

The Dynamics of Customer Satisfaction in Fresh Produce Markets: An empirical example from a developing economy

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A paper presented at the 2000 International Food and Agribusiness Management Association (IAMA) Congress held at The Fairmont Hotel, Chicago, Illinois, USA (24-28th June, 2000)

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Introduction

In recent years, considerable empirical work has been carried out on customer satisfaction in developed countries (Fornell et al., 1996; Oliver, 1980; Spreng et al., 1996; Anderson et al., 1994; Soderlund, 1998). Customer satisfaction has attracted a tremendous amount of research from psychology, marketing, management, accounting, and economics and is the most studied construct in marketing (Peterson and Wilson, 1992). However, limited attention has been paid to changes in purchasing behaviour of customers in developing countries (Kaynak et al., 1992).

Objectives

Economic models contend that the purchasing behaviour of customers in developing countries is mostly influenced by price rather than other factors that have been identified in developed countries. This study aims at identifying factors that determine customer satisfaction in developing countries, specifically in fresh produce markets and to compare the determinants to those identified in literature from developed countries.

Conceptual framework

There is considerable empirical evidence of a positive link between customer satisfaction and business performance and this has enhanced the interest of both researchers and marketing practitioners in these concepts (Anderson et al., 1994; Fornell et al., 1996; Oliver, 1980; Spreng et al., 1996). Buttle (1996) notes that customer satisfaction, for some organisations, has replaced market share as a measure of marketing success and business performance. Hanan and Karp (1989) refer to customer satisfaction as the only meaningful competitive advantage. In support of this view, Williams (1997) indicate that customers are a company's most important asset and should be included in the business performance equation. Barkema and Drabenstott (1995) contend that today's consumer demands an ever-widening variety of healthful, conveniently prepared food products and is driving the changes in food markets. Accordingly, to improve customer satisfaction some business organisations have prioritized the establishing of mechanisms that facilitate a continuous flow of information on product and service characteristics between the seller and customer (Hughes, 1994).

Oliver (1980) defines customer satisfaction as the after purchase judgement or evaluation of a product or a service. According to Fornell et al. (1996), customer satisfaction can be used to evaluate and enhance the performance of firms, industries, economic sectors and national

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economies as it measures the quality of goods and services as experienced by the customers who consumes them. Anderson et al. (1994) state that customers are the ultimate source of all revenues, as efficiency in acquiring and retaining customers is the key to long-term financial health. Fornell (1992) developed the Swedish National Customer Satisfaction Barometer and suggested that customer satisfaction can be a complement to economic measures of productivity and quality. More recent advances in assessing customer satisfaction have been the development of the American Customer Satisfaction Index (ACSI) by Fornell et al. (1996). The ACSI is a customer-based measurement of business performance that can also be used in evaluating the performance of industrial sectoral and national economies. Anderson et al (1994) indicate that customer satisfaction offers a way of evaluating the actual and anticipated total purchase and consumption experience. The ACSI accounts for both consumption experience and expectations and uses perceived quality and customer expectations as determinants of customer satisfaction.

The preceding literature points to existence of a link between customer loyalty, customer satisfaction and consequently business performance. Additionally, the literature also indicates that customer satisfaction is a function of product or service quality, price, merchandising, expectations, communication and perceived value.

The research on which this paper is based measured customer satisfaction for both business customers and end-users. However, this paper is only concerned with the customer satisfaction of the final consumer.

Communication, intra-organisational relationships and customer satisfaction

Marcus (1998) indicates that communication is an important dimension or antecedent in developing customer satisfaction. Frazier and Summer (1984) regard communication as the means by which persuasive information is exchanged between two and more individuals. In a supply chain context, Mohr and Nevin (1990) refer to communication as the glue that holds together distribution channels. Stern and El-Ansary (1980) indicate that communication provides a vehicle to influence, motivate, persuade, negotiate and learn within the marketing channel. Furthermore, communication is important in that it enables businesses to learn individual characteristics about individual customer characteristics and preferences. On the other hand, the customers are also able to learn about product and service characteristics and attributes.

Anderson and Weitz (1989) found a positive relationship existed between communication and trust from both the buyer and seller's point of view. The exchange of timely and accurate information is, therefore, an important component in channel performance. Therefore high levels of communication result in increased customer satisfaction. Marcus (1998) suggests that communication should be used to encourage repurchase by providing timely and relevant information on the products or services supplied.

We, therefore, posit that sellers who communicate with their buyers more frequently have more satisfied customers. This leads to the following hypothesis:

H₁: Communication is positively related to customer satisfaction.

Customer Satisfaction and price

The effect of price on overall satisfaction has received less attention than the other antecedents of customer satisfaction (Voss et al., 1998). However, equity theory provides some basis to assume that there is a link between satisfaction and price (Patterson et al. 1997). For instance, work by Oliver and DeSarbo (1998) indirectly measured the impact of price through the assessment of equity (a comparison of the input/output ratio). They suggested that parties in an exchange will feel equitably treated if they believe the ratio of their outcomes to inputs is comparable to their perception of the ratio of the exchange partner's outcomes to inputs. Thus, customer satisfaction is influenced by their perception of 'value for money'. In this study, we measured this construct in terms of buyer satisfaction with the price paid. Voss et al (1998) suggest that the failure to include price as a variable in prior research could have resulted in a weak or insignificant association between satisfaction and performance. They contend that in uncertain environments consumers use price as a cue in making pre-purchase expectations. Thus we hypothesise that:

H₂: Price satisfaction is positively associated with overall customer satisfaction.

H₃: Price satisfaction is positively associated with communication

Expectations and customer satisfaction

Prior research (Anderson et al. 1994; Voss et al. 1998, Yi, 1990) indicates that there is a link between satisfaction and expectations. Oliver (1980) defines expectations as the anticipation of future consequences based on prior experience, current circumstances and other information. Oliver (1996) notes that expectations create a frame of reference about which one makes a comparative judgement. He further asserts that as a result, outcomes below the expected (negative disconfirmation) are rated below this reference point, those equal to expectation are confirmation whilst those above expectations (positive disconfirmation) are rated as better than expectations. Customers, therefore, judge their satisfaction and dissatisfaction level with a product or a service by comparing its performance against an established level of expectations in their minds, if performance falls below expectations they are dissatisfied if above then they are satisfied (Yi, 1990). Anderson et al. (1994) asserts that expectation has a positive effect on the overall satisfaction and consequently on perceived quality and value. Fornell et al. (1996) concurs with this view and posits that expectations should accurately mirror quality. Garretson and Clow (1999) state that purchase intentions are influenced by expectations.

Therefore we hypothesise that:

H₄: Expectation is positively associated with price satisfaction.

H₅: Expectation is positively associated communication.

Customer satisfaction and perceived quality

A positive relationship between quality and organisational performance has been identified in prior research (Phillips et al. 1983). According to Aaker and Jacobson (1994) perceived quality provides a measure of the consumers' global assessment of the superiority or excellence of a product and is correlated to organisational performance. Quality is, therefore, viewed as one dimension of satisfaction. The concept of product and service quality is intricately linked with the concept of customer satisfaction. As stated by Macbeth and Ferguson (1994: 25) "*Total customer*

satisfaction and delight is what Total Quality is all about". Evans and Laskin (1994) posit that if a firm understands expectations, builds partnerships, empowers employees, and embraces total quality management, four positive outcomes will occur: customer satisfaction, customer loyalty, quality products and higher profits.

From the preceding discussion the following hypotheses are advanced:

- H6: Perceived quality is related to price satisfaction.***
- H7: Perceived quality depends on communication.***
- H8: Perceived quality is positively associated with customer expectations.***
- H9: Quality is positively associated with customer satisfaction.***

Merchandising and customer satisfaction

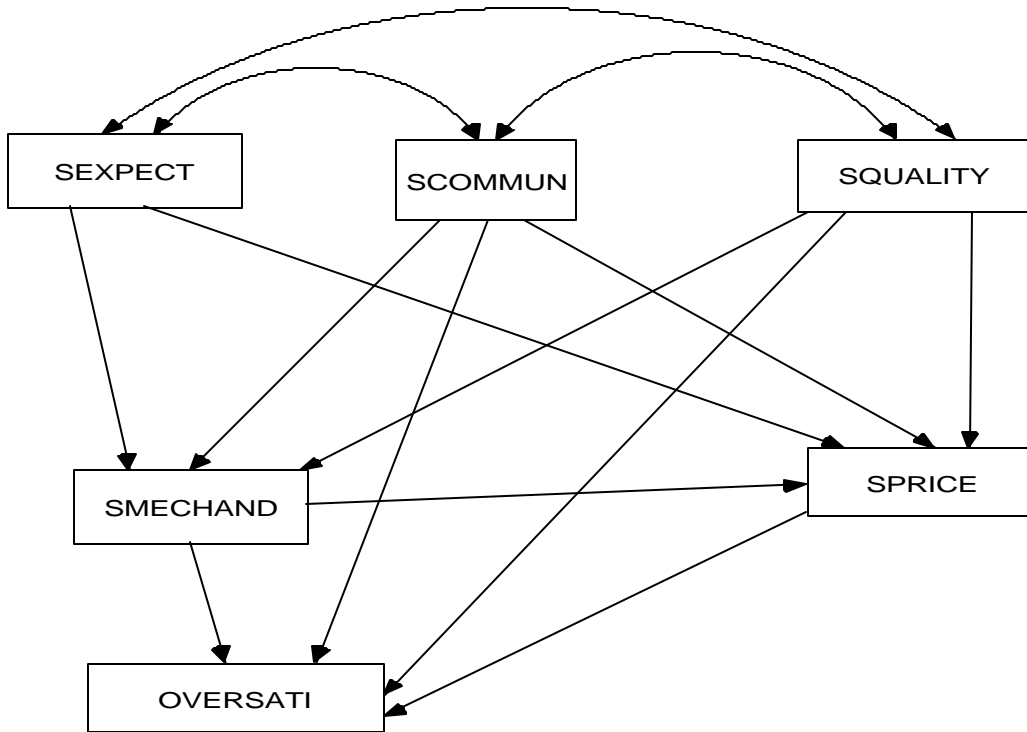
Kotler (1973) was one of the first writers to acknowledge the importance of atmospherics on the consumer's decision-making process and patronage. These atmospherics are viewed as a component of merchandising - the way the things are displayed and promoted at the store level as well as within the media (Lea-Greenwood, 1998). According to Greenely and Shipley (1989) the nature of the store, its layout, appearance and physical presentation of goods form a major supporting role in the retail product offering. Knox and Chernatony (1990) found that frequent purchasers were more reliant on visual communication in formulating purchasing decisions. Lucas et al. (1994) indicate that food retailers are continuously seeking ways to make shopping a pleasurable experience. Thus, merchandising should be regarded as a critical dimension of customer satisfaction within agrifood marketing channels.

In this study merchandising has been conceptualised as the technique of displaying products at the point of purchase. Merchandising is important for both formal and informal retailers. Most informal retailers operate in open markets and attract customers by displaying their goods on tables and platforms and retailers put a lot of effort into displaying the produce. Therefore merchandising is, in one respect, a means of communication that conveys the quality of the product and value of the produce. Therefore, effective merchandising is an important antecedent to customer satisfaction. Thus we hypothesise that:

- H10: Price satisfaction is positively related to merchandising***
- H11: Communication is positively related to merchandising.***
- H12: Quality is positively associated with merchandising.***
- H13: Expectation is positively associated with merchandising.***
- H14: Merchandising is positively related to customer satisfaction***
- H15: The relationship between communication and customer satisfaction is mediated by merchandising.***
- H16: Merchandising mediates the relationship between perceived quality and customer satisfaction***

The hypothesised relationships between the various constructs are indicated in figure 1.

Figure 1: Conceptual Model of Determinants of Customer Satisfaction



Where: *oversat* = overall customer satisfaction
smechand = satisfaction with merchandising
sprice = satisfaction with price paid
squality = satisfaction with quality
scommu = satisfaction with information provision
sexpect = satisfaction with how expectations were met

Development of measurements

The conceptualisation of the customer satisfaction construct can be carried out as either brand specific or transaction specific. (Oliver and Desarbo, 1988; Fornell, 1992). Both approaches are viewed as effective measures of customer satisfaction. Existing measures (Fornell et al. 1996; Anderson et al. 1994) were utilised wherever possible. The antecedents to customer satisfaction were identified as perceived quality, communication, price, merchandising and expectations. Merchandising incorporates in-store performance (display, product offering, service). Communication and merchandising were used as antecedents to customer satisfaction and have not been used in prior models.

The operationalisation of satisfaction with quality was carried through several dimensions namely; reliability of product, ability of product to meet personal and family expectations, high product quality and satisfaction with price charged and quality consistency. Satisfaction with merchandising was used as a measure of merchandising or performance. Four items were used to measure satisfaction with product display, service provided, price charged and product range. Whereas, satisfaction with communication was operationalised through the following dimensions; effectiveness of communication on; product use, storage requirements, product quality, product availability and product packaging.

The hypotheses above were tested on 356 buyers of fresh produce in Zimbabwe using a structured questionnaire. We used existing measures (Fornell et al. 1996; Anderson et al. 1994) wherever possible. All constructs were measured using multi-item, 7 point Likert-type scales anchored on 1 = strongly disagree (dissatisfied) and 7 = strongly agree (satisfied).

Analysis

The means and standard deviations of all the items in the measures are shown in Table 1. Satisfactory Cronbach alphas were obtained as shown in Table 1. Structural equation modelling (AMOS 4) was used to analyse the direct and indirect relationships among the variables.

Table 1: Means, Standard Deviations, Correlation Coefficients and Cronbach Alphas of the Measures

	Mean	Std Dev	1	2	3	4	5	6
1. Expectation	5.97	1.085	.851 ^R					
2. Communication	4.70	0.969	.153 ^b	.736				
3. Quality	5.51	1.144	.371 ^a	.274 ^a	.772			
4. Merchandise	4.93	0.860	.197 ^a	.467 ^a	.218 ^a	.803		
5. Price	5.21	1.408	.328 ^a	.261 ^a	.508 ^a	.257 ^a	.789	
6. Customer Satisfaction	5.58	1.299	.209 ^a	.552 ^a	.298 ^a	.935 ^a	.303 ^a	.835

^ap<.001; ^bp<.01; ^cp<.05. .851^R all figures on the diagonal are reliability co-efficients (Cronbach α 's) and figures not on the diagonal are correlation coefficients.

From Table 1 it can be noted that all the relationships are in the predicted directions. Price satisfaction is positively associated with customer satisfaction and as expected perceived value, effective communication, quality and merchandising are significantly related to customer satisfaction.

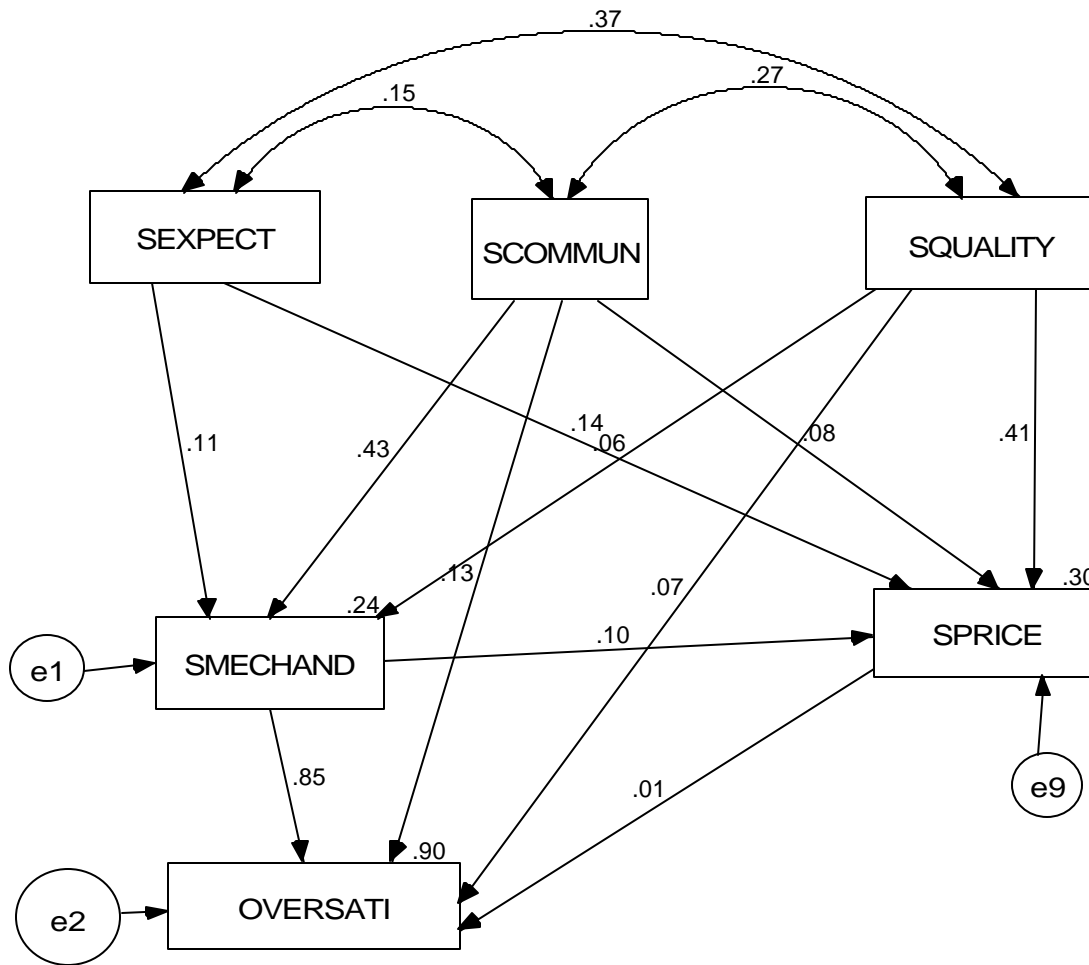
Table 2. Path Model Standardised Parameter Estimates

Hypothesis	Path Coefficient	t-value	Supported/ not supported
H1: Communication and customer satisfaction	0.131	6.116	Supported
H2: Price satisfaction is positively associated with customer satisfaction	0.014	0.657	Supported
H3: Communication is associated with price perceptions	0.078	1.418	Supported
H4: Price satisfaction is associated with expectations	0.413	2.760	Supported
H5: Expectation is associated with communication	0.153	2.641	Supported
H6: Quality associated with price	0.411	7.741	Supported
H7: Quality associated with communication	0.274	4.618	Supported
H8: Perceived quality associated with customer expectations	0.371	6.076	Supported
H9: Quality associated with customer satisfaction	0.069	3.184	Supported
H10: Price satisfaction is associated with merchandising	0.103	1.879	Supported
H11: Communication and merchandising	0.434	8.332	Supported
H12: Quality associated with merchandising	0.058	1.046	Supported
H13: Merchandising is related to expectations	0.109	2.024	Supported
H14: Merchandising associated with customer satisfaction	0.855	0.451	Supported
H15: Merchandising mediates communication-satisfaction relationship	0.373	15.000	Supported
H16: Merchandising mediates quality - customer satisfaction relationship	0.675	12.032	Supported

All the relationships hypothesised as having direct effects are supported. However, the hypothesised relationship between price and customer satisfaction it is not significant. The impact of communication and quality on customer satisfaction is far greater through merchandising than the direct effects. Figure 2 indicates the strength of the relationships between the various constructs investigated in this study.

Our results suggest that perceived quality and effective communication are positively associated with customer satisfaction. Merchandising appears to be an important issue in customer satisfaction within the fresh produce sector and it mediates the relationship between communication and customer satisfaction as well as between quality and customer satisfaction and between price satisfaction value and customer satisfaction. Additionally, the impact of certain antecedents to customer satisfaction could be underestimated by using traditional methods of data analysis (eg OLS). Furthermore, some antecedents (price and merchandising) are more critical to customer satisfaction than their direct regression coefficients suggest. Therefore, to assess the impact of the various determinants of customer satisfaction researchers may need to rely more on structural modelling techniques.

Figure 2: Empirical Results of Determinants of Customer Satisfaction



Managerial Implications

Our results imply that

- Produce quality has a significant influence on customer satisfaction in developing countries. This is consistent with literature from developed economies.
- Communication seems to influence the perceptions of value and customer expectations and communication should be used to effectively support merchandising decisions.
- Merchandising decisions have a significant influence on customer satisfaction and merchandising is critical in accentuating the effects of other antecedents.
- Merchandising is the vehicle through which communication exerts its influence on customer satisfaction.

Research Implications

This study extends the applications of customer satisfaction measures to developing countries. Additionally, the research also indicates that merchandising and communication are critical antecedents to customer satisfaction in the fresh produce sector.

Conclusion

This study indicates factors that have been identified, as determinants of customer satisfaction in developed countries are also important to developing countries markets. Further, it indicates that other factors rather than price alone determine customer satisfaction in developing countries. Perceived quality, expectations, price satisfaction and communication seem to have a direct influence on customer satisfaction. Additional factors such as merchandising have direct effects and also as act as mediators between other antecedent variables and customer satisfaction. In summary, several factors seem to influence customer satisfaction and managers need to take cognisance of these factors and the direct and indirect relationships between them to achieve customer satisfaction.

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