The role of perceived value in promoting customer satisfaction: Antecedents and consequences

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Abstract: The aim of this study was to investigate the role of perceived customer value in promoting customer satisfaction in the South African leafy vegetable market. The study also examined the antecedents of customer value and the outcomes of customer satisfaction. The study was quantitative in nature, using purposive sampling technique. A self-administered questionnaire was utilised, and 370 questionnaires were completed. The research participants were hawkers on the streets of Johannesburg, Central Business District, South Africa. Data were analysed using the PLS-SEM analytical techniques. The finding of this study shows that customer value has an influence on customer satisfaction. The academic contribution of this study is that most studies on customer satisfaction concentrate on the predictors of customer satisfaction as being trust, commitment and communication. The managerial implication is that business must place much emphasis on creating a sustainable customer value to achieve customer satisfaction. In so doing, organisations will be able to attain a competitive advantage and achieve organisational objectives.

Subjects: Economics; Business, Management and Accounting; Industry & Industrial Studies

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PUBLIC INTEREST STATEMENT
This paper looked the influence of customer value on customer satisfaction. Most studies on customer satisfaction are concerned with other determinants of customer satisfaction and very little studies are aimed at determining the influence of customer value in promoting customer satisfaction. Customer value is when a customer perceives to have gained more for less and when this happens a customer may be satisfied with the offering. Providing customers with value is critical for organisational success. The finding of the study shows that customer value has a positive influence on customer satisfaction. When a customer is satisfied, it leads to outcomes such as commitment, trust, loyalty and customer referrals, both of which are critical for sustainable competitive advantage. Therefore, organisations are urged to craft and implement strategies which will lead to customer value. Such strategies can be about product offering, pricing and communication.
1. Introduction

The relationship between customer value and customer satisfaction has attracted little research in agriculture marketing research (Rootman, Tait and Sharp). This denotes that there is an absence of scientific research about the antecedents of customer value and the outcomes of customer satisfaction in the leafy vegetable markets grounded in Africa. Also, the relationship between the constructs, customer value and customer satisfaction has received very little attention. The purpose of the study is to determine the role of perceived value in promoting customer satisfaction in the leafy vegetable market in South Africa.

Trust, commitment and communication positively reinforce customer satisfaction and enhance customer loyalty (Deng, Lu, Wei, & Zhang, 2010; Theron & Terblanche, 2010; Halimi, Chavosh, & Choshalya, 2011; Mousavian, 2011; Masud & Daud, 2019). Trust and commitment are mediating factors in determining customer satisfaction (Mpenganjira, Bogaards, Svensson, Mysen, & Padin, 2013) and trust is a predictor of customer satisfaction (Hau & Ngo, 2012; Mbango & Phiri, 2015). In this study, it is posited that trust, commitment and customer loyalty are outcomes of customer loyalty. Mpenganjira, Bogaards, Svensson, and Mysen (2014) and Mbango (2017) argue that these constructs are interlinked. In this study, the researcher contends that customer satisfaction is an outcome of customer value, and that trust, commitment, word of mouth and loyalty are the consequences of customer satisfaction. Product quality, communication, product mix and product price are predictors of customer value. Ko (2009) states that contemporary food services, such as the leafy vegetables market, face different challenges of high eminence demands from customers, food safety and increased profit. This denotes that dynamic elements, such as customer value is essential in satisfying customers. In this paper, trust, commitment, word of mouth and customer loyalty are realised as the outcomes of customer satisfaction, and product quality, communication, product price and product mix are positioned as predictors of customer value.

1.1. Background

Hawkers play an important role in the South Africa economy. Hawkers’ markets are considered an informal sector. Makhubela, van Scheers, and Makhitha (2017); and Mbango and Mmratli (2019) mention that informal sector businesses comprise informal businesses that operate mainly on street pavements in the cities and towns of South Africa. A leafy vegetables market is a market where hawkers sell different kinds of leafy vegetables. A total of R51.7 billion was spent at informal businesses in 2004 and, out of this amount, R10.4 billion (20.2%) of the spend was at hawkers’ markets (Ligthelm, 2006).

About 100 species of plants were recognised as leafy vegetables in South Africa (Mbango & Makhubela, 2018). According to Jansen van Rensburg et al. (2007) leafy vegetables are plant species where the leafy parts, such as flowers, succulent stems and very young fruit, are used as vegetables. The position of leafy vegetables in food consumption patterns of South African families depends on aspects, such as degree of urbanisation, time of the year, distance to fresh produce markets and poverty status (Gorra, Voster, & Conicella, 2002).

2. Grounding theory underpinning the study

2.1. The relationship between customer value and customer satisfaction

Hellier, Geursen, Carr, and Rickard (2003) define customer value as the customer’s overall evaluation of the net worth of the product/service that is found in the customer’s assessment of what the business offers. As customers, leafy vegetable hawkers are gradually demanding superior customer service, more value for their money and high-quality food products (Ryu, Han, & Kim, 2008). Makhitha, Cant, and Theron (2016) state that suppliers/farmers of leafy vegetables need to invest...
time to identify potential customers and offer them superior value for their money. Flint, Blocker, and Boutin (2011); and Makhitha et al. (2016) contend that in order to offer value to customers, businesses should first establish what the customer needs are and then whether the business can afford to offer customers a price that they are willing to pay. This denotes that business-to-business suppliers must attempt to match their abilities, resources and competencies to customer needs in order to serve them satisfactorily. Slater and Narver (2000); and Lusch and Vargo (2014) emphasise that managers should realise what their customers value in order to survive and prosper in competitive markets. Should customers’ perceived value be successfully matched by the suppliers, this may lead to customer satisfaction.

From a business-to-business perspective, customer value is created in the form of the product or service, or it can be created by suppliers that adapt to customers’ changing needs (Flint et al., 2011). Customer value can be derived from superior product quality, perceived value for money, prompt communication, as well as the availability of a variety of product choices (Mbango, 2017). Some measures of customer value correlate positively with customer satisfaction (Lapierre, Filiatrault, & Chebat, 1999; Spiteri & Dion, 2004).

Customer satisfaction is a general judgement process of the apparent difference between prior expectations and actual consumption (Han & Ryu, 2009). Customer satisfaction is a central notion in the field of marketing because it plays an important role in meeting the customers’ needs and wants (Han & Ryu, 2009; Martinaityte, Sacramento, & Aryee, 2019). Garbarino and Johnson (1999) further state that customer satisfaction is a complete valuation based on the consumption experience and total purchase together with good service provided over a certain period. Maxham (2001) highlights that customer satisfaction is an individual’s subjectivity that stems from the constructive evaluation of any experience and outcome related to using a product.

Academics differ in what promotes customer satisfaction and its outcomes. Some suggest that customer satisfaction is a result of trust, commitment and communication. However, this paper contends that customer satisfaction is promoted by customer value. Suppliers in the leafy vegetables market derive profits when they provide customer value (Han & Ryu, 2009). The above discussion denotes that customer satisfaction is essential in retaining customers and achieving business success.

Therefore, based on the theoretical discussion above, the first hypothesis can be formulated as:

\[ H_1: \text{Customer value has a positive influence on customer satisfaction.} \]

2.2. The conceptual research model for the study
Based on the grounding theory of the relationship between customer value and customer satisfaction as discussed above, this paper proposes a research model (Figure 1) that posits product quality, communication, product price and product mix as direct predictors of customer value. It posits customer value as an influencer/promoter of customer satisfaction and the outcomes thereof being loyalty, word of mouth, trust and commitment in the South African leafy vegetable market.

2.3. The relationship between product quality and customer value
Nyadzayo and Khajehzadeh (2016) define product quality as an overall judgement of the level of a supplier’s performance. The quality of a product or service draws attention to the ability of suppliers to determine the correct customer expectations and deliver the product or service at a level that will meet the customer expectations (Brink & Brendt, 2004). Once the customer expectations are met or exceeded, then a customer will have value. Anton, Camarero, and Carrero (2007) affirm that customer awareness of the low level of quality of products will increase the customers’ intention to end the
relationship with the supplier. Products of high quality might encourage customers to improve the relationship with their supplier (Hess, Ganesan, & Klein, 2003).

Studies conducted by Dusuki and Abdullah (2007); Omotayo and Joachim (2008); and Pollack (2009) discovered that product quality has a positive influence on customer value. Gounaris (2005) maintains that product quality has been deemed a foremost requirement for achieving customer value. Han and Hyun (2015) support the notion that product quality is a major driver of customer value, and further highlight that the ability of a business to maintain a competitive advantage is dependent on its ability to offer products of high quality, which in turn leads to customer satisfaction. Therefore, the following hypothesis can be formulated:

**H2**: Product quality has a positive influence on customer value.

### 2.4. The relationship between communication and customer value

Zamani and Harper (2019) define communication as a practice where the business interacts with its regular customers in a personal and warm manner. The suppliers/farmers of leafy vegetables should continuously be in touch with their regular customers in order to realise their constantly changing desires. Sin et al. (2005) state that communication is the formal and informal means of sharing timely, trustworthy and meaningful information between the business and its customers. A better relationship develops when there is effective communication between suppliers and their customers, which in turn leads to customer value (Halimi et al., 2011). An increase in the level of customised communication leads to an increase in relationship value creation (Ndubisi & Wah, 2005; Hau & Ngo, 2012). Given the above discussion, the following hypothesis is proposed:

**H3**: Communication has a positive influence on customer value.

### 2.5. The relationship between product price and customer value

Han and Ryu (2009) defined price as that which is sacrificed or given up in order to obtain a product. Han and Ryu (2009) observed that price is frequently used as a suggestion in the customers’ expectations of the product performance because customers tend to use price as a means of assessing their experiences with a product and, in the process, shaping their attitude towards a farmer/supplier. Normally, how a customer views price fairness or unfairness, significantly influences the customer’s perceived value and behavioural intentions (Bolton & Lemon, 1999). Ranaweera and Neely (2003) indicate that product price viewpoint is significantly related to
customer value as perceived customer value can be related to the perceived benefits less perceived costs. If the perceived benefits outweigh the perceived costs, then a customer may see value in doing business with a supplier. In supporting the aforementioned, Herrmann, Xia, Monroe, and Huber (2007) further purport that product price perception influences customers’ overall value judgements. Given the above discussion, it is hypothesised that the price of a product (the leafy vegetable) has a positive influence on the perceived value:

\[ H_4: \text{Product price has a positive influence on customer value.} \]

2.6. The relationship between product mix and customer value

Product mix refers to product lines or the total number of products that a supplier provides to customers (Forza & Salvador, 2006). Wan, Evers, and Dresner (2012) highlight that it is usually expected that a business can raise its overall market share by increasing its product selection to appeal to a larger set of customers. Ramdas (2003) states that how businesses choose to create variety in their product offerings, and how their supply chains are managed to implement variety, are key determinants of the success of the supplier’s strategy. A supplier may create a variety of products according to customers’ needs and offer consumers a choice from a set of ready-made offerings (Ramdas, 2003). From the perspective of the leafy vegetable market, this denotes that suppliers/farmers provide more than one type of leafy vegetable to the hawkers. A supplier that offers different types of leafy vegetables will be able to offer a “one-stop shop” to its customers. By doing so, customers will perceive to have gained value. Therefore, the next hypothesis can be formulated:

\[ H_5: \text{Product mix has a positive influence on customer value.} \]

2.7. The relationship between customer satisfaction and customer loyalty

Customer loyalty is when the customer is willing to commit to repeat purchases of products/services of a specific supplier to strengthen a relationship with that supplier (Azimi, 2017). Customer loyalty usually leads to the customer specifying a supplier as their preferred choice and to resist all instances of persuasion by competing suppliers (Yim, Tse, & Chan, 2008). According to Zhang and Prybutok (2005), customer loyalty within the leafy vegetable market is defined as the customer’s assurance to maintain a healthy, long-term relationship with the supplier. Customers that are satisfied with a supplier’s products tend to demonstrate loyalty and then to recommend the supplier to other people (Han & Hyun, 2015). Studies conducted by Luo and Homburg (2007); and Hu, Kandampully, and Juwaheer (2009) suggest that an important outcome of customer satisfaction is customer loyalty. There is uniform evidence that customer satisfaction contributes towards behavioural intentions, customer retention, repeat purchase intentions and customer loyalty (Van Tonder & Roberts-Lombard, 2015). In this study, it is hypothesised that customer satisfaction in the leafy vegetables market positively impacts on customer loyalty. Hence, customer loyalty is seen as an outcome of customer satisfaction:

\[ H_6: \text{Customer loyalty is an outcome of customer satisfaction} \]

2.8. The relationship between customer satisfaction and word of mouth

Word-of-mouth communication refers to people sharing their experiences and positive word-of-mouth communication emerges from satisfactory service encounters. Customer satisfaction as Kim, Nee Ng, and Kim (2009) mention, is essential to leafy vegetable managers as it leads to brand loyalty, repeat patronage and new customers through word-of-mouth recommendations. Chen, Shi, and Dong (2008) mention that word-of-mouth recommendations from friends, colleagues and family that are satisfied with the supplier of leafy vegetables have a significant impact on sales.

A study by Babin, Lee, Kim, and Griffin (2005) highlights that when customers experience a beneficial and pleasant service, they will be driven to endorse that service provider to their friends and family. Customer satisfaction is recognised amongst researchers as a strong predictor
of behavioural variables, such as loyalty, repeat purchase intention or word-of-mouth recommendation (Ulaga & Eggert, 2006). Kim et al. (2009), Ranaweera and Prabhu (2003) add that customer satisfaction has a strong positive significance for customer retention and positive word-of-mouth endorsement. Wangenheim and Bayon (2007) also stress that positive word-of-mouth endorsement is the outcome of high customer satisfaction.

H7: Word-of-mouth referral is an outcome of customer satisfaction.

2.9. The relationship between customer satisfaction and trust
Han and Hyun (2015) regard trust as the belief that an associate’s promise is reliable, and a party will fulfil his/her obligations in the relationship. Trust in leafy vegetables suppliers derives from customers’ positive experiences that inspire them to maintain with the relationship. Alluding to this notion, Morgan and Hunt (1994); Doney and Cannon (1997); Rodriguez and Wilson (2002) revealed that trust is an essential factor that mediate between variables because trust directly influences a commitment to a relationship. According to Gounaris (2005), trust is a behaviour or an interactive intention that shows a reliance on a supplier and that this involves uncertainty and vulnerability. This means that before trust develops, some guarantee of satisfaction should exist. Studies conducted by Chen, Huang, and Sternquist (2011) and Leonidou, Talias, and Leonidou (2008) underline that trust in a business relationship develops over time and can be difficult to build in the presence of an unsatisfactory business exchange relationship. Based on the above discussion, it is hypothesised that satisfaction with the leafy vegetables supplied previously, as well as services received will nurture trust amongst the relationship partners:

H8: Trust is an outcome of customer satisfaction.

2.10. The relationship between customer satisfaction and commitment
Mpinganjira et al. (2014) describe commitment as a psychological sentiment of the mind where an attitude regarding the continuation of a relationship with a business partner is molded. Commitment is the implicit or explicit pledge of continuation between the customer and the supplier (Nydzayo, 2010). In the leafy vegetable market, commitment to suppliers is dependent on the level of customer satisfaction (Wali, Wright, & Uduma, 2015). Customers become satisfied when they are in a relationship with their suppliers and there are existing social connections that can resolve barriers caused by communication problems (Chang, Wang, Chih, & Tsai, 2012). Satisfied customers can be influenced by suppliers to maintain the relationship because a commitment to a relationship is influenced by the assessment of the efficiency of the past interaction (Mpinganjira et al., 2014). When customer satisfaction increases, customers are less likely to leave the relationship because they are aware of the risks and costs inherent in ending the relationship (Chang et al., 2012).

H9: Commitment is an outcome of customer satisfaction.

3. Methodology

3.1. Research design
Research design is the roadmap that provides direction on how the researcher anticipates carrying out the research (Bryman & Bell, 2015). Research design is a planned structure to investigate and assist the researcher in obtaining answers to research questions (Cooper & Schindler, 2014). The current study employed a quantitative research approach and the survey method.

3.2. Population and sample
The respondents for the study comprised hawkers that sell leafy vegetables to the public in the Gauteng Province in South Africa. Four hundred questionnaires were distributed and 370 (93%) questionnaires were preserved and used as input into data analysis. The sample was considered fit
for analysis using the Roscoe (1975) calculator that recommends that sample sizes ought to be more than 300 and less than 500 applicable for an utmost research.

3.3. Data collection procedure
Purposive sampling was used to collect the data from the respondents (who were hawkers of leafy vegetables on the streets of the Johannesburg CBD). In purposive sampling, the respondents are selected intentionally based on the qualities and knowledge that they have. When using purposive sampling, the researcher chooses what needs to be known and then finds people who are willing to provide the information based on their knowledge or experience of the subject matter (Etikan, Musa, & Alkassim, 2015). In this study, purposive sampling was preferred because the researcher needed to understand the relationship between the constructs in the leafy vegetable market and therefore purposively targeted those hawkers.

3.4. Measurement and questionnaire design
The research constructs were developed solely on already validated measures. All scale items were rearticulated to relate exactly to the context of the current study’s requirement. A seven-point Likert scale was employed to measure the constructs ranging from ‘1—strongly disagree’ to “7—strongly agree”. All constructs used a seven-item scale which was adopted as follows: quality was adopted from Goffin, Lemke, and Szwejczewski (2006), Mbango (2015), and Suki (2016); customer value was adopted from Nyadzayo and Khajehzadeh (2016); communication was adopted from Hau and Ngo (2012), Zineldin and Jonsson (2000); product price was adopted from Suki (2017); product mix was the researcher’s own construct; customer satisfaction and trust were adopted from Morgan and Hunt (1994), Svensson, Mysen, and Payan (2010), Mpinganjira et al. (2014); customer loyalty was adopted from Suki (2016); word of mouth was adopted from Baker, Donthu, and Kumar (2016) and, lastly, commitment was adopted from Morgan and Hunt (1994) and Svensson et al. (2010). In line with the recommendation by Nunnally (1978), a minimum of three items were used per construct to guarantee suitable reliability.

The questionnaire was divided into three parts: Part A contained the introduction of the questionnaire to the participants; Part B contained the demographic profile with gender, age, citizenship, as well as the duration the respondents had been in business; Part C contained questions about the variables that were used in the study, namely quality, customer value, communication, product price, product mix, service quality, customer satisfaction, customer loyalty, word-of-mouth referrals, trust and commitment using a seven-point Likert scale that was anchored from “1—strongly disagree” to “7—strongly agree”.

4. Data analyses and results
Data analyses for this study was achieved using the PLS-SEM technique. This statistical technique can estimate complex models with a number of constructs, indicators and structural paths without imposing the assumptions of data distribution (Hair, Risher, Sarstedt, & Ringle, 2019). Given these advantages, the PLS technique was considered more suitable for the purposes of this study.

In evaluating the model proposed for this study, the two-step procedure recommended by Anderson and Gerbing (1988) that entails (a) measurement model analysis and (b) structural model analysis was implemented.

4.1. Measurement model analysis
The measurement model was assessed for its convergent and discriminant validity. With regard to convergent validity, estimates such as standardised factor loading, composite reliability (CR) and average variance extracted (AVE) were examined. According to Hair et al. (2019) to achieve convergent validity, the factor loading estimates should be significant and exceed a minimum threshold of 0.6 with 0.708 being preferable. In terms of the CR, a threshold of 0.7 is considered a good measure of internal consistency reliability.
The third step in the evaluation of the convergent validity of the measurement model is the assessment of AVE for all the items of each construct. The acceptable threshold of the AVE for confirming convergent validity is 0.5. The results of the convergent validity for the measurement model used in this study are presented in Table 1 and Figures 2 and 3. According to the results, all the

| Table 1. Convergent validity of the measurement model |
|---------------------------------------------|
| **Factor loading** | **Composite reliability** | **Average variance extracted** |
| Customer loyalty | 0.812 | 0.520 |
| CL1 | 0.755 | |
| CL2 | 0.802 | |
| CL3 | 0.682 | |
| CL4 | 0.768 | |
| Commitment | 0.858 | 0.670 |
| CM1 | 0.856 | |
| CM2 | 0.710 | |
| CM3 | 0.880 | |
| Communication | 0.794 | 0.567 |
| COW1 | 0.654 | |
| COW4 | 0.874 | |
| COW5 | 0.714 | |
| Satisfaction | 0.812 | 0.591 |
| CS2 | 0.726 | |
| CS4 | 0.714 | |
| CS6 | 0.735 | |
| Customer value | 0.776 | 0.537 |
| CV2 | 0.781 | |
| CV4 | 0.709 | |
| Product mix | 0.775 | 0.634 |
| PM1 | 0.840 | |
| PM2 | 0.750 | |
| Price | 0.841 | 0.569 |
| PR1 | 0.749 | |
| PR2 | 0.794 | |
| PR3 | 0.754 | |
| PR4 | 0.718 | |
| Product quality | 0.805 | 0.580 |
| QL1 | 0.828 | |
| QL2 | 0.778 | |
| QL4 | 0.669 | |
| QL5 | 0.705 | |
| Trust | 0.828 | 0.546 |
| TR1 | 0.745 | |
| TR2 | 0.666 | |
| TR3 | 0.797 | |
| TR5 | 0.742 | |
| Word of mouth | 1.000 | |
| WOM3 | 1.000 | 1.000 |
items measuring their respective constructs are significant at $p < 0.001$ and had an item factor loading estimate exceeding the minimum threshold of 0.60 with 0.644 (COW2) as the lowest. In terms of CR, the results presented show that the CR estimates are above the recommended threshold of 0.7 with 0.775 as the lowest. Lastly, the AVE estimates range between 0.520 and 1.00. These estimates are well above the 0.5 threshold, providing evidence of the internal consistency of reliability of the measurement model and thus confirming the convergent validity of the measurement model.

The second phase in the assessment of the measurement model entailed discriminant validity assessment. The assessment of the discriminant validity was achieved with the aid of the Fornell and Larcker (1981) technique. According to this technique, discriminant validity is achieved if the
square root of the AVE is greater than the inter-factor correlations among the constructs. The results of this analysis are presented in Table 2.

According to the results, the highest inter-factor correlation is 0.619—between satisfaction and communication. This estimate is lower than the lowest square root AVE, i.e., 0.714 (trust). This statistical evidence confirms the discriminant validity of the measurement model confirming that both the convergent and discriminant validity of the measurement model suggest that measures are valid for structural model analysis.

4.2. Structural model analysis
Prior to the structural model analysis, the threat of collinearity was examined to ascertain its potential to bias the regression results. The assessment of collinearity was carried out using the variance inflation factor (VIF). According to Mason and Perreault (1991) and Becker, Ringle, Sarstedt, and Franziska (2015), VIF values that are lower than 3 are indicative of the absence of collinearity at critical levels. The VIF values obtained for this study range between 1 and 1.606. Given that the VIF estimates are less than the critical threshold of values exceeding 3, it is concluded that collinearity will not bias the regression estimates of the structural paths.

The results of the structural model analyses are presented in Figures 2 and 3. According to the results, product quality has a significant and a positive effect on customers’ perceived value ($\beta = 0.236, p < 0.001$), providing support for H2. The results also suggest that communication with the customers has a significant and positive effect on the customers’ perception of value ($\beta = 0.145, p < 0.05$) and, therefore, provides statistical support for H3. Moreover, while price is significant and positively associated with perceived value ($\beta = 0.142, p < 0.01$), product mix is not significantly associated with customers’ perceived value. Therefore, while H4 is statistically supported, H5 is not. The results further show that the significant predictors explain 23.5% of the variance in customers’ perceived value. In terms of H1, the results of the analysis suggest that customers’ perceived value has a significant and positive effect on their satisfaction with suppliers ($\beta = 0.336, p < 0.001$), thus providing empirical support for H1. The results also indicate that perceived value explains 11.3% of the variance in customers’ satisfaction. With regard to the outcomes of customer satisfaction, the results of the study show that satisfaction significantly and positively predicts customers’ loyalty ($\beta = 0.606, p < 0.001$), word of mouth ($\beta = 0.365, p < 0.001$), trust ($\beta = 0.566, p < 0.001$), and commitment ($\beta = 0.603, p < 0.001$), thus providing statistical support for H6, H7, H8, and H9.

The predictive relevance of the model was established using a blindfolding procedure to obtain the $Q^2$ value (Geisser, 1974; Stone, 1974). This blindfolding procedure was carried out using a pre-specified omission distance of eight to obtain cross-validated redundancy to obtain the $Q^2$ value. The results of this analysis generated $Q^2$ estimates of 0.105 for perceived value, 0.053 for customer satisfaction, 0.206 for customer loyalty, 0.112 for word of mouth, 0.159 for trust, and 0.288 for commitment. Given that these values exceed zero for each of the endogenous constructs, it is concluded that predictive relevance of the structural model for each endogenous construct was obtained.

5. Discussions, managerial implications and conclusions
The primary purpose of the empirical study was to determine the role of perceived customer value on promoting customer satisfaction. The secondary objectives were to determine the antecedents of customer value and the consequences of customer satisfaction on the South African hawkers in the leafy vegetable market. Nine hypotheses were reviewed and analysed using the PLS-SEM technique.

The empirical finding of the study support the primary objective and the first hypothesis (H1: Customer value has a positive influence on customer satisfaction), supporting the research findings by Lapierre et al. (1999); and Lam, Shankar and Murthy (2004) who discovered that some measures of customer value correlate positively with satisfaction. The managerial implication of this finding means that businesses must place much emphasis on creating a sustainable customer value to achieve customer satisfaction. In doing so, businesses will be in a position attain a competitive advantage and achieve business l objectives. Businesses need
Table 2. Discriminant validity of the measurement model

|       | 1   | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|-------|-----|------|------|------|------|------|------|------|------|------|
| 1     |     |      |      |      |      |      |      |      |      | Commitment | 0.819 |
| 2     |     |      |      |      |      |      |      |      |      | Communication | 0.753 |
| 3     |     |      |      |      |      |      |      |      |      | Loyalty | 0.617  | 0.775 |
| 4     |     |      |      |      |      |      |      |      |      | Product mix | 0.384  | 0.473  | 0.329  | 0.796 |
| 5     |     |      |      |      |      |      |      |      |      | Product price | 0.212  | 0.420  | 0.255  | 0.436 | 0.754 |
| 6     |     |      |      |      |      |      |      |      |      | Quality | 0.440  | 0.510  | 0.419  | 0.371 | 0.367 | 0.762 |
| 7     |     |      |      |      |      |      |      |      |      | Satisfaction | 0.603  | 0.619  | 0.605  | 0.573 | 0.398 | 0.428 | 0.714 |
| 8     |     |      |      |      |      |      |      |      |      | Trust | 0.525  | 0.489  | 0.489  | 0.439 | 0.285 | 0.453 | 0.566 | 0.739 |
| 9     |     |      |      |      |      |      |      |      |      | Value | 0.277  | 0.378  | 0.271  | 0.329 | 0.338 | 0.404 | 0.336 | 0.332 | 0.732 |
| 10    |     |      |      |      |      |      |      |      |      | Word-of-month | 0.202  | 0.216  | 0.225  | 0.342 | 0.262 | 0.170 | 0.365 | 0.327 | 0.164 | 1.00 |

*bold diagonal values are the square root of the AVEs.
to do more to improve product quality, timeous communication and competitive pricing to achieve customer value, which in turn promotes customer satisfaction. As seen in this study, customer satisfaction positively influences trust, commitment, loyalty and word of mouth. These outcomes have great impact on determining business success. The academic contribution of this finding is huge because most studies on customer satisfaction (Morgan & Hunt, 1994; Mbango & Makhubela, 2018) concentrate on the predictors of customer satisfaction as being trust, commitment and communication. There are limited studies that examine the relationship between customer value and customer satisfaction especially in the African context with regard to the leafy vegetable market.

Product mix has an insignificant influence on customer value (H5) in the South African leafy vegetable hawker market. This finding is inconsistent with the findings by Wan et al. (2012) who highlighted that it is usually expected that a business can raise its overall market share by increasing its product selection to appeal to a larger set of customers. In the South African context, product mix may not play a vital role.

However, the empirical research findings on communication, product quality and product price show a significant influence by these constructs on customer value, in agreement with studies by Ndubisi and Wah (2005); Hau and Ngo (2012) and Wan et al. (2012).

The findings also reveal that word of mouth, commitment, trust and customer loyalty are significantly influenced by customer satisfaction. This finding makes a vital contribution to academia and practice because most literature, notably Morgan and Hunt (1994) support the notion that trust and commitment are precursors of customer satisfaction.

6. Limitations and future research direction of the study
The sample can be deemed narrow as it focussed on one specific industry. However, it lays a foundation for future studies in other industries/sectors. The fact that the study was conducted in the Johannesburg CBD in South Africa can limit its generalisation.

The study looked at the perceptions of customers of leafy vegetables and did not take into consideration the views of farmers/suppliers. Future studies can be done from the farmers’/suppliers’ perspective.

However, this article lays the foundation for future studies on the marketing of agricultural products as South Africa and Africa produce a lot of agricultural goods for world consumption but very little marketing research literature on this sector exists.

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References
Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103(3), 411. doi:10.1037/0033-2909.103.3.411
Anton, C., Camarero, C., & Correro, M. (2007). Analysing firm’s failures as determining of consumer switching intentions. European Journal of Marketing, 41(1/2), 135–158. doi:10.1108/03090560710718157
Azimi, H. (2017). Ranking the effect of services marketing mix elements on the loyalty of customers by using Topsis method (case study: City bank branches in Tehran). Innovative Marketing, 13(2), 41–46. doi:10.21511/im.13(2).2017.04
Babin, B. J., Lee, Y.-K., Kim, E.-J., & Griffin, M. (2005). Modelling consumer satisfaction and word-of-mouth: Restaurant patronage in Korea. Journal of Services Marketing, 19(3), 133–139. doi:10.1108/08976040510595605
Baker, A., M., Donthu, N., & Kumar, V. (2016). Investigating how word-of-mouth conversations about brands influence purchase and retransmission intentions. Journal of Marketing Research, 53(2), 225–239. doi:10.1509/jmr.14.0099
Becker, J.-M., Ringle, C. M., Sarstedt, M., & Franziska, V. (2015). How collinearity affects mixture regression results. Marketing Letters, 26(4), 643–659. doi:10.1007/s10597-014-9299-9
 Bolton, R. N., & Lemon, K. N. (1999). A dynamic model of customers’ usage of services: Usage as an antecedent and consequence of satisfaction. Journal of Marketing Research, 36(2), 171–185.
Brink, A., & Brendt, A. (2004). Customer relationship management and customer service. South Africa: Juta and Co Ltd, Lonsdowne.
Bryman, A., & Bell, E. (2015). Research methodology: Business and management context. Cape Town: Oxford University Press.
Chang, S. H., Wang, K. Y., Chih, W. H., & Tsai, W. H. (2012). Building customer commitment in business-to-business markets. Industrial Marketing Management, 41, 940–950. doi:10.1016/j.indmarman.2011.11.026
Chen, X. Z., Shi, Z., & Dong, D. H. (2008). An empirical study of relationship quality in a service setting: A Chinese case. Marketing Intelligence & Planning, 26(1), 11–25. doi:10.1108/02634500810847129
Chen, Z., Huang, Y., & Sternquist, B. (2011). Guanxi practice and Chinese buyer-supplier relationships: The buyer's perspective. Industrial Marketing Management, 40(4), 569–580. doi:10.1016/j.indmarman.2010.12.013
Cooper, D., & Schindler, P. (2014). Business research methods (12th ed.). New York: McGraw-Hill.
Deng, Z., Lu, Y., Wei, K. K., & Zhang, J. (2010). Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China. International Journal of Information Management, 30, 289–300. doi:10.1016/j.ijinfomgt.2009.10.001
Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. Journal of Marketing, 61(2), 35–51.
Dusuki, A. W., & Abdullah, N. I. (2007). Maqasid al-Shari’ah, Maslahah, and corporate social responsibility. American Journal of Islamic Sciences, 24(1), 25–48.
Etikan, I., Musa, S. A., & Alkassim, R. S. (2015). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1–4. doi:10.11648/j.ajtas.20160501.11
Flint, D., J., Blocker, P. C., & Boutin, P. J. (2011). Customer value anticipation, customer satisfaction and loyalty: An empirical study. Industrial Marketing Management, 40, 219–230. doi:10.1016/j.indmarman.2010.06.034
Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39–50. doi:10.1177/002224378101800104
Forza, C., & Salvador, F. (2006). Product information management for mass customization: Connecting customer, front office and back-office for fast and efficient customization. New York: Macmillan.
Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust and commitment in customer relationships. Journal of Marketing, 63(2), 70–87. doi:10.1177/00222429960300205
Geisser, S. (1974). A predictive approach to the random effects model. Biometrika, 61(1), 101–107. doi:10.1093/biomet/61.1.101
Goffin, K., Lemke, F., & Szojweiczewski, M. (2006). An exploratory study of ‘close’ supplier-manufacturer relationships. Journal of Operations Management, 24, 189–209. doi:10.1016/j.jom.2005.05.003
Gorra, R., Voster, A., & Concilla, F. (2002). Growth in Life Science Sector in Piemonte: local players, initiatives, industries and investment environment – an overview.
Gounaris, S. (2005). Measuring service quality in b2b services: An evaluation of the SERVQUAL scale vis-à-vis the INDSERV scale. Journal of Service Marketing, 19(6), 421–435. doi:10.1108/08876040510620193
Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, (just-accepted), 00–00.
Halimi, A. B., Chavosh, A., & Choshaly, S. H. (2011). The influence of relationship marketing tactics on customer’s loyalty in B2C relationship – The role of communication and personalization. European Journal of Economics, Finance and Administrative Science, 31, 49–56.
Han, H., & Hyun, S. S. (2015). Customer retention in the medical tourism industry: Impact of quality, satisfaction, trust and price reasonableness. Tourism Management, 46, 20–29. doi:10.1016/j.tourman.2014.06.003
Han, H., & Ryu, K. (2009). The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the restaurant industry. Journal of Hospitality & Tourism Research, 33(4), 487–510. doi:10.1177/1096348009344212
Hou, L. N., & Ngo, L. V. (2012). Relationship marketing in Vietnam: An empirical study. Asian Pacific Journal of Marketing and Logistics, 24(2), 222–235. doi:10.1108/1355851121218039
Hellier, P. K., Geursen, G. M., Carr, R. A., & Rickard, J. A. (2003). Customer repurchase intention: A great structural equation model. European Journal of Marketing, 37(11/12), 1762–1800. doi:10.1108/08876040310495656
Herrmann, A., Xia, L., Monroe, K. B., & Huber, F. (2007). The influence of price fairness on customer satisfaction: An empirical test in the context of automobile purchases. Journal of Product and Brand Management, 16(1), 49–58. doi:10.1108/1073076107113151
Hess, L. R., Ganesan, S., & Klein, N. M. (2003). Service failure and recovery: The impact of relationship factors on customer satisfaction. Journal of the Academy of Marketing Science, 31(1), 3–11.
Hu, H. S. K., Kandampully, J., & Juwaheer, T. D. (2009). Relationships, PIs and impacts of service quality: Perceived value, customer satisfaction and image: An empirical study. The Service Industries Journal, 29(2), 111–125. doi:10.1080/02642060802299232
Jansen van Rensburg, W. S., Van Averbeke, W., Slabbert, R., Faber, M., Van Jaarsveld, P., Van Heerden, I. ... Delofse, A. (2007). African leafy vegetables in South Africa. African Journals Online, 33(3). https://www.ajol.info/index.php/assa/article/view/49110. doi:10.1094/PDIS-91-4-04678
Kim, W. G., Nee Ng, C. Y., & Kim, Y.-S. (2016). Investigating relationship quality in a service setting: A study of relationship quality and customer satisfaction. Journal of Industrial Marketing Management, 28, 10–17. doi:10.1016/j.jindmar.2008.03.005
Ko, W. H. (2009). Foodservice satisfaction for work-sector meals: A model based on food variety, sensory...
feeling and quality perception. Journal of Culinary Science & Technology, 7(2–3), 132–151. doi:10.1080/1542805093313440

Lam, S. L., Shankar, V., & Murthy, M. K. E. B. (2004). Customer value, satisfaction, loyalty and switching costs: An illustration from a business-to-business service context. Journal of the Academy of Marketing Science, 32(3), 293–311. doi:10.1177/009207030426333

Lapierre, J., Filatotchev, P., & Chebat, J. C. (1999). Value strategy rather than quality strategy: A case of business-to-business professional services. Journal of Business Research, 45, 235–246. doi:10.1016/S0148-2963(97)00223-3

Leonidou, L. C., Talias, M. A., & Leonidou, C. N. (2008). Exercised power as a driver of trust and communication in cross-border industrial buyer-seller relationships. Industrial Marketing Management, 37(1), 92–103. doi:10.1016/j.indmarman.2007.08.006

Ligthelm, A. A. (2006). Size estimate of the informal sector in South Africa. Southern African Business Review, 10(2), 32–52.

Luo, X., & Homburg, C. (2007). Neglected outcomes of customer satisfaction. Journal of Marketing, 71(2), 133–149. doi:10.1509/jmkg.71.2.133

Lusch, R. F., & Vargo, S. L. (2014). The service-dominant logic of marketing: Dialog, debate and directions. London: Routledge.

Makitha, M., Cant, M., & Theran, D. (2016). Business-to-business marketing. Cape Town: Juta.

Makhubela, V. F., van Scheers, L., & Makhitha, K. (2013). Delighting the customer: Creativity-oriented high-performance work systems, frontline employee creative performance, and customer satisfaction. Journal of Management, 45(2), 728–751. doi:10.1177/0149206316672532

Mason, C. H., & Perreault, W. D. (1991). Collinearity, power, and interpretation of multiple regression analysis. Journal of Marketing Research, 28, 268–280. doi:10.1177/002224379102800302

Masud, H., & Daud, W. N. W. (2019). Human resource management practices and organizational commitment: Research methods, issues, and future directions. Review of Integrative Business and Economics Research, 8, 217–226.

Maxham, J. G. (2001). Service recovery’s influence on customer satisfaction, positive word-of-mouth and purchase intentions. Journal of Business Research, 54, 11–24. doi:10.1016/S0148-2963(00)00114-4

Mbango, P. (2013). Causes and outcomes of customer satisfaction in business-to-business markets relationship marketing in the South African cement manufacturing industry. Journal of Government and Regulation, 4(6), 391–399.

Mbango, P. (2017). Business-to-business framework of relationship marketing in the South African cement manufacturing industry. Academy of Marketing Studies Journal, 21(10), 1–13.

Mbango, P., & Makhubela, V. (2018). Outcomes of leaf vegetable product quality: The perspective of Gauteng province customers in South Africa. African Journal of Business and Economic Research, 13(3), 135–152. doi:10.31920/AA_Ajb

Mbango, P., & Mmatli, W. (2019). Precursors and outcomes of satisfaction in business-to-business relationship marketing. Insights from Hawkers/street vendors leafy vegetable market in South Africa. Cogent Social Sciences, 5, 1–19. doi:10.1080/23311886.2019.1684229

Mbango, P., & Phiri, M. A. (2015). Trust and communication as predictors of customer satisfaction in business-to-business relationship marketing in the South African cement manufacturing industry. Journal of Governance and Regulation, 4(2), 98–104.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. Journal of Marketing, 58(3), 20–38. doi:10.1177/002224299405800302

Mpinganjira, M., Bogaards, M., Svensson, G., & Mysen, T. (2014). Precursors and outcomes of satisfaction in business relationships: A replication study. Management Dynamics, 23(2), 2–13.

Mpinganjira, M., Bogaards, M., Svensson, G., Mysen, T., & Padin, C. (2013). Satisfaction in relation to the metrics of quality constructs in South African manufacturer-supplier relationships. ESIC Market Economic and Business Journal, 44(1), 55–71. doi:10.7200/esicm.144.0441.2i

Ndubisi, N. O., & Wah, C. K. (2005). Factorial and discriminant analyses of the underpinnings of the relationship marketing and customer satisfaction. International Journal of Bank Management, 23(7), 542–557. doi:10.1016/j.ijbm.2005.06.090

Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.

Nyadzayo, N. W., & Khajehzadeh, S. (2016). The antecedents of customer loyalty: A moderated model of customer relationship management quality and brand image. Journal of Retailing and Consumer Services, 30, 262–270. doi:10.1016/j.jretconser.2016.02.002

Omotayo, O., & Joachim, A. (2008). Customer service in the retention of mobile phone users in Nigeria. African Journal of Business Management, 2(2), 26–31.

Pollock, B. L. (2009). Linking the hierarchical service quality model to customer satisfaction and loyalty. Journal of Services Marketing, 23(1), 42–50. doi:10.1108/08876040910933084

Ramdas, K. (2003). Managing product variety: An interactive effects of the research directions. Production & Operations Management, 12(1), 79–101. doi:10.1111/j.1937-5956.2003.tb00199.x

Ranaweera, C., & Neely, A. (2003). Some moderating effects on the service quality-customer retention link. International Journal of Operations & Production Management, 23(2), 230–248. doi:10.1108/0144357031048674

Ranaweera, C., & Prabhu, J. (2003). On the relative importance of customer satisfaction and trust as determinants of customer retention and positive word of mouth. Journal of Targeting, Measurement and Analysis for Marketing, 12(1), 82–90. doi:10.1057/palgrave.tj.75740100

Rodriguez, C. M., & Wilson, D. T. (2004). Service recovery in the context of the relationship marketing framework. Journal of Services Management, 15(3), 235–248. doi:10.1108/09564520410543476

Roscoe, J. T. (1975). Fundamental research statistics for the behavioural sciences (2nd ed.). New York: Holt Rinehart & Winston.
Ryu, K., Han, H., & Kim, T. H. (2008). The relationship among overall quick-casual restaurant image, perceived value, customer satisfaction and behavioral intentions. *International Journal of Hospitality Management*, 27, 459–469. doi:10.1016/j.ijhm.2007.11.001

Sin, L. Y. M., Tse, A. C. B., Yau, O. H. M., Chow, R. P. M., Lee, J. S. Y., & Lau, L. B. Y. (2005). Relationship marketing orientation: Scale development and cross-cultural validation. *Journal of Business Research*, 58, 185–194. doi:10.1016/S0148-2963(02)00693-9

Slater, S. F., & Narver, J. C. (2000). Intelligence generation and superior customer value. *Journal of the Academy of Marketing Science*, 28(1), 120–127. doi:10.1177/0065104400281011

Sweeney, C. J., & Soutar, G. N. (2001). The effect of perceived value on consumer purchase intentions in service transactions. *Journal of Retailing*, 77(2), 201–218. doi:10.1016/S0022-4359(01)00048-1

Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society, Series B*, 36(2), 111–147.

Suki, N. M. (2016). Consumer environmental concern and green product purchase in Malaysia: Structural effects of consumption values. *Journal of Cleaner Production*, 132, 675–687. doi:10.1016/j.jclepro.2015.09.087

Suki, N. M. (2017). Green products usage: Structural relationships on customer satisfaction and loyalty. *International Journal of Sustainable Development & World Ecology*, 24(1), 88–95. doi:10.1080/13504509.2016.1169563

Svensson, G., Mysen, T., & Payan, J. (2010). Balancing the sequential logic of quality constructs in manufacturing-supplier relationships – Causes and outcomes. *Journal of Business Research*, 63, 1209–1214. doi:10.1016/j.jbusres.2009.10.019

Theron, E., & Terblanche, N. S. (2010). Dimensions of relationship marketing in business-to-business financial services. *International Journal of Market Research*, 52(3), 383–402. doi:10.2501/51470785310201326

Ulaga, W., & Eggert, A. (2006). Relationship value and relationship quality: Broadening the nomological network of business-to-business relationships. *European Journal of Marketing*, 40(3/4), 311–327. doi:10.1108/03090560610648075

Van Tonder, E., & Roberts-Lombard, M. (2015). Relationship marketing dimensions predicting customer loyalty towards independent financial advisors. *Journal of Contemporary Management*, 12, 184–207.

Wai, A. F., Wright, L. T., & Uduma, I. A. (2015). Customer relationship management for brand commitment and brand loyalty. *British Journal of Marketing Studies*, 3(4), 45–58.

Wan, X., Evers, P. T., & Dresner, M. E. (2012). Too much of a good thing: The impact of product variety on operations and sales performance. *Journal of Operations Management*, 30, 316–324. doi:10.1016/j.jom.2011.12.002

Wangenheim, V. F., & Bayon, T. (2007). The chain from customer satisfaction via word-of-mouth referrals to new customer acquisition. *Journal of the Academy of Marketing Science*, 35, 233–249. doi:10.1007/s11747-007-0037-1

Yim, C. K. B., Tse, D. K., & Chan, T. W. (2008). Strengthening customer loyalty through intimacy and passion: Roles of customer-firm affection and customer-staff relationship in service. *Journal of Marketing Research*, 45(6), 741–756. doi:10.1509/jmrk.45.6.741

Zamani, Z., & Harper, E. C. (2019). Exploring the effects of clinical exam room design on communication, technology interaction, and satisfaction. *HERD: Health Environments Research & Design Journal*, 1–17.

Zhang, X., & Prybutok, V. R. (2005). A consumer perspective of E-service quality. *IEEE Transactions on Engineering Management*, 52(4), 461–467. doi:10.1109/TEM.2005.856568

Zineldin, M., & Jonsson, P. (2000). An examination of the main factors affecting trust/commitment in supplier-dealer relationships: An empirical study of the Swedish wood industry. *The TQM Magazine*, 12(2), 245–266. doi:10.1108/09544780010325831
