

Value differentiation: Creating customised value propositions in the South African cement industry

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ABSTRACT

Contemporary market conditions no longer allow producers to classify their products as commodities or to enjoy the luxury of focusing only on sales strategies at the expense of product differentiation. However, the irony is that this is the exact approach followed by South African cement producers. This study proposes approaches that could be used to differentiate value propositions offered by cement producers, based on customer perceptions. Data were collected from 306 respondents, representing different business activities, by means of structured telephonic interviews, and analysed by means of correspondence analysis. The results suggest that customers do indeed attach different levels of importance to different value attributes, which indicates that value differentiation could be used as a viable marketing strategy in the cement industry. Indications are that customer value perceptions could be enhanced by the introduction of new or enhanced value attributes.

INTRODUCTION

On 25 June 2009, the South African Competition Commission publicly announced that they had searched the offices of the four largest South African cement producers. The complaint that had initiated these raids was based largely on findings of the Commission's economic research report that investigated anti-competitive behaviour in the South African infrastructure sector (Van der Merwe, 2009). With respect to cement, the report concluded that even though the legally sanctioned cement cartel was disbanded in 1996, the four cement producers still operated in the same historical locations, with low levels of competition among them. Cement prices had

doubled since 2001 and despite fluctuations in demand and input costs, the producers' prices of cement increased in tandem every six months, at much higher levels than the producer price index – the leading indicator of overall costs in the economy (Madiba, 2009).

This cartel-like behaviour is not peculiar to the South African context. Internationally, cement producers are known to adhere to set product standards and specifications utilising similar pricing structures (Zeidan and Resende, 2009; Blum, 2007; Röller and Steen, 2006). Public objection to this market conduct is often expressed through government investigation and interventions. The German cement industry, for example, was fined more than 600 million Euros for allegedly having fixed prices and quantities in the four regional German cement markets (Blum, 2009). The predicament, however, is that a general lack of true market forces (Blum, 2009) and a standardised value proposition in cement industries have created a strategic focus of market-share protection. As a result, sales became a priority for cement producers, and marketing strategies dealing with differentiation and unique value propositions became secondary (Jacques, 2007). In fact, Jacques (2007: 110) describes the aim of sales pitches in a typical cement company as 'aimed at making friends rather than demonstrating that their products were better than the competition's'.

Considering the German example, it is expected that uncovering cartel conduct in the South African cement industry could potentially have far-reaching implications for the producers, not only in terms of fines but also with regard to resultant changing customer-demand behaviour (Blum, 2009; 2007). To protect margins and market share, South African producers will have to change their commodity mindset. The need to differentiate products effectively has never been more pertinent.

Despite a common misconception that commodity products cannot be differentiated, Levitt (1980) assert that all goods and services can be differentiated by offering value attributes different from those of competitors' products. Levitt's seminal work argues that to a potential buyer, a product is a complex cluster of value attributes. When physical attributes of products offered by competing producers, are generic or scarcely differentiable, buyers will consider products differentiated by non-tangible value attributes. Following the lead of international companies, South African producers would benefit from understanding the importance of value attributes other than product and price, which could be used as a basis for differentiation.

This study proposes different value attributes that could be used to differentiate value propositions offered by cement producers, based on customer perceptions. The study is organised as follows: The first section provides a literature overview, which is followed by an overview of the objectives and a description of the research methodology used to test value perceptions. Next, results are provided. The theoretical and managerial implications of the findings, as well as the limitations of the study, are discussed, and directions for future research are offered.

THE SOUTH AFRICAN CEMENT INDUSTRY

For the greater part of 30 years the South African cement industry structure was a legitimate cartel. The cartel was brought about by the government of the day as a way of creating price stability through price control. In exchange for accepting price control, the industry was given the right to optimise distribution and to operate on sales quotas. To enforce the market-sharing agreement, a central selling organisation, Cement Distributors South Africa (CDSA), jointly owned by the cement producers, was formed to co-ordinate cement distribution. Prices were fixed by means of a multiple basing point-delivered pricing system, where the basing points were determined by the geographical location of factories (Fourie, 1994; Leach, 1994; Fourie and Smith, 1993).

The cement industry is considered to be a localised industry, as there are many technical problems associated with importing cement. For example, the product must stay dry, and has a very limited shelf life, requiring importers to have suitable storage facilities and logistical networks (Slabbert, 2009). The current competitive structure of the industry is that of a homogeneous oligopoly (Zeidan and Resende, 2009). In South Africa, the market players are four large established cement producers and one smaller newcomer (Slabbert, 2009). Industry participants are Pretoria Portland Cement (PPC) with a 40% market share; AfriSam with a 29.5% market share; Lafarge with a 17.5% market share; Natal Portland Cement (NPC) with a 7% market share; and Sephaku Cement which is still in the process of entering the market.

DEMAND AND SUPPLY CONDITIONS

Cement is by and large a homogeneous product in a mature market (Blum, 2007; Röller and Steen, 2006). Demand may be considered as derived, as it follows final demand in the construction business. As such, demand elasticity with respect to price is low and often close to zero for the market as a whole (Blum, 2007). Unless price wars occur, price fluctuations are usually of limited variance and could cancel out over the medium period (Zeidan and Resende, 2009; Blum, 2007). The most important differentiation for cement initially emerges through geography, as the transportation costs of cement normally limit its economic distance to about 150 kilometres (Blum, 2007).

Entry costs into the cement industry are high, and include important irreversible capital costs such as clinker production facilities, silos, and investment in quarries. In addition, it could also prove challenging to obtain the respective environmental licences required to run a cement company and to establish distribution channels. Industry incumbents therefore may have the power to block, accommodate, or deter entry of subsequent potential entrants (Blum, 2007).

VALUE PROPOSITIONS OFFERED TO CEMENT BUYERS

Robinson, Clarke-Hill and Clarkson (2002: 151) define a commodity product such as cement as a product that is "manufactured to a standard set or fixed specification, bought in response to basic and essential needs, and used in markets where purchasing decisions are governed by rational factors". This definition leaves little room for differentiation. However, if products are considered to be a complex cluster of value attributes, it can be argued that customers will attach different levels of value to these attributes in proportion to the attribute's perceived ability to help solve their problems or meet their needs. Based on this argument, Levitt (1980: 83) contends that generic products can be differentiated by claiming 'distinction of execution'. Producers can differentiate the offered product from the generic product by means of adding or enhancing service-based value attributes such as being responsive to enquiries, improving the clarity and speed of order confirmations, and providing efficient transactions. This form of differentiation could be applied to cement, as participants in the cement industry have frequent market interaction (Zeidan and Resende, 2009), thus creating opportunities for differentiation.

Today the collective differences in the offered products are referred to as 'value propositions', a term widely used in business markets (Anderson, Narus and Van Rossum, 2006: 91). According to Anderson *et al.* (2006), suppliers use the term 'value proposition' in three different ways: Firstly, some suppliers simply list all the benefits they believe their offering may yield, and consider this benefit

assertion to be their value proposition. The second type focuses on favourable points of differentiation relative to the next best alternative, with the assumption that these differences offer value to their customers. Best-practice suppliers, however, base their value propositions on value research, in order to understand which elements matter the most to target customers. Value propositions that offer the greatest value to target customers are then created on points of difference and points of contention, relative to the next best alternative.

VALUE DIFFERENTIATION

Customer value is a multidimensional concept that reaches beyond the price versus quality trade-off (Vandenbosch and Dawar, 2002) and it is regarded as an essential prerequisite for long-term company survival and success (Graf and Maas, 2008). The growing realisation of the importance of perceived value stems from an understanding that the way customers judge and value a service or product is crucial to achieving a competitive advantage (Graf and Maas, 2008). Flint, Woodruff and Gardial (2002) point out that there are two related meanings of 'value' found in the literature. Most commonly, 'customer value' refers to judgements or assessments of what customers perceive they receive from a seller in a specific purchase or use situation. The other meaning refers to what customers want (desire) to happen when interacting with a supplier and/or using the supplier's product or service. From a conceptual perspective, a sound understanding of the dimensions that drive value creation in manufacturer-supplier relationships could provide the basis needed to differentiate competing products. To be effective, differentiation must nevertheless 'contribute to customer value by either providing benefits to the customer or lowering a customer's costs' (Ulaga and Eggert, 2006: 119).

Findings from a study conducted by Vandenbosch and Dawar (2002), however, reveal that merely offering superior products, technologies or services is not enough to maintain an edge over competitors, as product parity is relatively easily achieved in most markets. Most of the 1 500 senior managers who participated in this study indicated that competitive advantage is rather achieved through the way their companies interact with customers. This finding confirms that customers often value their interaction with their suppliers as much as, or more than, what they actually buy. Respondents furthermore indicated that the main drivers of customer choice are factors like convenience, ease of doing business and product support, as well as risk-oriented factors like trust, confidence and the strength of relationships. Robinson *et al.* (2002) concur with these findings. They found that the nature and extent of service provision can effectively augment un-differentiable commodity products.

In addition, Boyaci and Ray (2006) emphasise that in a capacitated environment, suppliers should consider price, delivery time and reliability to be important differentiation strategies.

In an attempt to create an integrated framework of value, Ulaga and Eggert (2006) conclude that value can be created through the core offering, in the sourcing process and in customer operations. Value attributes associated with the core offering include product quality (the extent to which the supplier's product meets customer specifications) and delivery performance (meeting delivery schedules, flexibility and accuracy of delivery). Beyond the core offering, suppliers can also create value in the sourcing process through suppliers' service support (responsiveness, information management and outsourcing of activities) and the personal interaction between buyers and sellers. Value can also be created by means of reducing acquisition costs as buyers value a supplier's willingness to take costs out of the sourcing process. Drivers of cost reduction identified in this area include inventory costs, order-handling costs, and incoming-product inspection costs. The final domain of value creation lies in customers' operations; value is created in customers' operations by a supplier's know-how of the industry.

From a managerial perspective, there needs to be a better understanding of which value-creation dimensions of a business relationship represent a potential basis for differentiation in the cement industry.

OBJECTIVES OF THE STUDY

The overall objective of this study was to identify which value attributes are essential when competing for market share in the cement industry. The study did not address the conceptualisation of customer value. Rather it considered the possibility of using customer perceptions of the importance of value attributes to differentiate commodity products. The research objectives were:

- to assess the importance of the underlying value attributes of the current value proposition offered in the cement industry; and
- to investigate the possible introduction of new value attributes in order to offer differentiated value propositions.

RESEARCH METHODOLOGY

The study was quantitative in nature, and a survey approach was used. In order to elicit a higher response rate, structured telephone interviews were conducted with the selected respondents.

Population and sample

The population relevant to this study included all customers who bought cement directly from South African cement producers during the previous year. Given the total number of cases in the population as well as budget constraints, this study used non-probability sampling. A combination of sampling techniques was used to select a final sample. Firstly, convenience sampling was used to construct a sampling frame. The customer list of the second-largest South African cement producer was used as a sample frame. This sample frame included customers who operated in different parts of the country and across industries, and consisted of 5 091 cases. These cases were divided into groups based on their business activity, to ensure proportionate representation. Cases were allocated, prior to the sampling procedure, to one of three distinct strata:

- Building construction (BC): This stratum consisted of customers who constructed either commercial or residential buildings. They were users of both bagged and bulk products, and their worksites were based at projects.
- Concrete product manufacturers (CPM): Cases included in this stratum comprised customers who manufactured pre-cast products. Their worksites were restricted to one place and they generally had

large fixed bulk storage facilities. Their process was continuous, making security of supply critical. They used mainly bulk products, but bagged products could be used when quantities were small or when bulk delivery was not practical.

- Resellers (RS): Customers in this stratum made up the majority (more than 50%) of customers by volume. They were typically in the retail trade and they bought pockets of cement to resell to customers (small builders and home-based users). These kinds of customers often stocked a range of competitor products, and competition among resellers was rife.

Within the strata, customers were sampled at random – applying the stratified random sampling method. The size of the sample was based on Stutely’s advice (cited in Saunders, Lewis and Thornhill 2007: 211) to use a minimum number of 30 cases per stratum, aiming for a normal sampling distribution at a significance level of 95%. Sample sizes were also *pro rata* to the size to the stratum. A rough guide prescribed by Saunders *et al.* (2007) indicates that a sample size of 357 would be appropriate for a survey study to limit the margin of error to 5%. However, considering the relative sizes of the different strata, a sample size of 300 was deemed appropriate.

**TABLE 1
ATTRIBUTES CONTAINED IN THE CURRENT VALUE PROPOSITION OFFERED BY CEMENT PRODUCERS**

Value attribute	Description
Product offering	Product offering refers to the products (cement) offered for sale to customers. Key considerations of this attribute include the range of products offered, product quality, availability and adherence to specifications.
Representation	Representation requires respondents to comment on the effectiveness (frequency and information sharing) of visits by sales representatives.
Ordering	Ordering refers to the order process. Key considerations are accessibility of producers, accuracy of the order taken, processing time and the level and quality of assistance.
Distribution	Distribution is the activity of transporting cement from the producer to the customer. Key considerations include lead times and keeping to a previously-designated time.
Technical support	Technical support refers to the ability of producers to provide product-specific information, advice and problem resolution to solve buyers’ unique problems with regard to material characteristics and other product-specific challenges.
Administration	Administration can be defined as the process of organising people and resources efficiently in order to direct activities toward common goals and objectives. Specific considerations include accurate and user-friendly documentation, problem resolution and the management and application of the credit policy.
Relationship management	Relationship management considers how a producer manages and nurtures interactions with customers. Specific considerations include long-term strategic partnerships, having customers’ best interest at heart, providing advice, the producer’s knowledge and understanding of customers, the business, and how producers add value.
Image	Image considers the general impression the customer holds about the producer. Specific consideration includes adherence to standards (South African Business Standards (SABS) and International Standards Organisation (ISO) standards), whether the producer is considered as a specialist, is customer-driven, innovative and easy to do business with.

The unit of analysis was individuals who were primarily responsible for cement purchases and considered to be key decision-makers in the purchasing process, regardless of job titles. Such respondents were identified by the producer. If the producer was unable to identify key decision-makers, buying companies were approached to identify respondents who fitted the respondent criteria.

Questionnaire design

The questionnaire comprised two sections. The first section dealt with the importance of attributes contained in the current value proposition offered by cement producers. Measurement items for this section were adapted from the work of Ulaga and Eggert (2006) to fit the cement industry context. A short description of constructs (value attributes) considered in this section is given in Table 1. Although the study was concerned with the importance attached to specific value attributes, it was acknowledged that each of these attributes was shaped by specific key considerations. The format of the data collection methods (structured interviews) allowed the interviewer to explain the key considerations of each value attribute to respondents.

The second section of the questionnaire collected data on service issues that could potentially add value to respondents' business dealings with cement producers. Measurement items for this section considered value-added through customer interaction (Vandenbosch and Dawar, 2002), order generation, and fulfilment (Boyaci and Ray, 2002). Specific service issues considered, included the following items:

- Guaranteeing no stock-outs if orders are placed in time (48 hours prior to required date and time);
- Accurately dealing with orders in terms of product and quantity (getting it right the first time);
- Delivery within the agreed time span for rush orders (24 hours);
- Delivery within the agreed time span for normal orders (48 hours);
- Delivery within one hour of the agreed time;
- The online availability of information on aspects such as order progress and stock availability;
- Ease of getting through to the call centre;
- The call centre accurately dealing with customers' orders/requests and getting it right the first time;
- The degree to which customers are informed about the progress of their orders;
- The speed of offloading the vehicle (within 40 minutes);
- Responsiveness to queries (getting back to customers within an acceptable time);

- The percentage of breakages with each delivery (maximum 25%) – only applicable to the reseller stratum;
- Flexibility in shipment sizes (between 8 and 34 tons per shipment);
- Flexibility in shipment sizes (between 5 and 34 tons per shipment) – only applicable to the concrete product manufacturers and building construction strata;
- Management of your inventory in your silo to ensure the supply remains above minimum but below maximum levels.

Following practices from various international satisfaction measurement surveys such as the European Customer Satisfaction Survey and the American Customer Satisfaction Index, this study used a 10-point rating scale (Coelho and Esteves, 2007) to assess the importance of value attributes. According to Coelho and Esteves (2007), the 10-point scale provides higher explanatory power for the leading indicators of the research phenomena and is particularly useful for customer satisfaction surveys conducted by telephone.

Data collection

Data were collected by means of computer-assisted telephone interviewing (CATI) using questionnaires with a predetermined set of questions. This method reduced costs, increased timeliness and improved data quality (Couper, 2005). The interviews were conducted by a research company familiar with the sample frame, and the average interview lasted between 10 and 12 minutes.

Data analysis methods

Data were analysed by means of correspondence analysis. This analysis technique was used to identify which value attributes were most important for each of the identified strata. Variables with p-values of less than 0.05 were considered significant (Cooper and Schindler, 2008). A multiple regression analysis was conducted using the proposed value attributes as independent variables and overall value as a dependent variable. Multiple regression analysis is one of the most widely used statistical procedures for both applied and scholarly marketing research. Although multiple regression is commonly used to test the individual effects of many explanatory variables, inherent collinearity is a common concern in the interpretation of the regression estimates (Cohen, Cohen, West and Aiken, 2003; Mason and Perreault, 1991). Data were therefore subjected to ridge regression in order to improve the reliability and statistical and inferential interpretation. In ridge regression a constant is added to the variance of each independent variable. This procedure, however, slightly attenuates the regression coefficient to increase the precision of the estimate (Cohen *et al.*, 2003).

Next, importance grids were used to plot variables against the two dimensions considered in this study, namely importance and value. *Importance* refers to the importance buyers attach to underlying value attributes whilst *value* refers to the impact of the value attribute on overall value obtained through the ridge regression analysis. Plotting the ratings assigned to each variable in a graphical way assisted with identifying trends in the different strata (Hair *et al.*, 2005).

Respondents and response rate

A high response rate of 87% indicates that sampling and data collection processes were efficient. In total 306 respondents participated in the survey. Of these, 44 represented the concrete product manufacturers (CPM),

131 the building construction (BC) customers and 131 the resellers (RS). The sample is considered to be proportional of the stratum size.

RESULTS

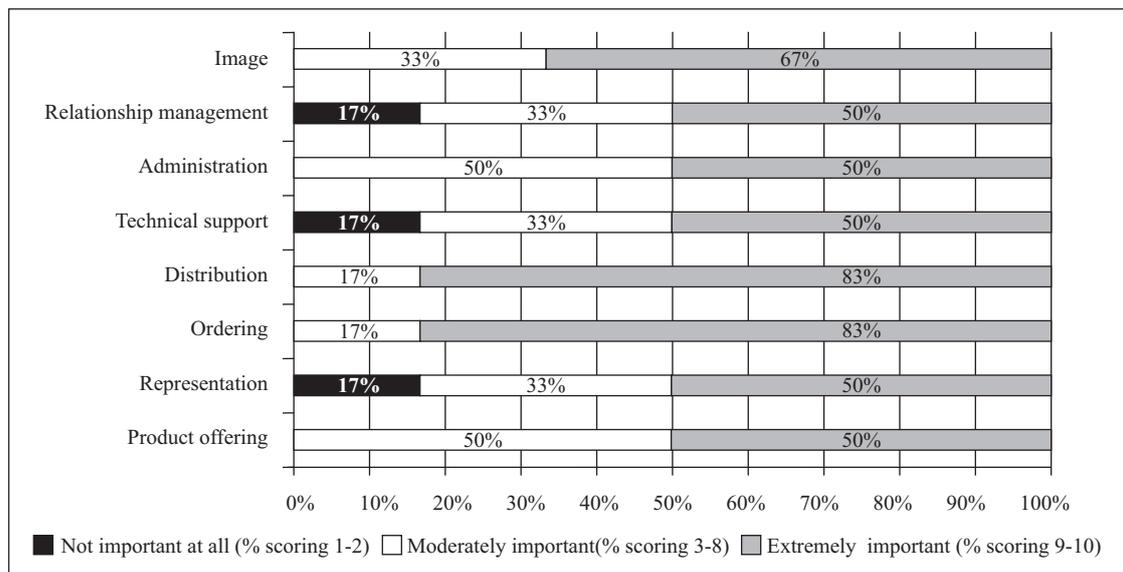
The first research objective was to assess the importance of the underlying value attributes of the current value proposition offered. This was done by measuring customer perceptions about the importance of key value attributes associated with the total value proposition offered by cement manufacturers. To do this, respondents were asked to rate, on a scale from 1 to 10, the relative importance of attributes. Results of all measurement items (mean scores) are depicted in Table 2.

**TABLE 2
RANKING OF THE OVERALL VALUE PROPOSITION STATEMENTS BY THE STRATA**

Value attributes	BC*	CPM*	RS*	Total
Sample (n) =	131	44	131	306
Product	8.15	8.80	8.37	8.34
Representation	7.22	7.14	7.78	7.45
Ordering	8.42	8.45	8.08	8.28
Distribution	8.11	7.41	7.69	7.83
Technical support	7.43	7.49	7.23	7.35
Administration	8.01	8.07	8.23	8.11
Relationship management	7.76	7.95	8.00	7.86
Image	8.32	8.52	8.46	8.41

* BC = Building construction; CPM = Concrete product manufacturers; RS = Resellers

**FIGURE 1
RELATIVE IMPORTANCE OF VALUE PROPOSITION ATTRIBUTES**



From Table 2 it is clear that most respondents perceived *image*, which relates to the adherence to local and international standards and customer orientation, to be the most important dimension of value. However, when considering different perspectives per stratum it is clear that although resellers (RS) concurred with the overall view, the building construction (BC) stratum considered *ordering* as the most important attribute, whilst the concrete product manufacturing stratum (CPM) considered the *product offering* as the most important value dimension. Different assessments could be explained by virtue of different business activities: in this case the worksites of buyers in the building construction stratum were based at project sites, resulting in frequent ordering as opposed to keeping stock. Concrete product manufacturers, in contrast, needed quality input material to produce quality end-products.

One-way analysis of variance (one-way ANOVA) was used to analyse the variance within and between groups of data by comparing means (Saunders *et al.*, 2007). However, results showed that there were no significant differences for any of the attributes between groups displaying different levels of value preferences. It can thus be concluded that all three strata considered all the value attributes as equally important.

In order to provide further insight into the relative importance of each attribute, the respondents' responses were grouped into three categories representing different levels of importance (results are illustrated in Figure 1): *extremely important* (scores of 9 and 10); *moderately important* (scores from 3 to 8); and *not important at all* (scores of 1 and 2). Figure 1 illustrates that once data were reclassified into these categories, *distribution* and *ordering* emerged as the most important attributes, followed by *image*.

Next, the data underlying Table 2 were used to perform a regression analysis with overall value as the dependent

variable and each of the value attributes as independent variables. The results of the ridge regression performed with overall value as dependent variable are shown in Table 3. The regression weights show that all the independent variables contained in the current value proposition contribute (to a greater or lesser extent) to the overall value perceived by buyers. The key drivers of the current value proposition, as indicated by the regression weights, are in order of importance: *product offering* (18.3%), *ordering* (15.7%), *administration* (13.6%), *image* (13.6%) and *distribution* (11.5%). Table 3 reports the Beta coefficients as well as the p-values for the ridge regression that was performed, indicating relative importance and statistical significance respectively. In all cases, p-values of less than 0.05 were obtained, indicating that the regression was statistically significant at the 95% level of confidence for all independent variables. The excellent fit is also demonstrated in the adjusted R² value of 0.96, which suggests that almost all the variation in overall value perceptions are explained by the independent variables.

An importance grid for this result was created, based on the data presented in Table 3 (see Figure 2). The respondent ratings (importance of the value attributes) were plotted on the y axis and the weightings of the value attribute obtained through the ridge regression analysis on the x-axis. In each case the axis represents the median of the data set, with four attributes left of the y-axis and another four to the right. Figure 2 indicates that *product offering* was rated as the most important and most valuable attribute. This rating could be due to the situation in the cement industry at the time, when product availability was not always at satisfactory levels. Other attributes considered of high value and importance included *ordering*, *administration*, and *image*. *Distribution*, *relationship management*, *representation* and *support* were considered to be on the lower end of the spectrum, indicating opportunity to improve in these areas.

TABLE 3
RESULTS OF THE RIDGE REGRESSION:
OVERALL VALUE AS DEPENDENT VARIABLE

Ridge regression summary for dependent variable	Beta	Std. err.	B	Std. err.2	t(298)	p-value	abs	Weight
Product offering	0.18517	0.02823	0.18235	0.02780	6.55791	0.00000	0.18235	18.3%
Representation	0.08098	0.02565	0.08553	0.02709	3.15662	0.00175	0.08553	8.6%
Ordering	0.15954	0.02917	0.15669	0.02865	5.46904	0.00000	0.15669	15.7%
Distribution	0.11169	0.02823	0.11467	0.02898	3.95608	0.00009	0.11467	11.5%
Technical support	0.07639	0.02630	0.08190	0.02819	2.90456	0.00395	0.08190	8.2%
Administration	0.13557	0.02901	0.13551	0.02899	4.67341	0.00000	0.13551	13.6%
Relationship management	0.10174	0.02821	0.10354	0.02871	3.60625	0.00036	0.10354	10.4%
Image	0.13930	0.02935	0.13551	0.02855	4.74577	0.00000	0.13551	13.6%

L = 0.10000 R = 0.98161089 R² = 0.96355993 Adjusted R² = 0.96258167, (8.298) = 984.98 p < 0.0000 Std error of estimate: 16.222

FIGURE 2
IMPORTANCE GRID: PERCEPTIONS OF ALL CUSTOMERS

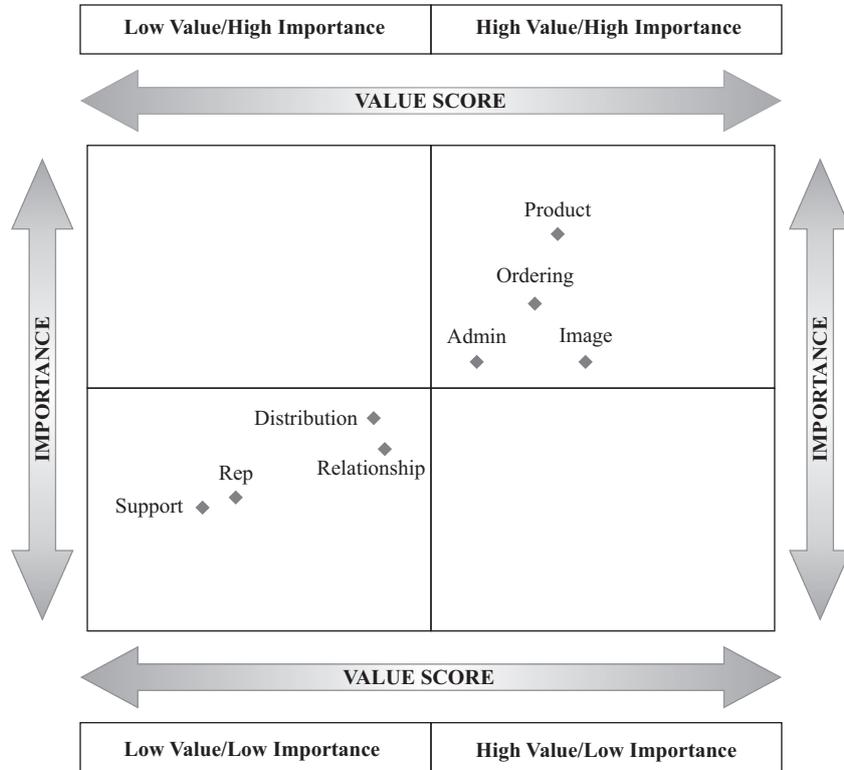


FIGURE 3
IMPORTANCE GRID: PERCEPTIONS OF RESELLERS

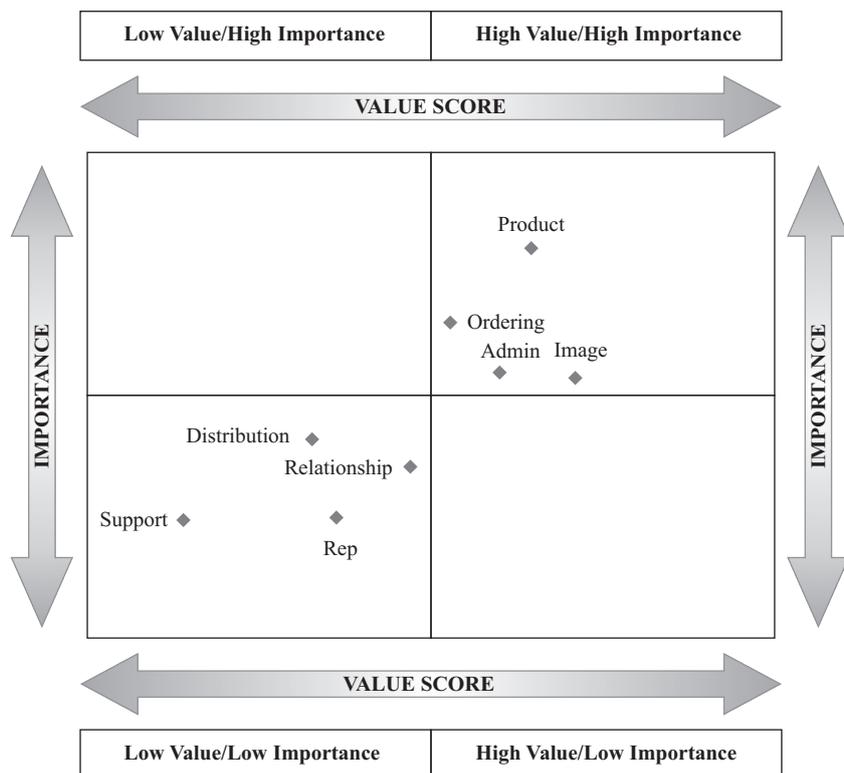


FIGURE 4
IMPORTANCE GRID: PERCEPTIONS OF CONCRETE PRODUCT MANUFACTURERS

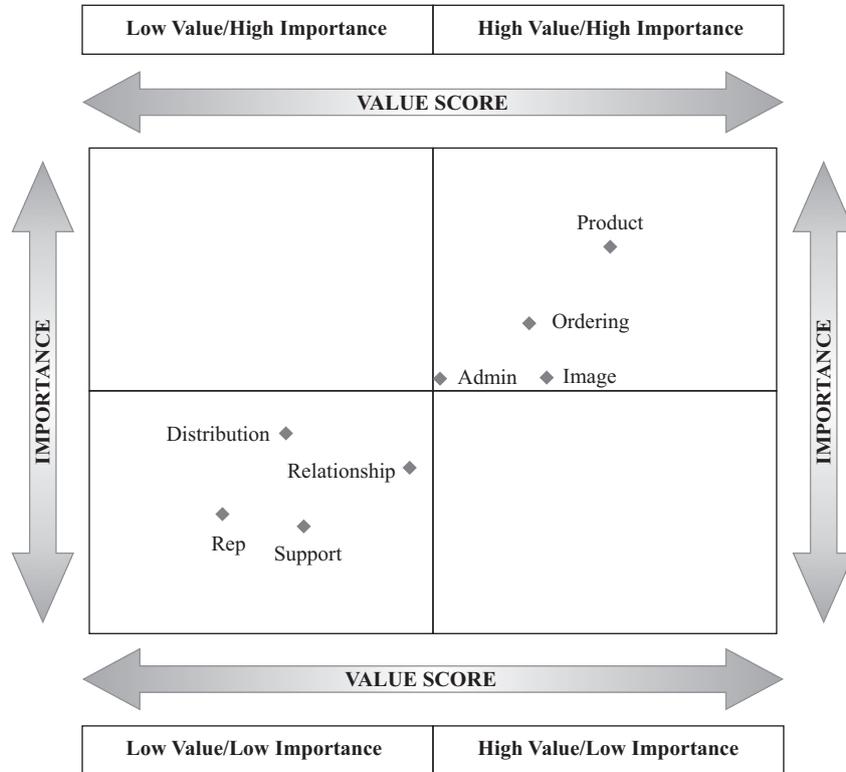
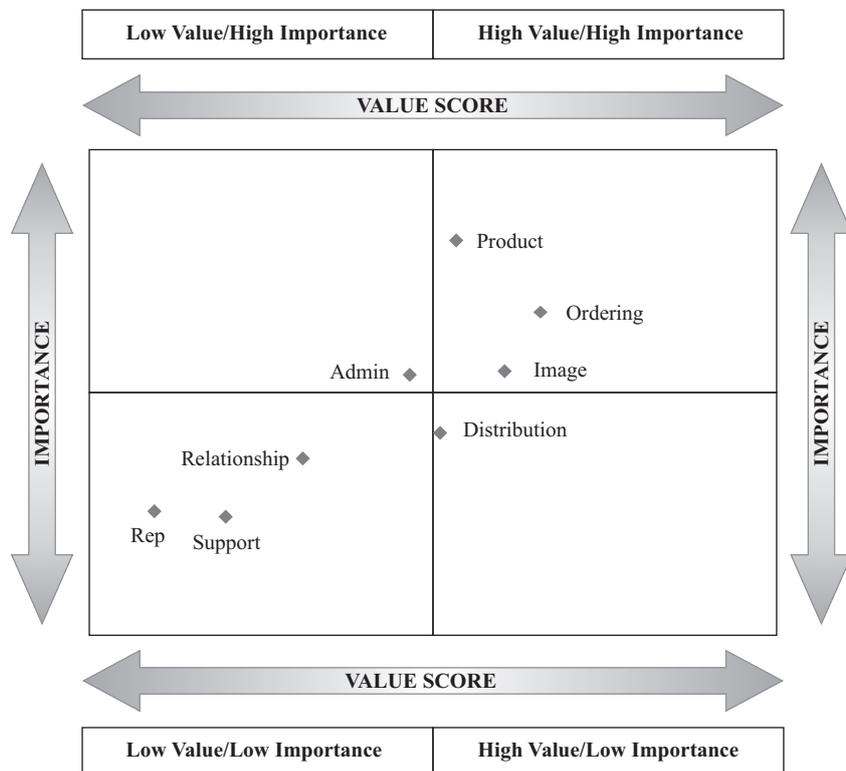


FIGURE 5
IMPORTANCE GRID: PERCEPTIONS OF CONSTRUCTION CUSTOMERS



Figures 3, 4 and 5 report the importance grid results for the three strata. Resellers rated *product offering* and *ordering* as the most important creators of value, as depicted in Figure 3. This result is not surprising as the retail industry needs stock to stay in business. Areas where improvements could be made to add value were *distribution*, *relationship management*, *representation* and *support*. For concrete product manufacturers the picture looks similar to that of the other segments. Figure 4 shows that this segment perceived *product offering* to be most important and the ordering process to be the second most important attribute. Areas where improvements could be made to add value were *representation*, *support* and *distribution*. The importance grid of the building construction customers (Figure 5) differs from the other segments, and although this segment considered *administration* as important they considered it to be of lower value than the other groups. *Distribution*, on the other hand, provided more value to this group when compared to the other segments.

The second section of the questionnaire collected data on customer perceptions about the value added through service quality issues. This section thus considered the introduction of new or enhanced value attributes that could be used to develop differentiated value propositions. In

order to gain insight into this area, respondents were asked to rate the potential value of new or enhanced service attributes on a scale from 1 to 10, where 1 = 'no value added' and 10 = 'a lot of value added'. Table 4 shows the means obtained for each of the statements in terms of customers' perceptions on the potential of the attribute *add value*. One-way ANOVA results again confirmed that no significant differences existed for the ratings of any of the attributes between groups in terms of different levels of potential value added. In order to provide further insight into the relative value of each attribute to one another, the respondents' responses were recorded in three categories representing different levels of value added, (results illustrated in Figure 6): *a lot of value added* (scores of 9 and 10); *moderate value added* (scores from 3 to 8); and *no value added* (scores of 1 and 2). Figure 6 shows the relative value of the selected attributes for the total sample.

The value of getting orders correctly handled and delivered as specified by the customer was deemed the attribute that added most value for customers. The attribute adding the least value was delivery within one hour of the originally agreed delivery time. In each case, across all segments, these attributes were selected as the most and least value added, underscoring the importance of getting the order executed as requested.

TABLE 4
RANKING OF THE VALUE ADDING ATTRIBUTES STATEMENTS BY STRATUM¹⁾

Service value statements by segment	BC*	CPM*	RS*	TOTAL
Sample (n) =	131	44	131	306
Guaranteeing of no stock-outs if orders are placed in time (48 hours prior to required date and time)	7.92	7.14	7.29	7.54
Accurately dealing with your order in terms of product and quantity (getting it right the first time)	8.44	8.82	8.37	8.46
Delivery within the agreed time span for normal orders (48 hours)	8.02	7.59	7.35	7.68
Delivery within the agreed time span for rush orders (24 hours)	7.89	7.32	7.18	7.51
Delivery within 1 hour of the agreed time	7.22	6.48	6.23	6.71
The on-line availability of information on aspects such as order progress and stock availability	7.79	7.41	7.14	7.46
The ease of getting through to the call centre	8.20	8.80	8.26	8.32
The call centre accurately dealing with your order/request and getting it right the first time	8.27	8.73	8.33	8.36
The degree to which you are informed about the progress of your order	7.60	7.47	7.28	7.45
The speed of offloading the vehicle (within 40 minutes)	8.09	8.36	8.21	8.18
Their responsiveness to queries (getting back to you within an acceptable time)	7.93	7.91	7.71	7.83
The percentage of breakages with each delivery (maximum 25%)	N.A.	N.A.	7.47	7.47
The flexibility in shipment sizes (between 8 and 34 tons per shipment)	N.A.	N.A.	7.85	7.85
The flexibility in shipment sizes (between 5 and 34 tons per shipment)	7.75	7.81	N.A.	7.77
The management of your inventory in your silo to ensure supply remains above minimum but below maximum levels	7.97	7.34	N.A.	7.79
Index score (unweighted)	7.94	7.80	7.61	7.78

*BC = Building construction; CPM = Concrete product manufacturers; RS = Resellers

¹⁾Mean scores on 10-point scale

FIGURE 6
RELATIVE IMPORTANCE OF VALUE ADDING ATTRIBUTE

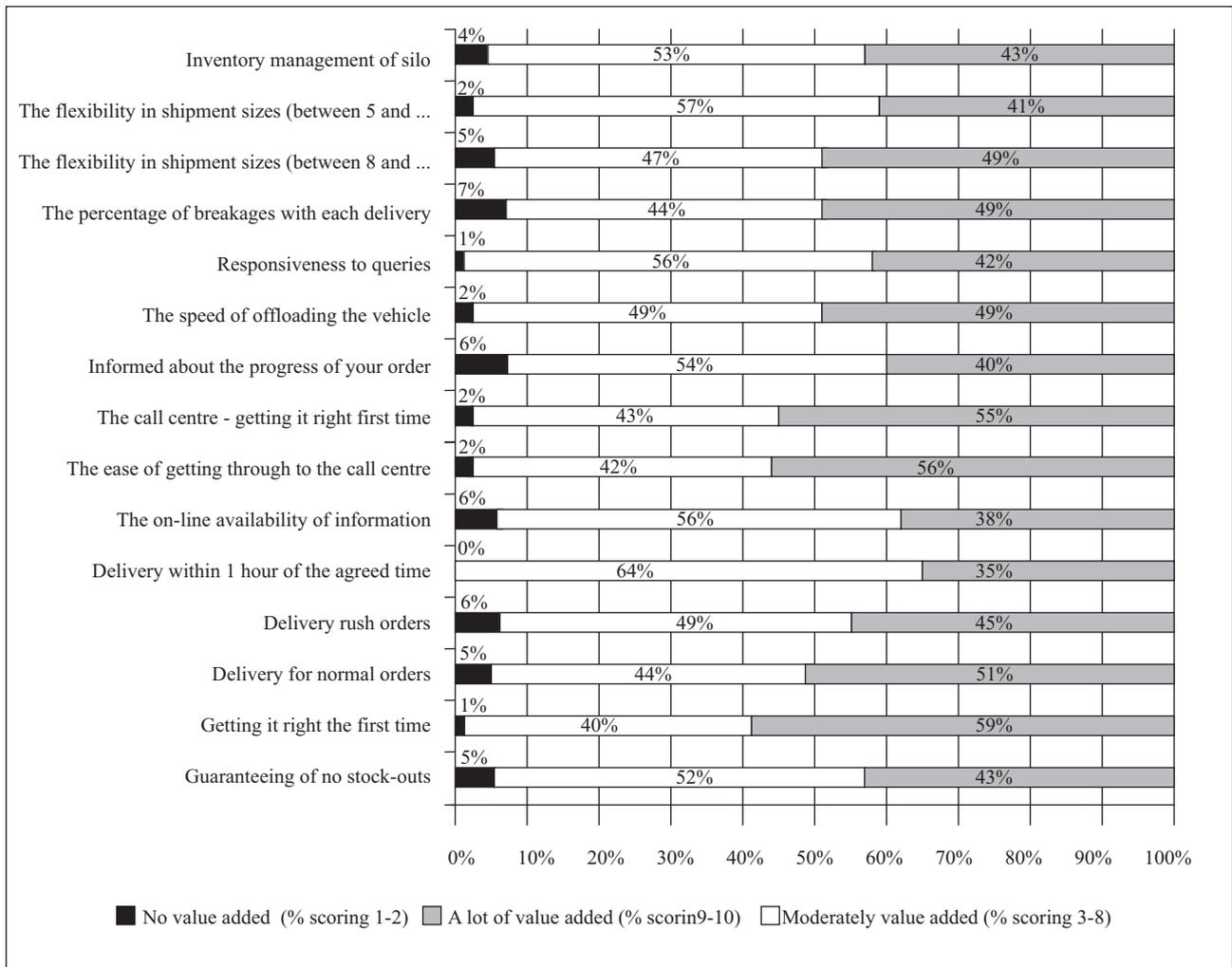


Table 5 depicts the regression results obtained for the dependent variable *value quality*. Interestingly, of the 15 independent variables, 10 returned results that could be described as significant. This statistic can be seen in the column marked p-level, which is an indication of significance. The lower the p-value, the higher the significance.

CONCLUSIONS

Contemporary market conditions no longer allow cement producers to classify their products as commodities, or for that matter, provide for the luxury of focusing only on sales strategies at the expense of product differentiation. In addition, competitor structures such as cartels are no longer tolerated. Market conditions therefore make it necessary for cement producers to consider alternative

strategies to protect and grow their market share. Customers, even customers of commodity products, have different needs that require producers to offer differentiated value propositions if they wish to compete successfully. This study considered different value dimensions that could be used to differentiate value propositions offered by cement producers. Overall, the research findings suggest that different groups of customers do indeed attach different levels of importance to different value attributes associated with producers' core offerings, sourcing processes and customer operations, notwithstanding the fact that cement producers offer generic products and utilise similar pricing structures. The findings concur with Levitt's (1980) assertion that there are no such things as commodities, because customers regard products as complex sets of value attributes.

TABLE 5
RESULTS OF THE RIDGE REGRESSION PERFORMED WITH OVERALL SERVICE VALUE AS
DEPENDENT VARIABLE

Service quality element	Beta	Std. err.	B	Std. err.	t(291)	p-level	abs	Weight
Flexibility of shipment sizes (5-34 tons)	0.0870	0.0306	0.0903	0.0318	2.8436	0.0048	0.0903	8.81%
Delivery within the agreed time span for normal orders (48 hours)	0.0822	0.0308	0.0842	0.0315	2.6690	0.0080	0.0842	8.21%
The call centre accurately dealing with your order/ request and getting it right the first time	0.0826	0.0315	0.0798	0.0304	2.6221	0.0092	0.0798	7.78%
The degree to which you are informed about the progress of your order	0.0723	0.0299	0.0761	0.0314	2.4205	0.0161	0.0761	7.42%
Guarantee no stock-outs if order is placed 48 hours in advance	0.0728	0.0301	0.0761	0.0315	2.4159	0.0163	0.0761	7.42%
The on-line availability of information on aspects such as order progress and stock availability	0.0669	0.0297	0.0715	0.0317	2.2553	0.0249	0.0715	6.97%
The responsiveness to queries	0.0663	0.0320	0.0679	0.0328	2.0684	0.0395	0.0679	6.62%
Accurately dealing with your order in terms of product and quantity (getting it right the first time)	0.0684	0.0320	0.0656	0.0307	2.1385	0.0333	0.0656	6.40%
Delivery within the agreed time span for rush orders	0.0625	0.0301	0.0653	0.0315	2.0742	0.0389	0.0653	6.37%
Delivery within one hour of the agreed time	0.0524	0.0273	0.0597	0.0311	1.9169	0.0562	0.0597	5.82%
The speed of offloading the vehicle	0.0578	0.0309	0.0572	0.0306	1.8723	0.0622	0.0572	5.58%
The flexibility in shipment sizes (8-34 tons)	0.0544	0.0306	0.0558	0.0314	1.7766	0.0767	0.0558	5.44%
The percentage of breakages with each delivery	0.0499	0.0288	0.0540	0.0312	1.7296	0.0848	0.0540	5.27%
The ease of getting through to the call centre	0.0468	0.0311	0.0455	0.0303	1.5018	0.1342	0.0455	4.43%

This study emphasizes the importance of a clear understanding of value dimensions and attributes as a foundation of marketing strategy. To break out of the commodity trap of blind allegiance to cost leadership as the generic strategy (Robinson *et al.*, 2002), producers should pursue methods of differentiation. In this respect, perceived customer value could play a guiding role when identifying different customer segments and creating differentiated value propositions. This study has developed items for measuring the importance of value attributes and consolidated them into an overall index of customer value that could be used as a benchmark or as input for further measurement refinement.

MANAGERIAL IMPLICATIONS

The results revealed that buyers perceived all value dimensions offered within the current value proposition to be important. The relative importance of attributes, as depicted in Figure 1, revealed three distinct groupings of attributes. Respondents considered *distribution* and *ordering* as the most important. These value attributes were the only attributes that had a direct impact on the respondents' company operations. Customers are, for example, dependent on producers to deliver cement. (If this is not done it could directly impact on the buyers' productivity). Customers are also responsible for placing

orders, which require planning and resources on their side. The next level of value attributes relate to the quality of the product and supporting administration processes. As cement is considered to be a commodity product, it was expected that respondents would attach lower levels of importance to *image*, *product offering* and *administration*. The attributes that were considered to be the least important included *relationship management*, *tactical support* and *representation*. This was an interesting finding, as the literature review suggested that commodities could be differentiated through distinction of execution. Distinction of execution, in turn, would be determined by *relationship management*, *technical support* and *representation*. Although these attributes were considered on the lowest level of relative importance, it could indicate that scope exists for value to be created in these areas.

Using regression analysis, the key drivers of value, in order of importance, were identified as the *product offering*, *ordering*, *administration*, *image*, *distribution* and *relationship management*. These results should, however, be considered against the relative importance assigned by respondents to each of the attributes. *Distribution* for example, was considered to be one of the most important value attributes but was not one of the top four value drivers.

Product offering, on the other hand, was considered the most important driver of value although customers did not consider it as one of the top three value attributes in terms of relative importance. Managers therefore need to realise that although customers expect superior products, supplying such products is not enough to create a competitive advantage. The reverse is also true, in that a competitive advantage will not be achieved by offering and enhancing supporting value attributes in the absence of a superior product.

The findings furthermore suggest that respondents, representing buyers from different business activities, assigned different levels of importance to value dimensions. If differences of perception are significant, it could be useful input for future value-based segmentation. Moreover, the results indicate that customer value perceptions could be enhanced by the introduction of new value attributes. Contrary to the different perspectives held regarding the importance of value dimensions offered within the current value propositions, all groups of respondents agreed that the most important new value attributes were getting orders correctly handled and delivered, as specified. The consistency indicates that the importance of the order handling is paramount. The results from the ridge regression analysis identified 10 significant value dimensions that customers considered to be important: the flexibility of shipment sizes; delivery within the agreed time span for normal orders; the call centre accurately dealing with orders; inventory management; the availability of information about order progress; guarantees of no stock-outs if orders are placed 48 hours in advance; on-line availability of information; responsiveness to queries; accurately dealing with orders in terms of product and quality; and delivery within the agreed time span for rush orders. The management implication here is that producers need to keep to their promises. Respondents furthermore did not consider specific operational standards to add value. Attention to detail such as the speed of offloading the vehicles, delivery within one hour of the agreed time, the percentage of breakages with each delivery, and getting through to the call centre, will therefore not create differentiated value propositions that could create competitive advantage.

In conclusion, value differentiation could present a viable marketing strategy in the cement industry. South African cement producers would benefit from understanding the importance of value attributes other than product and price, as a basis for differentiation. Indeed, understanding customer needs could lead to identifying different customer segments, prioritising supply chain operations, and the introduction of differentiated product offerings based on customer requirements and increased value offered to customers.

LIMITATIONS OF THE STUDY AND RECOMMENDATIONS FOR FUTURE RESEARCH

This study did not address the conceptualisation of the concept of customer value, but rather considered customers' perceptions about the importance of value attributes within the current operating environment. Further research on customer value conceptualisation would enrich the understanding of perceived customer value in this context. Data of the present research were also based on customers' perspective of the importance of value attributes offered at similar quality levels and pricing structures across the industry. Further research is, however, required to determine whether customers would be willing to pay differentiated prices for differentiated value propositions. Furthermore, although customers were clustered according to their business activities, it would also be beneficial to cluster customers according to their needs, in order to determine whether preferences differ significantly enough to justify value-based segmentation. The present study relied only on single respondents (key decision-makers). Other members of the buying organisation might emphasise different value attributes as important, and because potential biases cannot be excluded, further research could address this limitation. A further limitation is the fact that customers of only one company participated in the study. These limitations should be kept in mind when results of the present study and their implications are considered. Nevertheless, the findings offer a point of departure for managerial decision-making and may provide new insights for both academics and practitioners.

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APPENDIX 1

Copy of questionnaire

Section A - Rating of value proposition

The following list of attributes represents the total value proposition offered by cement producers. On a scale for 1 to 10 please indicate the importance of each dimension for the successful operation of your business where 1 = 'not important at all' and 10 = 'extremely important'. You may also indicate the importance with any number between 1 and 10.

Please rate the importance of:	No value added										A lot of value added									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The product offering (range, quality, availability and adherence to specification)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Representation (effective visits by a sales representative)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Ordering (accessibility, accuracy, processing and assistance)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Distribution (timely, full and emergency deliveries, lead times)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Technical support (information, advice and problem resolution)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Administration (accurate and user-friendly documentation, problem resolution and management and application of credit policy)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Relationship management (knowledge, long-term strategic partnerships, best interest at heart, advice, knowledge and understanding of business and adding value)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Image (adherence to standards SABS & ISO, specialist, customer driven, innovative & easy to do business with)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10

Section B - Service issues that could add value

The following list of statements indicates the service issues that could add value to your business in your dealings with cement producers. On a scale from 1 to 10 please rate each service issue on the degree to which it would add value to your organisation where 1 = 'no value added' and 10 = 'a lot of value added'. You may also indicate the value added with any number in-between 1 and 10.

Service issue	Not important at all										Extremely important									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Guaranteeing of no stock-outs if orders are placed in time (48 hours prior to required date and time)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Accurately dealing with your order in terms of product and quantity (getting it right the first time)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Delivery within the agreed time span for normal orders (48 hours)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Delivery within the agreed time span for rush orders (24 hours)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Delivery within 1 hour of the agreed time	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The on-line availability of information on aspects such as order progress and stock availability	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The ease of getting through to the call centre	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The call centre accurately dealing with your order/request and getting it right the first time	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The degree to which you are informed about the progress of your order	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The speed of offloading the vehicle (within 40 minutes)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Their responsiveness to queries (getting back to you within an acceptable time)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The percentage of breakages with each delivery (maximum 25%)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The flexibility in shipment sizes (between 8 and 34 tons per shipment)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The flexibility in shipment sizes (between 5 and 34 tons per shipment)	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
The management of your inventory in your silo to ensure supply remains above minimum but below maximum levels	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10