyze how the engaged suppliers are reliable to deliver to the integration. Empirically, the supplier’s reliability within the buyer–supplier integrations has been well established as of essence for integration performance in developed countries (Stuart *et al.*, 2012). A study by Stuart *et al.* (2012) employed explanatory design with the help of factor analysis and structural equation modeling (SEM) to analyze the integration

of 107 respondents. Likewise, in Kenya, descriptive research design and descriptive statistical analysis surveyed 119 respondents and found that reliability of the suppliers had significant implications for the performance of procurement department (Oyando *et al.*, 2014). Conversely, Lysons and Farrington (2012) argued that any evaluation process should look into the reliability and, preferably, consider post qualification of the suppliers, and that if this is not done, the evaluation course will be regarded as incomplete. However, Oyando *et al.* (2014), who did their studies in Kenya, were silent on the need for the buying entities to conduct post qualification. The following hypotheses are therefore postulated:

H3.1 There is no significant influence of usage of post qualification on the reliability of buyer–supplier integrations on procurement performance in terms of delivery time of materials in large manufacturing firms in Tanzania.

H3.2 There is no significant influence of usage of post qualification on the reliability of buyer–supplier integrations on procurement performance in terms of delivered quantity of materials in large manufacturing firms in Tanzania.

2.2.4 Interpersonal trust. TCET holds that individuals within the firms are highly subjected to bounded rationality and self-centeredness, and there should be proper governance directed toward relationship management rather than contractual management (Williamson, 1981). RDT reinforces that interpersonal trust is linked with power, information flows and social support for the integration (Salancik, 1995). Also, it is described that RDT emphasizes understanding the environment by focusing on the intraorganizational relationships in connection with power (Pfeffer and Salancik, 2003). Moreover, Matevž and Maja (2013) who used explanatory design and SEM realized interpersonal trust in form of sovereignty from doubt between buyers' and suppliers' workforces as a resource advantage, aiding as relational and transactional teamsters of competitiveness in business affiliation. Moreover, the study revealed that inter-personal trust is what sounds in buyer–supplier integration's performance, while the reverse prevails for inter-organizational trust. However, the nature of procurement cycle involves different actors, such as procurement, stores and transport personnel from both buying and supplying organizations. However, Lysons and Farrington (2012) theorized that personal traits vary among staff, which, if unmonitored, may result in dynamic contributions. In response to such controversies, the following hypotheses were proposed:

H4.1 There is no significant influence of inter-personal trust in buyer–supplier integrations on procurement performance in terms of delivery time of materials in large manufacturing firms in Tanzania.

H4.2 There is no significant influence of inter-personal trust in buyer–supplier integrations on the procurement performance in terms of delivered quantity of materials in large manufacturing firms in Tanzania.

2.2.5 Inter-organizational trust. Apart from interpersonal trust, theoretically, inter-organizational trust was also regarded as equally important as interpersonal trust. TCET holds that different firms are subjected to bounded rationality and opportunism, and there should be a proper avenue for ensuring that the relationships are sustainably managed while keeping social interactions in the upfront (Williamson, 1981). RDT reinforces that inter-organizational trust is closely connected with having control power over the party, thus allowing more information to flow, and cooperative attitudes being the priority of the transaction (Salancik, 1995). Also, it is described that RDT emphasizes on the understanding of the environment by focusing on the

average power rather than contractual terms (Pfeffer and Salancik, 2003). Empirically, studies have revealed that inter-personal trust in form of sovereignty due to doubt between buying and supplying firms is a resource advantage for performance (Matevž and Maja, 2013; Zhang and Huo, 2013). Theoretically, if the firm's staff acts deceitfully, the procurement process outcomes will be frustrated (Lysons and Farrington, 2012). Moreover, Matevž and Maja (2013) conducted their study using explanatory design and sample size of 130 firms from the context of developed countries and recommended that future studies focus on the related aspects in the other context. Therefore, this study analyzed the influence of inter-organizational trust on procurement performance in the context of developing countries using Tanzania and was guided by the following hypotheses:

- H5.1 There is no significant influence of inter-organizational trust in buyer–supplier integrations on procurement performance in terms of delivery time of materials to large manufacturing firms in Tanzania.
- H5.2 There is no significant influence of inter-organizational trust in buyer–supplier integrations on procurement performance in terms of delivered quantity of materials to large manufacturing firms in Tanzania.

2.2.6 Perceived buyer's confidence on the worth of the Buyer–Supplier integrations. Theoretically, the perceived buyer's confidence in the trustworthiness of the relationship is described as the entry key to the road map of the successful performance of the mutual integrations (Dyer and Chu, 2003). Empirically, the perceived buyer's confidence on the substance of the relations is reasoned as one of the trust fundamentals of buyer–supplier integrations manipulating the performance (O'Toole and Donaldson, 2002). The study of O'Toole and Donaldson (2002) employed sample size of 200 using descriptive design and factor rating method. Equally important, Chao and Kato (2014) did an empirical study using longitudinal design on the perceived buyer confidence in buyer–supplier integrations and apprehended that perceived buyer's confidence decides the performance of buyer–supplier integration, despite the fact that the study did not underline the precise resultant consequences. Consequently, this study extends by scrutinizing the impact of perceived buyer confidence as one that, in the midst of the trust, attributes to the procurement performance. Also, it has been advocated that the idea of performance appreciated from buyer–supplier integration desires to be advanced over its dimensions (Chao and Kato, 2014). Therefore, it is against this genuine review that this study, among other issues, shielded the role of perceived buyer confidence in buyer–supplier integrations on the procurement performance in footings of delivery time and delivered quantity of materials, thus leading to the formulation of the following hypotheses:

- H6.1 There is no significant influence of perceived buyer's confidence in the buyer–supplier integrations on the procurement performance in terms of delivery time of materials to large manufacturing firms in Tanzania.
- H6.2 There is no significant influence of perceived buyer's confidence in the buyer–supplier integrations on procurement performance in terms of delivered quantity of materials to large manufacturing firms in Tanzania.

2.3 Conceptual framework

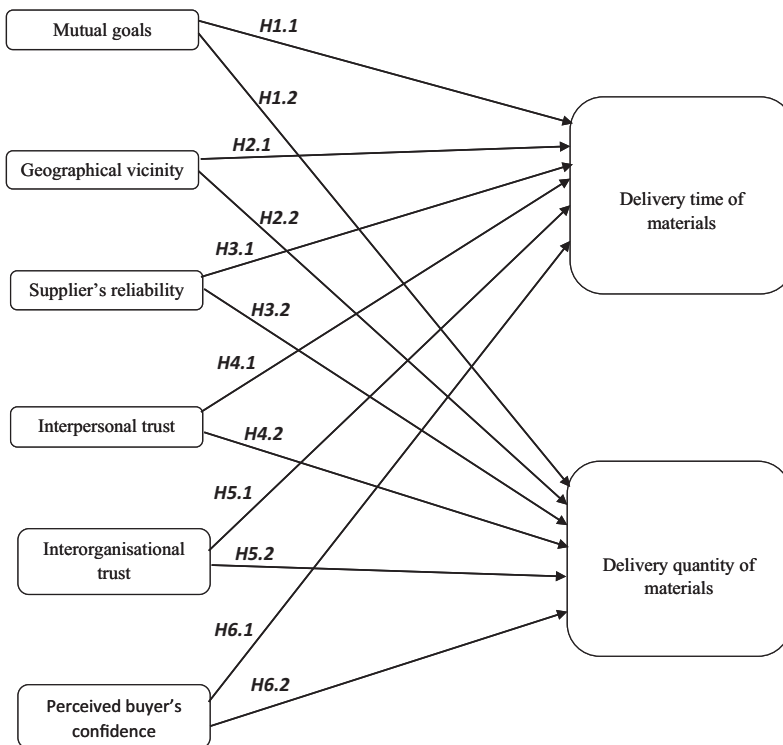
The explanatory variable of this study is buyer–supplier integration predicting procurement performance as a dependent variable. The constructs of buyer–supplier integration are mutual goals, geographical vicinity, supplier's reliability, interpersonal trust, interorganisational trust

and perceived buyer's confidence. The constructs of procurement performance are delivery time of materials and delivered quantity of materials. Moreover, the conceptual framework, as indicated in Figure 1, aimed at testing the cause-effect relationship of each construct of the explanatory variables against each construct of the dependent variable through the developed hypothesis.

3. Methodology

3.1 Research approach

The study was governed by deductive and quantitative approaches. The deductive approach focused on using TCET and RDT to test the developed hypothesis. Quantitative methodology attempts to quantify social phenomena; it generates and analyzes numerical data and focuses on the links among a smaller number of attributes across many cases (Antwi and Hamza, 2015). It mainly employs surveys through questionnaires to gather data, which are later revised and tabulated in number to allow it to be featured by the use of statistical analysis techniques (Creswell, 2014). The need to study the cause-effect relationship of trust of buyer-supplier integration on the procurement performance called for the quantitative approach using survey method. The quantitative approach focused on collection of quantitative data in the form of numerical data from the sampled procurement and store managers.



Source: Literature Review (2019)

Figure 1.
Conceptual
framework

3.2 Philosophical underpinning

This study was guided by positivism. The positivist position is premised on the ground that scientific knowledge consists of truths, and its ontology deliberates reality as independent of social construction (Hughes and Sharrock, 2016). Positivism was guided by objective facts quantitatively generated through questionnaires and supplied to procurement and store managers for the purpose of hypothesis testing. Quantitative methods are normally considered appropriate when there is a need for hypothesis and theory testing associated with the cause–effect relationship (Marczyk *et al.*, 2005). Therefore, the use of positivism made it possible to explain the cause–effect relationship between trust in buyer–supplier integration and the procurement performance while testing TCET and RDT through the developed hypothesis in the context of large manufacturing firms in Tanzania.

3.3 Sampling procedure

All large manufacturing firms in Tanzania were regarded as the target population for this study. However, Temeke Municipality was chosen as the sample frame since it is home to 54% of all large manufacturing firms in Tanzania. Large manufacturing firms are contextualized as those firms that employ more than 99 employees to use machines to transform raw materials into finished products using capital turnover of above 800 million Tanzanian shillings (Page, 2016). Considering that only 55 firms met the criteria to be regarded as large manufacturing firms in Temeke Municipality, the census approach was applied to include all 55 firms to form the sample size. Procurement and store managers from large manufacturing firms (buying firms) were strategically approached using purposive sampling owing to their vast experience and relevant knowledge on trust in buyer–supplier integrations and the status of material supply to manufacturing firms. The procurement and store managers of large manufacturing firms are the ones who deal with the order placement and receiving of the incoming materials from the suppliers (Lysons and Farrington, 2012). Three forms of organizing procurement and store functions exist in the world of supply chain management: independent form, whereby store department is purely independent from procurement department; subordinate form, whereby in most cases store department is a subordinate of procurement department and the last is integrated form, whereby responsibilities of procurement and stores are integrated. Under integrated form, both store and procurement managers are strategically integrating together when dealing with suppliers for the better delivery of the organization’s manufacturing requirements. Stemming from their responsibilities, it is purely evident that they reliably inform whether the existing buyer–supplier relationships were delivering materials on time and in the right quantity or not. Therefore, one procurement manager and one store manager were picked from each firm, totaling a sample size of 110.

3.4 Data collection procedure

Data that informed this study were obtained through survey approach with the help of structured questionnaires. The study employed cross-sectional approach as data were collected once. For validity purposes, questionnaires were piloted using a sample size of 12, which sufficiently met the minimum sample size of 10 as recommended by Creswell (2014). However, out of 52 firms, three did not show up in terms of response thus making the response rate 95%. The response rate obtained was sufficient for the analysis and reporting of this study because Mugenda and Mugenda (2003) described a response rate of above 70% as excellent for analysis and reporting.

3.5 Operationalization of variables

Operationalization of variables us enabled to know the construct variables of the main independent and dependent variables so that they could be processed easily by computer-assisted techniques. The summary of the operationalization is indicated in [Table 1](#).

The named constructs of independent variables were hypothesized using 5-Point Likert scale. This helped to capture the expressional opinion in form of ordinal scale regarding how trust of buyer–supplier integration is embraced. It should be noted that 5-Point Likert scale was coded in terms of compliance as: 1 – very poor extent, 2 – poor extent, 3 – normal extent, 4 – high extent and 5 – very high extent. The choice of 5-point Likert scale was traced back to previous scholars who analyzed the influence of buyer–supplier integrations on other performance aspects. Other scholars who analyzed buyer–supplier integration constructs using ordinal scale with five points are [Kamau \(2013\)](#), [Msemwa et al. \(2017\)](#) and [Kimario and Mwangike \(2021\)](#).

The dependent variable in this study was procurement performance, operationalized by delivery time and delivered quantity. Data were captured using binary responses. The commonly used binary coding is (0, 1), whereby 0 stands for unfavorable response and 1 for favorable response and, by default, SPSS always refers to 1 unless commanded otherwise. However, in this study, the same numbers were used but coded with opposite response, whereby 0 represented favorable responses while 1 was coded with unfavorable response. The essence of using the opposite coding was motivated by the nature of this study. It was acknowledged earlier that the presence of poor performance in the large manufacturing firms in Tanzania would uncover the root causes of such performance, and hence the reference category for the logistic model applied was poor procurement performance (unfavorable response). Moreover, the unfavorable response in the procurement performance was captured using late delivery and delivery with shortage in terms of quantity.

3.6 Model specification

Data generated quantitatively were analyzed using the SPSS version 20.0 through the binary logistic regression technique to establish the cause–effect relationships between multiple categorical ordinal variables and one dependent dummy variable, as suggested by [Gujarati and Sangeetha \(2006\)](#). The relationship is mathematically expressed below:

$$\text{logit}(\pi(x)) = \ln\left(\frac{\pi(x)}{1 - \pi(x)}\right) = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \beta_6x_6$$

Whereby:

- π = probability that requirements are delivered with conception of shortage/late;
- β = constant (the value at which the fitted line crosses the y-axis);
- x_1 = mutual goals;
- x_2 = geographical vicinity of the buyer to the supplier;
- x_3 = dependability of the suppliers;
- x_4 = inter-personal trust;
- x_5 = inter-organization trust;
- x_6 = perceived buyer's confidence in the integrations; and
- $\beta_1 \dots \beta_2$ = Beta (slope; change in y for a 1 unit change in x). This measures the strength of predictors.

3.7 Reliability and validity of the study

The logically designed question was used to capture and keep the flow of ideas under research, as suggested by [Kothari \(2017\)](#). The incorporation of the introductory section attracted the

Table 1.
Operationalization of variables

Category	Variables	Constructs	Sample measurement item	Measurement scale	Reference (s)
Independent variable	Trust	Mutual goals	Expectation serving the interest of either party through win-win contracts	5-Point Likert scale	Lysons and Farrington (2012)
		Geographical vicinity of the actors	Distance from the supplier to the buyer	5-Point Likert scale	Venkat and Wakeland (2006)
	Reliability of supplier	Interpersonal trust	Supplier's history	5-Point Likert scale	Lysons and Farrington (2012)
			Freedom from suspicion between individuals of buyers' and suppliers' firms	5-Point Likert scale	Lysons and Farrington (2012)
Dependent variable	Procurement performance	Interorganisational trust	Freedom from suspicion between a buyer's firm and supplier's firm	5-Point Likert scale	Lysons and Farrington (2012)
		Perceived buyer's confidence	Risk perceived measures for firm's performance	5-Point Likert scale	Wüllenweber <i>et al.</i> (2006)
	Delivery of the required quantity of materials	Delivery of the required quantity of materials	Ability to deliver materials at the right time	Binary scale	Lysons and Farrington (2012)
			Ability to deliver right quantity of materials	Binary scale	Lysons and Farrington (2012)

Source: Empirical literature review (2019)

respondents and informed them on the purpose of the study and the usage of the data, which, in turn, helped to create face validity. Also, the logical designing of the study took into account all variables section-wise using the inputs from the conceptual framework hence construct validity. Apart from that, the questionnaires were designed with close-ended questions to ease data collection by taking into account that respondents were busy with the ongoing office activities. The researcher employed Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of sphericity through SPSS 23.0 to check validity of the sample size. Moreover, Cronbach's alpha approach was used to measure the coefficient of reliability so as to test the internal consistency (Tavakol and Dennick, 2011). Moreover, Cronbach's alpha approach is time-honored for internal consistency and the most often used, where scales such as Likert Scale are used for measuring the internal consistency (Tavakol and Dennick, 2011).

4. Findings and discussion

4.1 Validity and reliability tests

The researcher employed KMO and Bartlett's Test of sphericity through SPSS 23.0. The result extracted from SPSS shows that the sample sufficiency index KMO, which compares the sizes of the observed correlation coefficients to the sizes of the partial correlation coefficients for the sum of analysis variables, is 0.563, and it is valid because it is above 0.5. Likewise, the Bartlett's Test of sphericity depicts high degree of accuracy of the measurement model based on the fact that the approximate Chi-Square is 247.9 and its degree of significance level is 0.04, implying that it is less than 0.05 and hence the employed measurement of model is highly valid.

Reliability of the independent variables revealed that results for mutual goals, and joint efforts in problem solving, reliability of the suppliers, interpersonal trust, inter-organizational trust and perceived buyer's confidence were 0.78, 0.75, 0.72, 0.75, 0.89 and 0.74, respectively. Based on the fact that the rule of thumb suggests that the Cronbach alpha coefficient needs to be above or equal to 0.7 to be regarded as reliable (Fraenkel and Wallen, 2003).

4.2 Diagnostic test findings

It was imperative to conduct diagnostic tests on the assumptions of techniques used for inferential analysis (Field, 2013). Moreover, the linearity of the predictor variable to the log odds, multicollinearity and normality were tested to run the logistic regression. The adjusted Nagelkerke R squared was used to check for the validity of the model fitness and hence came up with the value of 22% and 26% for delivery time and delivered quantity of materials correspondingly. This infers that predictor variables of trust – mutual goals, vicinity to the suppliers, supplier's reliability, inter-personal trust, inter-organizational trust and buyer's confidence in the integration – jointly explain 45% and 47% of the variance in the outcome variable of delivery time and delivered quantity of materials, respectively. The rule of thumb advocates that, for the value of R squared to be sufficient in elucidating the variance of the predictor variables on the outcome variable, the value should be greater or equal to 10% (Falk and Miller, 1992). Therefore, since the R squared employed in this study ranged from 22% to 26%, then, it is safe to contend that the model fitted the data. Other social science studies were steered with R squared of the following values; 20.8 (Msemwa *et al.*, 2017) and 0.29–0.81 (Kiveu, 2018); hence, the R squared of this study, which ranged between 0.11 and 0.45, was almost within the common range of other scholars. Attention was paid on the interpretation of pseudo R^2 in binary logistic regression due to heteroscedasticity. Furthermore, the model fitness Hosmer Leme Show Goodness of Fitness was used where its P value was 0.8 and 0.9 for both models and hence accepted as

suggested by Allison (2014), who insisted that the model should be greater than 0.5 to infer that the model is not insignificant.

Two ways were used to check for the multicollinearity. First, it was the use of correlation matrix interrelatedness, which was later confirmed by variance inflation factor (VIF). The use of dual approaches was engaged because Field (2009) recommended correlation matrix as, tremendously, a method for fast scrutiny of correlation but also praised the use of VIF because the use of matrix may understate the genuineness of the test. The rule of thumb advocates that once using inter-item correlation matrix, the coefficients of correlations should be below 0.8, signaling that the degree of correlation between the two independent variables is reasonable for further regression process (Field, 2009). Therefore, the coefficients of correlation of variables indicated in Table 2 are below 0.8.

Thereafter, VIF as the confirming method of checking multicollinearity, it was used for checking the degree of correlation of the independent variables and the results are indicated in Table 3. The rule of thumb advocates that the values of VIF should be less than 10 to justify the absence of multicollinearity (Robinson and Schumacher, 2009). Since the values ranged between 1.4 and 3.7, this signifies absence of multicollinearity among the explanatory of trust of buyer–supplier integration.

Field (2009) requires all parametric tests to work with normally distributed data; thus, the distribution of data was checked with the consideration of data for logistic regression, which were converted into log odds. The results of the assessment are indicated in Table 4.

Therefore, the normality test was conducted, and the value of skewness ranged between -0.4 and 0.1 and the std. error of skewness was 0.2 all being between -2 and 2 as suggested by Byrne (2010). The value of kurtosis ranged between -0.47 and 0.1 , and the std. error of kurtosis was 0.5 . Also, the rule of thumb suggests that the kurtosis value and the std. error of kurtosis

Table 2.
Inter item correlation matrix of the variables of trust of buyer–supplier integrations

Variable	Mutual goals	History	Vicinity to suppliers	Inter-organizational trust	Interpersonal trust	Buyer’s confidence
Mutual goals	1.0	0.4	0.5	0.7	0.4	0.6
Supplier’s reliability	0.4	1.0	0.4	0.4	0.3	0.5
Vicinity to suppliers	0.5	0.4	1.0	0.6	0.6	0.7
Inter-organizational trust	0.7	0.4	0.6	1.0	0.4	0.6
Interpersonal trust	0.4	0.3	0.5	0.4	1.0	0.5
Buyer’s confidence	0.6	0.5	0.7	0.6	0.5	1.0

Source: Field data (2019)

Table 3.
Collinearity statistics of the variables of trust of buyer–supplier integrations

Model	Collinearity statistics		Status at VIF < 10
	Tolerance	VIF	
Mutual goal	0.3	3.2	No multicollinearity
Vicinity to the suppliers	0.7	1.4	No multicollinearity
Supplier’s reliability	0.3	3.6	No multicollinearity
Inter-personal trust	0.3	3.4	No multicollinearity
Inter-organizational trust	0.7	1.5	No multicollinearity
Buyer’s confidence on the integration	0.3	3.7	No multicollinearity

Source: Field data (2019)

should be between -7 and 7 (Kim, 2013). Therefore, skewness, kurtosis values and their respective std. errors were within the common range; thus, distribution of data was fairly done with the degree of error that is approximately equivalent to zero.

4.3 Inferential statistical findings and their discussions

During the interpretation process, the cause-effect relationship was analyzed by binary logistic regression, where the P value was considered significant and only rejected if it was less than 0.05 (Kinnear and Gray, 2002). While interpreting logistic regression results, the odds ratio >1 implies that a unit increase in the independent variable consequently increases the likelihood of the outcome and the reverse prevails when the odds ratio <1 (Field, 2009). Therefore, the findings are as presented in Tables 5 and 6:

The P values of the role of mutual goals in the buyer-supplier partnership with regard to delivery time and delivered quantity of materials to large manufacturing firms in Tanzania were 0.04 and 0.02 , respectively, and hence both hypotheses $H1.1$ and $H1.2$ were rejected and appeared significant in the model. The odds ratio of 2.24 and 2.62 infers that a unit increase in mutual goals results to an increased likelihood of material shortage and delivery delay to large manufacturing firms in Tanzania by 2.24 and 2.62 , respectively. Mutual goal setting serves as foundation for open sharing of information on the available stock of materials through computer-based technology to facilitate timely delivery of the required materials of the manufacturing firms without disadvantaging manufacturing schedules. Therefore, due to transforming changing demands of supply chain systems where businesses have been

Statistics	Mutual goals	History	Geographical vicinity	Inter-organizational trust	Interpersonal trust	Buyer's confidence
Skewness	-0.5	0.1	-0.3	-0.4	-0.3	-0.4
Std. error of skewness	0.2	0.2	0.2	0.2	0.2	0.2
Kurtosis	0.1	-0.5	-0.2	0.1	-0.5	-0.1
Std. error of kurtosis	0.5	0.5	0.5	0.5	0.5	0.5
Skewness z value	-1.7	0.6	-1.4	-1.6	-0.5	-1.7
Kurtosis z value	0.1	-1.0	-0.4	0.2	-1.0	-0.1

Source: Field data (2019)

Table 4. Assessment for normality for the variables of trust of buyer-supplier integrations

Independent variables	B	Wald	df	Sig.	Exp(B)
Mutual goal	0.81	4.39	1	0.04	2.24
Vicinity to the suppliers	0.52	4.07	1	0.04	1.68
Supplier's reliability	0.93	4.42	1	0.04	2.54
Inter-personal trust	-1.06	6.09	1	0.41	0.35
Inter-organizational trust	-0.30	1.32	1	0.25	0.74
Buyer's confidence on the integration	-1.32	8.28	1	0.40	0.27
Constant	1.28	2.08	1	0.15	3.61

Source: Field data (2019)

Table 5. Binary logistic regression results of the cause-effect relationship of trust of buyer-suppliers' integration on procurement performance in terms of delivery time of materials in large manufacturing firms in Tanzania

encountered with substantial challenges, it is vital for manufacturing firms to nurture mutually beneficial integrations with their suppliers for more assurance of supply of materials on time and in the required quantity. When both parties of the integrations know what to expect from each other, they can symbiotically identify opportunities to stimulate mutually beneficial performance, thus leading to better timely delivery of the required quantity of materials to the manufacturing firms and hence better supplier relationships. Considering that materials are very scarce and transaction costs are very high for relationship management, manufacturing firms should encourage mutual relationship rather than contractual ones. The more the relationship is mutually exclusive, the more likely the procurement performance of manufacturing materials. Being open and candid with partners provides a concrete footing for an integration to propagate and become a yardstick resource, which is advantageous for both parties. Integrations managed by mutual goal setting are exclusively employing dependency of resources using average power to the advantage of performance, which skips transaction costs associated with power dominance.

The P values of the role of geographical vicinity of the buyer–supplier partnership on delivery time and delivered quantity of materials to large manufacturing firms in Tanzania were 0.04 and 0.02, respectively; hence, both hypotheses *H2.1* and *H2.2* were rejected and appeared significant in the model. The odds ratio was 1.68 and 1.86 implying that a unit increase in geographical vicinity increases the likelihood of delayed material delivery and consequently leads to material shortage in large manufacturing firms in Tanzania by 1.68 and 1.86, respectively. Therefore, the geographical vicinity between buyers and suppliers seems to impact procurement performance. Therefore, the closer are actors of the integration, the more the ability of the supplier to deliver manufacturing materials on time and in the required quantity. Most of the materials are transported from up country; thus, they undergo several rechecks on weighbridges that are installed along all highways. This results in delays as trucks queue, thus leading to delayed delivery and, consequently, the material shortages. [Sung and Kang \(2013\)](#) and [Salema and Buvik \(2016\)](#) similarly found that geographical vicinity in the buyer–supplier integrations is vital for procurement performance.

The P values of the influence of supplier's reliability on material delivery time and delivered quantity of materials procured to large manufacturing firms in Tanzania are 0.04 and 0.03, respectively; hence, both hypotheses were rejected and appeared significant in the model. The odds ratios are 2.54 and 2.75, respectively, implying that a unit increase in the supplier's reliability increases the likelihood of delayed material delivery and material shortage in large manufacturing firms in Tanzania by 2.54 and 2.75, respectively. This

Table 6.
Binary logistic
regression results of
cause–effect
relationship of trust
of buyer–suppliers'
integration on
procurement
performance in terms
of delivered quantity
of materials in large
manufacturing firms
in Tanzania

Variables in the equation	B	Wald	df	Sig.	Exp(B)
Mutual goal	0.96	5.67	1	0.02	2.62
Vicinity to the suppliers	0.62	5.38	1	0.02	1.86
Supplier's reliability	1.01	4.89	1	0.03	2.75
Inter-personal trust	−1.21	7.25	1	0.07	0.30
Inter-organizational trust	−0.37	1.92	1	0.17	0.69
Buyer's confidence	−1.46	9.36	1	0.20	0.23
Constant	1.41	2.40	1	0.12	4.11

Source: Field data (2019)

implies that most suppliers are not qualified enough to secure the contracts and they have chanced through submitting fraudulent information. Generally, most firms overlooked post qualification thus leading to engagement with incompetent suppliers. Post qualification helps to determine different important aspects of the supplier such as financial capability, third- and fourth-party logistics arrangements, current commitments, human resource welfares in executing past similar related deliverables. The more the reliable vetting of suppliers is, the more the performance. It is through reliable suppliers that manufacturing firms can be supplied with materials on credit basis timely and in the required quantities because of the financial strength of the suppliers. Also, the presence of manageable commitments of the suppliers with other manufacturers increases trustworthiness and hence removes fear of poor performance resulting from overwhelmed pledges.

The P values on the impact of interpersonal trust in the buyer–supplier integrations, delivery time and quantity of materials delivered to large manufacturing firms in Tanzania are 0.41 and 0.07, respectively; hence, both *H4.1* and *H4.2* were insignificant and hence failed to be rejected. The odds ratio was 0.35 and 0.29, implying that a unit increase in interpersonal trust leads to the decreased likelihood of delayed material delivery and shortage in large manufacturing firms in Tanzania by 0.35 and 0.29, respectively. Therefore, the existing interpersonal trust in the buyer–supplier integrations in large manufacturing firms of Tanzania leads to timely delivery of materials as per required quantity. The paramount source of this strength is rooted from participation and empowerment of employees. Also, resilient management team builds solid relationships, which allow the team to focus its efforts on better performance through unlocking of the manufacturing firms from opportunistic suppliers. [Matevž and Maja \(2013\)](#) also establish that performance was evident in firms where interpersonal issues in the buyer–supplier integrations were well handled. Thus, having a good performance in some few manufacturing firms of Tanzania, as evidenced by *p*-value which is above the allowable degree of error of rejecting the null hypothesis; implies that relationships within the manufacturing firms are very important for their success.

The P values on the impact of inter-organizational trust in buyer–supplier integrations delivery time and quantity delivered to the large manufacturing firms in Tanzania were 0.25 and 0.17, respectively; hence, both hypotheses *H5.1* and *H5.2* were failed to be rejected and were hence insignificant. The odds ratio was 0.741 and 0.691, implying that a unit increase in inter-organizational trust decreased the likelihood of late delivery of materials and material shortage in large manufacturing firms in Tanzania by 0.74 and 0.69, respectively. This also implies that inter-organizational trust has no detrimental impact on procurement performance in Tanzania. It would be evident if self-interest at the expense of the integrations was prevalent, contrary to the findings by [Matevž and Maja \(2013\)](#). However, [Matevž and Maja's \(2013\)](#) study was conducted in developed countries, contrary to the current study.

The findings on the role of perceived buyer's confidence and trust in the buyer–supplier integrations on procurement performance were all not rejected. This happened because the P values are 0.40 and 0.20 for hypothesis *H6.1* and *H6.2*, respectively. This implies that perceived buyer's confidence of the trust of buyer–supplier integrations on the procurement performance is no longer a challenge in large manufacturing firms in Tanzania. The inferential statistical analysis further shows that a unit increase in perceived buyer's confidence in buyer–supplier's integrations decreases the possibility of late delivery and material shortages by 0.27 and 0.23, respectively. Therefore, perceived confidence has been well built in large manufacturing firms, as evident by the way actors convey messages on new products, exchange greetings, and convey welcome messages to buyers for future business prospects. The discoveries of this study contrast with those of [O'Toole and Donaldson \(2002\)](#) and [Chao and Kato \(2014\)](#), who argue that perceived buyer's confidence in

the buyer–supplier integrations is crucial. However, O’Toole and Donaldson (2002) conducted their study in a developed country, unlike this study, which was conducted in a developing country’s milieu. Chao and Kato (2014) recommended the study of more dimensions, but in contrast, this study unveils the role of perceived buyer’s confidence in the procurement performance dimensions of material delivery time and delivered quantity of materials to large manufacturing firms in Tanzania.

Finally, and interestingly, the performance outcome resulting from the same predictor variables of trust of buyer–supplier integrations on two different indicators that is delivery time and delivered quantity of materials was more or less the same like where one relationship appeared significant, the twin predictor revealed the same implication too. This is possibly because late delivery of materials automatically causes delivery shortage of materials.

5. Conclusion and findings

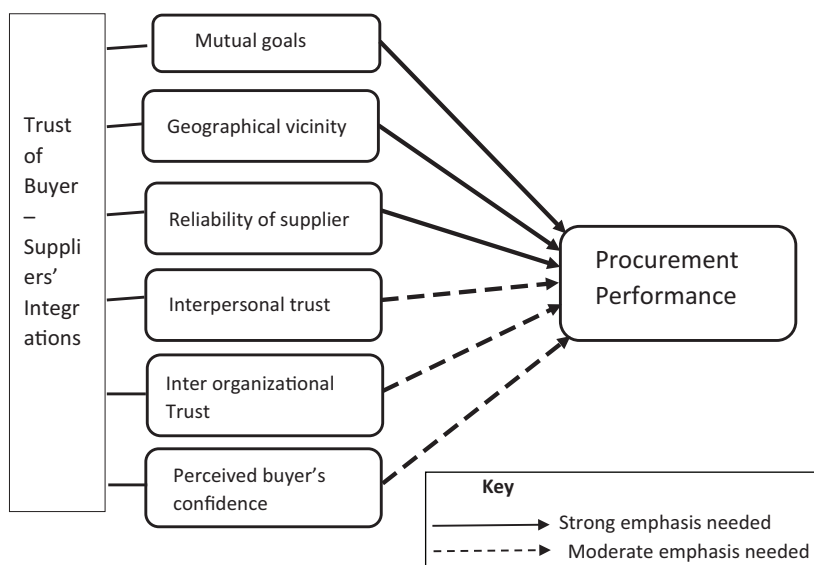
5.1 Conclusion

The importance of trustful relationships should never be underestimated. The findings of this study reveal the indispensable role of trust in the buyer–supplier integrations on procurement performance in large manufacturing firms of Tanzania. The study disclosed the root cause of procurement performance of manufacturing firms in Tanzania in the light of the existing trust resource advantages of buyer–supplier integration, whereby mutual goals of the actors, geographical vicinity of the two actors and reliability of the suppliers are of a high stake. Therefore, firms are likely to experience poor procurement performance that is: delayed delivery of material and material shortage in circumstances where these three aspects are poorly managed. Other aspects that were tested in this study include: inter-personal trust, inter-organizational trust and perceived buyer’s confidence in the integrations, all of which were revealed to be safely and effectively practiced to a very great extent in the surveyed firms. It is further documented that inter-personal trust, inter-organizational trust and perceived buyer’s confidence in the integrations are not significant because their p-values are greater than 0.05, implying that the confidence interval of the postulated null hypothesis is less than 95%. However, in order for trust in the buyer–supplier integrations to yield desirable procurement performance, those aspects should not be overlooked, as their removal will automatically create other problems because the confidence interval was not perfect by 100%. Additionally, the findings on cause–effect relationship of the trust of buyer–supplier on the procurement performance pave a way for attainment of ESG agenda. Timely availability of the required quantity of materials is consistent with ESG as their availability shall guarantee employment opportunities in the manufacturing firms and further shall ensure availability of their produced products to the society.

5.2 Recommendations

Generally, trust in the buyer–supplier integrations in terms of establishment of mutual goals, geographical vicinity and supplier’s reliability should be strongly emphasized, while moderate emphasis should be put on inter-personal trust, inter-organizational trust and perceived buyer’s confidence in the integrations by adopting the framework illustrated in Figure 2 below. The developed framework shall serve not only Tanzanian manufacturing firms but also those of other developing countries. The rejuvenation of the manufacturing firms shall create more employment opportunities and timely availability of products in the market.

Large manufacturing firms in Tanzania are encouraged to adopt the framework developed from this study. Furthermore, negotiations should be well scrutinized, thus yielding a win-win goal setting for the integration. Also, manufacturing firms are encouraged to shift their operations closer to the sources of material. Lastly, thorough post



Large manufacturing firms in Tanzania

Figure 2. Framework of trust of buyer-supplier integrations and the procurement performance of large manufacturing firms

Source: Researcher (2021)

qualification process should be conducted prior to engaging suppliers to evade the trap of engaging incompetent suppliers. The government should review its policies in a move to provide a supportive environment where challenges associated with geographical vicinity are addressed. Separate weighbridges for cargo trucks and passenger vehicles should be installed to curb lengthy queues that delay material delivery, thus resulting in material shortages in firms. The ongoing standard gauge railway construction should be done quickly and networked in the entire country to curb the burden of late delivery and material shortages in large manufacturing firms. Since there are those traits of trust in the buyer-supplier integrations which are disregarded, the Ministry of Trade, Industry, and Marketing should empower large manufacturers through capacity building. Capacity building will guarantee implementation of best practices, thus enhancing trust in the buyer-supplier integrations and, consequently, procurement performance. Additionally, this study was able to reveal the cause-effect integrations that exist between buyer-supplier trust and procurement performance in Tanzania. However, buyer-supplier integration is a newly adopted best practice for developing countries, and hence, it would add more value if a longitudinal study were conducted to track change in how it has been adopted for the procurement performance of the surveyed firms. Apart from that, knowing that there is considerable variation among different nations, similar related studies should be replicated in other developing countries in the world.

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