



# Factors determining the perceived relevance of social commerce in the African context



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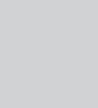
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**Background:** This study determined factors influencing the perceived relevance of social commerce in the African context, in which Tanzania was chosen as a case for study. The motivation comes from the recent trend in which different service vendors take social networks as a platform for their business display, in conjunction with the use of mobile money and other online financial services in business facilitation.

**Objectives:** The study determines factors influencing the perceived relevance of social commerce in the African context.

**Methods:** The study used the survey strategy in its operationalisation. Only social media subscribers based in Tanzania formed the study population. It used the literature to identify the knowledge gap, followed by hypotheses formulation. Advanced quantitative models were used for testing the hypotheses.

**Results:** Collectively, the following variables have a significant impact on the perceived relevance of social commerce: the effectiveness of order delivery, the perceived vendor's response to queries, the perceived quality of online display, the perceived shopping convenience, the perceived rejection of returned goods and the perceived convenience of returning goods.

**Conclusion:** Social-media-based commerce provides useful platforms to subscribers and vendors of different services. The approval rate is a good predictor of the future increase in the number of users across Africa, and Tanzania in particular.

## Introduction

Commercial activities significantly contribute to human developments (Gotzamani & Tzavlopoulos 2009; Oliveira et al. 2017). They are a source of income generation for owners, employees and the government through taxation (Oliveira et al. 2017). Strategically, elements that make a business competitive have changed across the world over time (Cossío-Silva et al. 2015). Currently, the survival of a business is based on value creation, an analogy which ensures that the consumer acquires more value to all purchases made. The vendor of the service is liable to organise company activities, for all segments of the process to contribute to the anticipated value (Lee & Lin 2005). Arguably, the adoption of information and communication technologies (ICTs) in commerce intends to add value for consumers through allowing instant access to different service options, enhancing financial security and even lowering the cost of services (Oliveira et al. 2017).

Generally, there are evidences from small businesses which equipped themselves for the market through the adoption of e-commerce (Macharia 2009; Rahayu & Day 2015). Nevertheless, many evidences are based on vendors of developed countries; African countries had a low access to traditional e-commerce channels because of poor infrastructure (International Monetary Fund 2016; Macharia 2009). Currently, innovations in the mobile phone industry extend access to financial services, and even to the marginalised groups. This is further supported by the increase of subscription to social media (Lai & To 2015). This increase opens a new business avenue (Akman & Mishra 2017). The combination of social media and mobile money services forms a hybrid platform for business called social commerce (Akman & Mishra 2017; Lubua 2017).

Overall, social commerce must be relevant to users; this takes into consideration both technical and non-technical factors (Akman & Mishra 2017). For example, the user must be able to have a quality access to product information (Akman & Mishra 2017; Hajli 2014). This ensures the buyer that the product meets expectations. Moreover, the quality of information is useful in establishing the relevance of the price tag to the cited products (Dillon & Reif 2004; Gotzamani &

Tzavlopoulos 2009). Furthermore, the convenience of the payment method is another technical factor. Online purchases take advantage of limited time and geographical location. However, when the shopping system is localised, it must enhance the convenience to purchase (Cossío-Silva et al. 2015). For example, the payment option must be available to buyers and must address available risks to enhance the confidence of users (Lubua 2014; Saini, Rao & Panda 2012).

Moreover, business owners have a role to play in enhancing the relevance of online business, and social commerce in particular. For example, studies by Gotzamani and Tzavlopoulos (2009) and Oliveira et al. (2017) advocate the importance of the response by the service vendor to clients in ensuring their loyalty. The vendor must ensure that all the misunderstandings (of clients) are addressed in an effective manner. Moreover, the vendor must ensure minimum order delivery time because the delay may shape the perceived relevance of the platform used (Hajli 2014; Hung & McQueen 2004). Furthermore, there must be a policy to adequately address after-sale inquiries. An example of the after-sale customer-related issues includes the return of goods damaged on transit, or even goods that do not fit the criteria by the buyer. In the case where the risk of rejection upon the return is high or the return method is complicated, clients are likely not to favour the medium in their purchases (Kursunluoglu 2014; Macharia 2009). In Tanzania (and other developing countries sharing similar characteristics), social commerce is becoming common (Akman & Mishra 2017; Gibreel, AlOtaibi & Altmann 2018); knowing the value it brings to users, it is the interest of this study to conduct an analysis to determine factors impacting the current perceived relevance of social-media-based commerce.

## Main objective

This study determines factors influencing the perceived relevance of social-media-based commerce in the context of developing countries. In particular, the study is conducted in Tanzania. Its interest follows the recent trend in which social media pages are used by business vendors to display their products in order to get the attention of users about their platforms (Akman & Mishra 2017; Kursunluoglu 2014). This system of business uses mobile money services to facilitate transactions. This is against traditional methods for completing business transactions where the cash system is more dominant. The results of the study are useful for business owners as they seek to win more market share through online services.

## Literature review

Many developing countries are adopting mobile phones in higher rates than before (Tanzania Communications Regulatory Authority 2018). The adoption is linked with innovations, aiming to accommodate human activities (Tang & Wu 2015; Venkatesh, Thong & Xu 2012). Researchers agree that the transformation of feature phones into smartphones set an important milestone in the development of our

communities because the latter provides a bigger platform for software development (Akman & Mishra 2017; Hajli 2014). These softwares cater for different purposes, one being the provision of the platform for socialisation (Lai & To 2015). Social media are user centred; therefore, they make a suitable platform for business in the modern era (Lai & To 2015; Salvatori & Marcantoni 2015). Social-media-based commerce addresses challenges of traditional e-commerce; for example, mobile money users (without traditional bank accounts) are equally eligible (Osano & Languitane 2016). Arguably, low-income societies accept the use of mobile money services in their transactions more than traditional banking systems (Kikulwe, Fischer & Qaim 2014; Osano & Languitane 2016). This is possibly because of minimum registration requirement and the ease of transacting because of its extensive accessibility (Kikulwe et al. 2014). In supporting the study by Narteh, Mahmoud and Amoh (2017), it is the assumption of this study that people who are engaged in the use of social media (in sub-Saharan Africa) are likely to be using mobile money services as well; this is because the two are among the highly adopted programmes (Talat, Azar & Yousaf 2013). This combination brings the opportunity for business through social media (i.e. social commerce), with the support of mobile money services. Basically, social commerce uses social networks in the selling and buying of goods, through utilising user rating, referrals, social adverts and online communities to facilitate online shopping (Gibreel et al. 2018). In the current study, we consider technical and non-technical factors related to social media and mobile money in determining the perceived relevance of social commerce. The following variables justify the study: risks and the convenience associated with the payment method, quality of display, return convenience, response effectiveness, and the purchasing power.

## Risks and the convenience associated with the payment method

The literature identifies the risk of online payments at the heart of the decision by potential clients to engage in technology use. Studies by Dillon and Reif (2004) and Hajli (2014) discussed the importance of businesses to consider potential threats to online purchases, because the fear of loss may have a negative influence on customers. Arguably, mobile money services are threatened by an insecure environment because of the presence of socially engineered and technical threats, targeting poorly informed users (Dillon & Reif 2004; Oliveira et al. 2017). Therefore, risks associated with social commerce are constantly there. Hence, transactions with a trusted vendor is more desired (Oliveira et al. 2017; Tang & Wu 2015). Knowing that cyber crimes are increasing, the current study decided to determine the impact of risks associated with mobile money payments on the perceived relevance of social commerce. On the other hand, this study associates the convenience of payment method with the perceived relevance of social commerce. One of the factors defining the convenience of payment is the availability of the payment medium to the user (Akman & Mishra 2017). It is possible that the payment method available to the vendor

is currently not accessible to the buyer. Moreover, the buyer may not prefer the payment method because it comes with high operational cost (Hung & McQueen 2004). This makes the purchase process difficult for potential buyers and may affect the perceived relevance of social commerce.

### Quality of display

The quality and relevance of the price are important to clients (Oliveira et al. 2017). Unlike traditional platforms of business, online platforms face the challenge of verifying the quality of materials (to be sold) because they are virtually displayed (Narteh et al. 2017). The process is more difficult for first-time buyers. Studies by Lee and Lin (2005) and Tang and Wu (2015) emphasised that people must be comfortable with the quality of the product before they buy. Therefore, part of this study determines whether the perceived quality of product displayed, influences the perceived relevance of social commerce. In addition, the study hypothesised that the perceived relevance of the price displayed, is equally important in determining the perceived relevance of social commerce. Arguably, the relevance of the displayed price must be supported by the acknowledged quality of product (Chaudhry & Stumpf 2011).

### Return convenience

Many online retailers are taking note of research output showing that clients require an efficient way of purchasing (Kursunluoglu 2014). Unfortunately, very few retailers have a favourable return policy, and this is undesirable to clients (Bonifield, Cole & Schultz 2010). A number of reasons contribute to the need for a return policy, which is favourable to clients: these include products that do not conform to online descriptions, wrong shipment of an item, damages in transit, problems with the quality and the fit of products to the user, and even change in customer preference (Gotzamani & Tzavlopoulos 2009; Kursunluoglu 2014). According to Gibreel et al. (2018), social-media-based commerce operates better in a more localised environment; however, it is possible that clients share a common perception of the need for a return policy. The perception may impact their decision to use the platform for purchases. This is the reason why the relationship between the perceived return convenience and the perceived relevance of social media commerce is studied here. In addition, the study determines the impact of the perceived risk of rejecting goods returned by the customer on the perceived relevance of social commerce.

### Response effectiveness

Clients use the relevance and effectiveness of the feedback they receive from retailers in measuring their level of satisfaction with the service (Lee & Lin 2005). Several methods may be used in communication between retailers and their clients (i.e. emails, instant messages, online reviews and others); nevertheless, vendors are advised to customise communication methods based on clients' preferences. The retailer risks to lose a client in the event of dissatisfaction

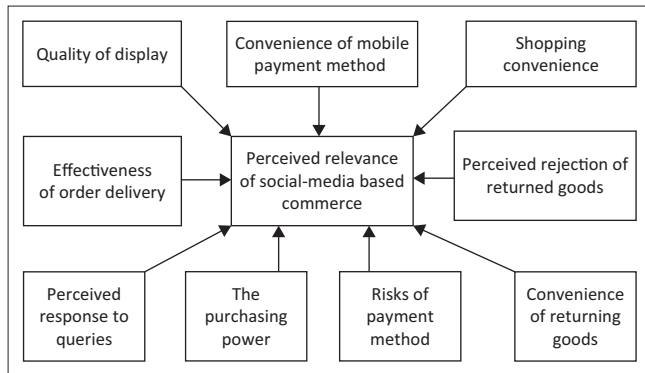
(Kikulwe et al. 2014). This is the reason why studies by Lee and Lin (2005) and Akman and Mishra (2017) advocate the need to meet clients' expectations in all aspects, including providing effective response to queries. To the best of our knowledge, the available literature concentrates on subjects other than the impact of the effectiveness of the response on clients towards the perceived relevance of social commerce. For example, Kursunluoglu (2014) studied the influence of customer services on customer satisfaction and loyalty, Cossío-Silva et al. (2015) concentrated on value creation through customer services, while Lee and Lin (2005) and Gotzamani and Tzavlopoulos (2009) concentrated on customer perception of the quality of e-services. Therefore, the current study considers two key variables in determining the perception of clients regarding the relevance of social-media-based commerce: order delivery effectiveness and the effectiveness of response to enquiries.

### The purchasing power

Venkatesh et al. (2012) conducted one of the famous series of studies on technology adoption, in which one of the influencing variables was the price value. In their study, price was an important determinant of the intention to use new technology in human activities. Our study agrees with this observation; however, it acknowledges the fact that some members of the society (in developing countries) are characterised with extremely low income, to the extent that they cannot manage a purchase of lower priced services. For example, in non-developed countries, many citizens live with an income less than US\$ 1 per day (World Bank 2016). With this income, it is difficult for someone to purchase services other than those which support the basic living, even if they are competitively priced. This is the reason why the current study decided to learn the impact of the purchasing power of users on their perception of the relevance of social-media-based commerce.

### The conceptualisation of the study

The literature suggests that the intention to use a new innovation is an important determinant of the actual use (Venkatesh et al. 2012). Nevertheless, one cannot engage in the use of the technology if it is perceived as irrelevant (Hwang & Jeong 2016). This is the reason for choosing the perceived relevance of social-media-based commerce as the ultimate output variable of the study. Moreover, the study determined the importance of the variables such as the quality of display, risks associated with the payment method, convenience of the payment method, the return convenience, the effectiveness in responding to customers' inquiries and the purchase power in influencing the perceived relevance of social-media-based commerce. The literature provided basic information about these variables, and were integrated into the conceptual framework through brainstorming. The result of this conceptualisation is shown in Figure 1. Except for the preferred method for purchases (which was nominal), other variables of the conceptual framework were measured through a Likert scale (ordinal).



**FIGURE 1:** Conceptual framework – The perceived relevance of social media-based m-commerce.

**TABLE 1:** Components of the research questionnaire.

Number	Variable	Measurement
1	Quality of the information in knowing the relevance of the price	Ordinal
2	Usefulness of the display in knowing the quality of products	Ordinal
3	The perceived effectiveness of order delivery	Ordinal
4	The perceived effectiveness of response to inquiries	Ordinal
5	The perceived risk of rejection on returning unfit products	Ordinal
6	The perceived convenience of returning unfit products	Ordinal
7	The perceived relevance of the payment method	Ordinal
8	The preferred method of payment	Nominal
9	The perceived relevance of mobile money for payment	Ordinal
10	The perceived purchasing power of respondents	Ordinal
11	The perceived relevance of social commerce	Ordinal

Figure 1 summarises the different relationships proposed by the current study. These relationships are hypothesised as shown below:

**H1:** The quality of the displayed product information determines the perceived relevance of social commerce.

**H2:** The perceived effectiveness in order delivery determines the perceived relevance of social commerce.

**H3:** The perceived effectiveness of the vendor in responding to queries determines the perceived relevance of social-media-based commerce.

**H4:** The perceived risk of rejection of a returned product determines the perceived relevance of social-media-based commerce.

**H5:** The perceived convenience of returning products determines the perceived relevance of social media commerce.

**H6:** The perceived risk associated with the payment method determines the perceived relevance of social-media-based commerce.

**H7:** The perceived convenience of the mobile money payment method determines the perceived relevance of social media commerce.

**H8:** The clients' purchasing power determines the perceived relevance of social-media-based commerce.

**H9:** The perceived shopping convenience determines the perceived relevance of social-media-based commerce.

## Methodology

The operationalisation of the current study followed a quantitative research approach through a survey strategy.

This approach follows scientific procedures of research and, therefore, avoids the influence of researchers on the result of the study (Williams 2007). In this regard, the study was objective in its nature (Castellan 2010). Objective studies rely on hypotheses testing. In the current study, the conceptual framework in Figure 1 was used to deduce the hypotheses for testing. Table 1 summarises the components of the questionnaire used as the tool for data collection.

This study used social media subscribers based in Tanzania as its general population, and the actual number of social media users is unknown. To execute the study, the principal researcher used the list of friends in his Facebook and Instagram accounts as the sampling population. This population is well defined and suitable for scientific sampling. As some of the social media friends appear in both accounts, the reconciliation showed the sampling frame to have 950 social media users. Given this population, and 0.05 as the acceptable margin of error, the acceptable sample size for categorical data is at least 209 units (Bartlett, Kotrlik & Higgins 2001). The current study meets the standard of Bartlett et al. (2001) because its sample was 302. Data from the sample were collected randomly through sharing the online questionnaire, designed through Google forms.

Before the analysis, data were coded and entered into the Statistical Package for Social Science (SPSS) data sheet. There were no outliers found after data inspection. This status was possible because the study used closed-end questions to extract data from respondents, and the online form does not provide the room for extreme scores (Reja et al. 2003). Recalling from Figure 1 and Table 1, the perceived relevance of social-media-based commerce is the dependent variable, under the influence of all other variables. As the model embraces a predictive relationship, and the dependent variable is ordinal, the study adopted the ordinal logistic model to make key decisions (Fullerton 2009; McCullagh 1980).

Furthermore, to ensure the validity of the study for the current problem, it followed the following procedure. Firstly, the study used the literature to have a clear understanding of the research gap. Then, the variables of the study (suggested in Figure 1) were used to identify different aspects that required the extraction of data from respondents. These were used in the formulation of the questionnaire. The content of the questionnaire was shared with senior researchers of two institutions, whose comments were incorporated. Moreover, the data collection process was managed by the principal researcher to ensure that only relevant respondents participate in the study. The reliability of the study was confirmed through the Cronbach's alpha, where the average reliability value was 0.88; the minimum acceptable value is 70 (Williams 2007). In addition, the study followed ethical principles of research endorsed by the international bodies of research and the North-West University.

## Results

This section begins with the presentation of demographic characteristics of respondents. A detailed explanation of

categorical relationships between these demographic variables and the perceived relevance of social commerce is already published by Lubua and Pretorius (2018 a and b). Therefore, Table 2 presents the demographic descriptive information, with the intention to assist the readers in knowing the nature of the sample of the study.

Originally, the intention of this study was to test variables hypothesised to determine the perceived relevance of social commerce among users of social networks in Tanzania. Ordinal regression was used in making decisions about the position of different relationships of the conceptual framework. Each relationship was analysed independently. Based on Table 3, the following variables were observed to have insignificant impact on the perceived relevance of social-media-based commerce: perceived risk of the payment method, purchasing power and convenience of the mobile money payment method. The three variables do not cause a significant impact on the perceived relevance of social-media-based commerce because their parameter estimates have  $p$ -values greater than the threshold (i.e. 0.05).

**TABLE 2:** Demographic characteristics of the participants.

Variable	Elements of measurements	Descriptive statistics	
		Frequency	%
Age	30 years or less	124	40.5
	Between 31 and 45 years	158	51.6
	46 years and above	24	7.9
	Total	306	100.0
Education	Secondary education and below	12	3.9
	Certificate or diploma	22	7.2
	Undergraduate degree	154	50.3
	Postgraduate	118	38.6
	Total	306	100.0
Gender	Female	128	41.8
	Male	178	58.2
	Total	306	100.0
Employment	Student	24	7.9
	Employed	210	68.6
	Entrepreneurship	72	23.5
	Total	306	100.0

**TABLE 3:** Factors with insignificant influence on the perceived relevance of social-media-based commerce.

Input variable	Model fitting information	Input-variables parameters' $p$ -values		Nagelkerke $r$ -square value
		Parameters	$p$ -value	
Purchasing power	0.008	Less than 30 000	0.641	0.042
		31 000 to 50 000	0.080	
		51 000 to 100 000	0.950	
		Above 101 000	RV	
Perceived risk of the payment method	0.009	Highly perceived	175	0.047
		Perceived	215	
		Moderate	0.506	
		Do not perceive	0.871	
		Highly do not perceive	RV	
Convenience of the mobile money payment method	0.342	Highly convenient	0.548	0.016
		Convenient	0.504	
		Moderate	0.967	
		Inconvenient	0.692	
		Highly inconvenient	RV	

RV, Reference value

With these results, the study excludes these variables in its discussion.

The second category of input-variables have some parameter estimates with a significant difference in the reference value, while some did not. In the analysis, the *model fitting information* of the perceived rejection of returned goods suggests 0.010 as the  $p$ -value. The parameter which suggests that respondents do not highly perceive rejection upon return was set as a reference value. Additionally, respondents who do not perceive rejection upon returning goods have an insignificant difference with the reference value. The recorded  $p$ -value was greater than 0.05 ( $p = 0.640$ ). On the contrary, the  $p$ -values for the remaining parameters showed a significant difference in the reference value. Regardless of these results, the reported Nagelkerke  $r$ -square value was 0.046, which suggests a small (but significant) impact on the perceived relevance of social-media-based commerce; therefore, we choose to disengage this variable in our model. Studies by Kursunluoglu (2014) and Rahayu and Day (2015) complement this observation by suggesting that buyers desire an assurance that the vendor's policy supports the returning of unfit purchased goods.

Another variable tested against the perceived relevance of social commerce is the perceived return convenience. The *model fitting information  $p$ -value* was 0.000, suggesting that the model is relevant to testing the given relationship. The parameter which suggests the return of unfit goods as highly inconvenient, was set as a reference in an effort to understand whether other parameters differed across the scale. Based on the results, the parameter suggesting the return of unfit goods as inconvenient showed an insignificant difference to the reference value. Other parameters reported a significant difference because their

**TABLE 4:** Determinants of social commerce with parameters with mixed level of significance.

Input variable	Model fitting information	Input-variables parameters' $p$ -values		Nagelkerke $r$ -square value
		Parameters	$p$ -value	
Perceived rejection upon return	0.010	Highly perceived	0.001	0.046
		Perceived	0.020	
		Moderate	0.037	
		Do not perceive	0.640	
		Highly do not perceive	RV	
Effectiveness of order delivery	0.000	Highly effective	0.000	0.330
		Effective	0.005	
		Moderate	0.264	
		Ineffective	0.533	
		Highly ineffective	RV	
Perceived response to queries	0.000	Highly effective	0.000	0.365
		Effective	0.000	
		Moderate	0.007	
		Ineffective	0.501	
		Highly ineffective	RV	
Perceived return convenience	0.000	Highly convenient	0.001	0.088
		Convenient	0.005	
		Moderate	0.000	
		Inconvenient	0.798	
		Highly inconvenient	RV	

RV, reference value.

$p$ -values were less than the threshold value (0.05). Moreover, the reported *Nagelkerke r-square value* is 0.088. Additional information indicated that 68.6% of those who are comfortable with the convenience of returning the unfit products, perceived social commerce as relevant, while 42% of those who are not comfortable perceived it as relevant. Therefore, the increase of the comfortability of the return process determines the perception of respondents of the relevance of social commerce. Things that may decrease the comfortability to return unfit goods include a high chance of rejection, distance and possible additional cost (Akman & Mishra 2017; Chaudhry & Stumpf 2011; Gotzamani & Tzavlopoulos 2009).

Next to this analysis, we discuss variables with mixed levels of significance in their parameter estimates, but with the *Nagelkerke r-square value above 0.100*.

### The effectiveness of order delivery

When customers make an online purchase, they expect to receive purchased products within a reasonable timeframe (Gotzamani & Tzavlopoulos 2009). This area is thought to impact the perceived relevance of social commerce. In our analysis, we tested the impact of the effectiveness of order delivery on the perceived relevance of social commerce, and the *model fitting information p-value* was 0.000. With this  $p$ -value, the model is relevant in using the perceived effectiveness of order delivery to predict the perceived relevance of social commerce. Furthermore, the parameter estimates of the input variable show that those who perceived a moderate and an ineffective order delivery practice do not significantly differ from the reference value. Their observed  $p$ -value is greater than 0.05. The reference parameter is the perception that order delivery is highly ineffective. Those who admit that social commerce comes with effective and highly effective order delivery, showed a significant difference in the reference value. Furthermore, 78% of those who perceive effective and highly effective order delivery considered social commerce as relevant, while 2% of those who view the order delivery as ineffective shared the same view. Generally, the analysis concludes the position of this relationship by suggesting that the *Nagelkerke r-square value* is 0.330, which suggests that the perceived effectiveness of order delivery impacts the perceived relevance of social-media-based commerce by 33% (Salvatori & Marcantoni 2015). Studies by Sanjuq (2014) and Talat, Azar and Yousaf (2013) shared a view that customers are eager to use their newly purchased products; therefore, the delay in arrival affects the future decision to use the platform on purchases.

### Perceived response to queries

The online display of business information is more favourable to clients with adequate prior information about the product on sale (Lai & To 2015). This is because an online business does not offer an opportunity for a physical verification of products. We agree with the proposal by Hwang and Jeong (2016) that the establishment of a proper platform for directing clients' queries and inquiries would boost the confidence of potential buyers towards products on display.

In this study, we determined the impact of the perceived response to queries on the perceived relevance of social-media-based commerce. The results suggested the  $p$ -value for the *model fitting information* as 0.000, which is less than the threshold value. Nevertheless, the parameter estimates suggested those who perceive ineffective response to query ( $p = 0.798$ ) to have an insignificant difference from the reference value. The reference value was the parameter known as highly ineffective. The remaining parameters showed a significant difference because their  $p$ -values were less than 0.05. Moreover, this study accepted the fact that the last two parameters were indifferent because they both perceive that there is a poor response to queries, although in different magnitudes. This observation was explained through descriptive information showing that 76.6% of respondents who perceive an adequate response and 8.3% of those who do not perceive an adequate response to enquiries from vendors are convinced that social-media-based commerce is relevant. Moreover, the model analysis suggested the *Nagelkerke r-square p-value* as 0.365. This information suggests that the perceived effectiveness of the response to queries impacts the perceived relevance of social-media-based commerce by 36.6%. With this observation, the study supports the emphasis made by Chaudhry and Stumpf (2011) and Lee and Lin (2005) ensuring that a proper platform is established to address queries raised by clients. Instant responses are more preferred.

### The perceived shopping convenience

In our case, the shopping convenience is the degree to which buyers can easily access the product they want regardless of their geographical location or time limits. This comes with the knowledge that the modern environment provides different products or solutions, but physically available in locations other than that of the buyer (Hung & McQueen 2004; Hwang & Jeong 2016). Arguably, developments in ICTs make the process of acquiring such services possible. In the Tanzanian context, mobile money services offer a reliable method for payment for many service vendors, even where the buyer is in a different location (Kikulwe et al. 2014; Lubua & Pretorius 2017). Mobile money services are more relevant because many Tanzanians lack access to formal banking services (International Monetary Fund 2016). In this section of the study, we tested the impact of the perceived shopping convenience on the relevance of social-media-based commerce. A significant impact was observed, with the *model fitting information p-value* reported as 0.000 (see Table 5). Moreover, the information from parameter estimates suggests a significant difference from the reference value across all variables. All parameters of the input variable suggested a  $p$ -value less than 0.05. As there was no response reported for the parameter 'highly inconvenience', the parameter that suggests an inconvenient shopping process was set as a reference value. Meanwhile, the *Nagelkerke r-square p-value* is reported as 0.201, which is 20.1% of impact to the perceived relevance of social media commerce. The reported information is descriptively expressed as follows: 72.6% of those who support the statement that they conveniently use social media platforms for purchases also perceive that

**TABLE 5:** Determinants of the perceived relevance of social commerce with all parameters with a significant  $p$ -value.

Input variable	Model fitting information	Input-variable parameters' $p$ -values		Nagelkerke $r$ -square value
		Parameters	$p$ -value	
The extent you agree that social media provides the quality display of product information	0.000	Highly agree	0.000	0.219
		Agree	0.000	
		Moderate	0.000	
		Disagree	0.000	
		Highly disagree	RV	
Perceived shopping convenience	0.000	Highly convenient	0.000	0.201
		Convenient	0.000	
		Moderate	0.025	
		Inconvenient	RV	
		Highly inconvenient	No response	

RV, reference value.

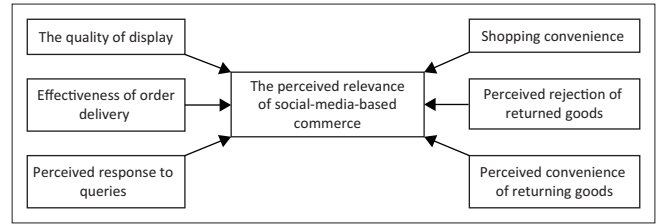
social commerce is relevant. None of those who perceive inconvenience consider it as relevant. Social media, like any other type of online businesses, is expected to enhance the convenience of purchase to clients (Rahayu & Day 2015).

### Quality display of the product information

The contemporary business environment is full of different products. Unfortunately, some are counterfeit products, which makes the buying process difficult (Chaudhry & Stumpf 2011). For this reason, clients prefer to make a proper verification of the products before buying (Gotzamani & Tzavlopoulos 2009). The intention is to save themselves from losing their money. Knowing the quality of the product in a traditional environment is less challenging compared to where online platforms are involved. This is because the traditional method offers the opportunity to physically verify the quality of the product on sale. Apart from the availability of counterfeit products, social media are characterised by criminal activities targeting illegal gains (Chaudhry & Stumpf 2011; Salvatori & Marcantoni 2015). Therefore, social commerce is likely to be more challenged. In the current study, it was observed that the perceived quality of display determines the perceived relevance of social-media-based commerce by 21.9%. This follows the reported Nagelkerke  $r$ -square  $p$ -value of 0.219. Moreover, the model fitting information reported the  $p$ -value as 0.000. In addition, all the parameters of the input variable reported a significant difference from the reference value. This information is justified through the descriptive information of the cross-tabulation, in which 75% of those who are confident in the quality of displayed information and 31.5% of those who are uncomfortable, perceived that social-media-based commerce is at least relevant. Therefore, the increase of the comfortability with the quality of displayed information determines the perceived relevance of social media commerce. Ensuring that the quality of the product is visible and verifiable to clients is important for their confidence (Tang & Wu 2015).

### A recast to the model

It was the intention of this study to determine factors impacting the perceived relevance of social commerce in the context of developing countries, where Tanzania was chosen

**FIGURE 2:** Factors determining the perceived relevance of social media commerce.

as a case study. The choice of variables engaged in the study was motivated by the available literature. In this section, we reflect on the conceptual framework and establish its general position. The analysis proved the following variables to have an insignificant influence on the perceived relevance of social-media-based commerce: purchasing power of the client, perceived risk of the payment method and convenience of the mobile payment method. Therefore, we exclude them from the conceptual model. Generally, the following variables had the causal effect above 10%, and we use them to establish the current position of the conceptual model: effectiveness of order delivery, perceived response to queries, to which you agree that social media provides the display of product quality information, perceived shopping convenience, perceived rejection of the returned unfit goods and perceived convenience of returning unfit goods. Collectively, these variables suggest the  $p$ -value for the model fitting information as 0.000, and the Nagelkerke  $r$ -square  $p$ -value as 0.577. Therefore, these variables have a collective impact of 57% on the perceived relevance of social-media-based commerce. Hence, the conceptual framework proposed in Figure 1 is transformed into Figure 2.

### Conclusion

This study was undertaken to test factors determining the perceived relevance of social-media-based commerce. Overall, the study agrees that subscribers of social networks perceived social commerce as relevant to them. This perception is good for businesses that use social media platforms to meet their clients; therefore, it must encourage social-media-based business vendors to consolidate their online position. Moreover, it is acceptable to suggest that the effectiveness of order delivery, the perceived response to queries, the extent to which you agree that social media provides the display of quality product information, the perceived shopping convenience, the perceived rejection of the returned unfit goods and the perceived convenience of returning unfit goods determine the perceived relevance of social media by above 50%. We understand that engaging this study in a quantitative approach would provide additional information on different factors impacting social commerce; therefore, we recommend future studies to engage this approach.

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## Competing interests

The authors declare that they have no financial or personal relationships which may have inappropriately influenced them in writing this article.

## Authors' contribution

E.W.L. initiated the research idea, drafted the work, collected data and wrote the report. P.P. refined the idea, statistics and the report.

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