

An assessment of a business-to-business brand loyalty environment in the South African paint industry

Quentin van den Heever

23122986

Mini-dissertation submitted in *partial* fulfillment of the
requirements for the degree *Master of Business Administration*
at the Potchefstroom Campus of the North-West University

Supervisor: Prof CA Bisschoff

November 2013

It all starts here™



ABSTRACT

The study was conducted to measure brand loyalty of customers in a business-to-business environment, in this case the South African paint manufacturing industry. A brand loyalty conceptual framework developed for the Fast Moving Consumer Goods industry by Moolla (2010) was used to test if it also applies in a business-to-business setting. The framework was adapted to suit the above industry and used to measure brand loyalty levels of South African paint manufacturers.

From the results it can be concluded that the model can be applied with some adaptations. Factor analysis was utilised to validate the influences. Factor analysis results were viewed with caution as sample adequacy was found to be marginal in some cases, possibly due to a small data set. Although two of the influences could not be validated, they were still found to be important.

All the influences are found to be reliable as evaluated using Cronbach's alpha. The measured brand loyalty values show that customers in the South African paint industry are quite loyal, with some influences scoring very high. Culture in particular was found to be not very important. This is likely due to the fact that individual culture instead of company culture was measured. More work is required to adapt the questionnaire to measure company culture when assessing brand loyalty in a business-to business setting.

Clear brand loyalty differences were identified along with age, company size and the position the respondent holds with the company. Owners/directors, procurement personnel, technical personnel and general managers view different brand loyalty influences as important.

Key terms: Brand loyalty, branding, purchasing behaviour, B2B, business-to-business.

TABLE OF CONTENTS

1	CHAPTER 1: NATURE AND SCOPE OF THE STUDY.....	1
1.1	INTRODUCTION.....	1
1.2	MOTIVATION FOR THE STUDY	2
1.3	PROBLEM STATEMENT	3
1.4	OBJECTIVES.....	3
1.4.1	Primary objective	3
1.4.2	Secondary objectives	3
1.5	RESEARCH METHODOLOGY	4
1.5.1	Literature study.....	4
1.5.2	Population.....	4
1.5.3	Sample	4
1.5.4	Measuring instrument	5
1.5.5	Statistical analysis	5
1.6	LAYOUT OF THE STUDY.....	6
1.7	POSSIBLE IMPACT ON INDUSTRY	6
1.8	SUMMARY.....	7
2	Chapter 2: Brands and brand loyalty	8
2.1	INTRODUCTION.....	8
2.2	OVERVIEW OF THE SOUTH AFRICAN PAINT INDUSTRY	10
2.3	BRAND LOYALTY	11
2.3.1	Customer satisfaction	13
2.3.2	Switching costs.....	14
2.3.3	Brand trust.....	15
2.3.4	Involvement	16
2.3.5	Commitment	16
2.3.6	Perceived value	17
2.3.7	Repeat purchase	18
2.3.8	Brand affect	19
2.3.9	Relationship proneness	20
2.3.10	Brand relevance	21
2.3.11	Brand performance.....	22
2.3.12	Culture	24

2.4	SUMMARY	25
3	CHAPTER 3: RESEARCH METHODOLOGY AND RESULTS	27
3.1	INTRODUCTION.....	27
3.2	RESEARCH METHODOLOGY	27
3.3	RESULTS.....	28
3.3.1	Demographic profile	28
3.4	VALIDITY OF RESEARCH INSTRUMENTS.....	31
3.4.1	Customer satisfaction (CUS)	32
3.4.2	Switching costs (SCR)	33
3.4.3	Brand trust (BTS).....	35
3.4.4	Repeat Purchase (RPR)	36
3.4.5	Involvement (INV).....	37
3.4.6	Perceived value (PVL)	38
3.4.7	Commitment (COM)	39
3.4.8	Relationship Proneness (RPS)	40
3.4.9	Brand affect (BAF).....	41
3.4.10	Brand relevance (BRV).....	42
3.4.11	Brand performance (BPF).....	43
3.4.12	Culture (CUL)	44
3.5	RELIABILITY OF RESULTS	45
3.6	IMPORTANCE OF RESEARCH VARIABLES.....	47
3.6.1	Customer satisfaction (CUS)	48
3.6.2	Switching costs (SCR)	49
3.6.3	Brand trust (BTS).....	50
3.6.4	Repeat purchase (RPR)	50
3.6.5	Involvement (INV)	51
3.6.6	Perceived value (PVL).....	52
3.6.7	Commitment (COM)	53
3.6.8	Relationship Proneness (RPS)	54
3.6.9	Brand affect (BAF).....	55
3.6.10	Brand relevance (BRV).....	56
3.6.11	Brand performance (BPF).....	57
3.6.12	Culture (CUL)	58

3.7	SUMMARY OF MEAN VALUES	59
3.8	RELATIONSHIP BETWEEN DEMOGRAPHICS AND influences	61
3.8.1	Position in Company	61
3.8.2	Correlations with Age Group and Business Annual Turnover	65
3.8.2.1	Age Group	66
3.8.2.2	Business Annual Turnover	67
3.9	SUMMARY	68
4	CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS.....	69
4.1	INTRODUCTION.....	69
4.2	CONCLUSIONS AND RECOMMENDATIONS	69
4.2.1	VALIDITY AND RELIABILITY	69
4.2.2	BRAND LOYALTY INFLUENCES	70
4.3	AREAS FOR FUTURE RESEARCH	72
4.4	SUMMARY	72
	REFERENCES.....	74
	APPENDIX ONE: QUESTIONNAIRE.....	83
	APPENDIX TWO: LETTER FROM LANGUAGE EDITOR	90

LIST OF TABLES

Table 2-1: Consumer and B2B market characteristics	9
Table 3-1: KMO and Bartlett's Test - Customer Satisfaction	32
Table 3-2: Factor Analysis of Customer Satisfaction.....	33
Table 3-3: KMO and Bartlett's Test - Switching Costs.....	34
Table 3-4: Factor Analysis of Switching Cost	34
Table 3-6: KMO and Bartlett's Test - Repeat Purchase	36
Table 3-7: Factor Analysis of Repeat Purchase	36
Table 3-8: KMO and Bartlett's Test - Involvement.....	37
Table 3-9: KMO and Bartlett's Test - Perceived Value	38
Table 3-10: Factor Analysis of Perceived Value.....	38
Table 3-11: KMO and Bartlett's Test - Commitment.....	39
Table 3-12: Factor Analysis of Commitment	39
Table 3-15: KMO and Bartlett's Test - Brand Affect	41
Table 3-16: Factor Analysis of Brand Affect	41
Table 3-23: Reliability of the influences and their factors	45
Table 3-24: Omitted questions	47
Table 3-25: Mean scores of Customer Satisfaction.....	48
Table 3-26: Mean scores of Switching Cost	49
Table 3-27: Mean scores of Brand Trust.....	50
Table 3-28: Mean scores of Repeat Purchase	51
Table 3-29: Mean scores of Involvement	52
Table 3-30: Mean scores of Perceived Value.....	53
Table 3-31: Mean scores of Commitment	54
Table 3-32: Mean scores of Relationship Proneness.....	55
Table 3-33: Mean scores of Brand Affect	56
Table 3-34: Mean Scores of Brand Relevance.....	57
Table 3-35: Mean scores of Brand Performance.....	58
Table 3-36: Mean scores of Culture	58
Table 3-37: Importance ranking: Influences and sub-factors.....	59
Table 3-38: Kruskal-Wallis test: Potition In Company.....	62
Table 3-39: Non-parametric Correlations: Age Group	66

LIST OF FIGURES

Figure 2-1: Conceptual Brand Loyalty Framework	12
Figure 3-1: Age Group.....	28
Figure 3-2: Gender	29
Figure 3-3: Ethnicity	29
Figure 3-4: Business Location.....	30
Figure 3-5: Position In The Company.....	30
Figure 3-6: Business Annual Turnover	31
Figure 3-7: Brand Loyalty Influence	60

1 CHAPTER 1: NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

Traditionally brand interest research focussed strongly on consumer markets while the branding of Business-to-Business (B2B) markets or products are largely neglected (Napoli & Lindgreen as cited by Leek & Christodoulides, 2011:1060). However, numerous studies that have been done identified various industrial branding benefits to organisations. These benefits include improved perceptions of quality (Cretu & Brodie, 2007:237), conferring uniqueness (Mitchell *et al.*, 2001:424), enabling a premium to be charged (Ohnemus, 2009:165), and raising barriers to entry (Mitchell *et al.*, 2001:424). B2B (business-to-business) branding increases buyer confidence and satisfaction with their purchase decision (Mitchell *et al.*, 2001:424) and reduces their level of perceived risk and uncertainty (Ohnemus, 2009:165).

Despite these apparent benefits of branding, business branding is not widely used across B2B companies, possibly due to a lack of extensive academic theory. B2B branding is an area that is in need of further research (Leek & Christodoulides, 2011:1060). This study intends to evaluate brand loyalty in a B2B environment with specific focus on water based paint binders used as the main ingredient in the manufacture of water based coatings (paints).

In a B2B environment functional values including quality, technology and after sales service were found to be of importance to buyers. Innovation, a functional factor, was also found to be of importance. Functional values were found to be the primary factors considered by buyers in the decision-making process (Leek & Christodoulides, 2012:112). The emotional qualities of risk reduction, providing reassurance and trust were also highlighted as significant in brand development. (Leek & Christodoulides, 2012:112). Persson (2010:1274) suggests that corporate brand image determinants of price premium can be conventionalised into six dimensions. These dimensions are brand familiarity, product solution, service distribution, relationship and company associations. Pan *et al.* (2012:156) found that the effects of customer satisfaction and trust on loyalty are not as important when

products are purchased on a regular and short purchase cycle. Factors that largely relate to product performance do not seem to have such a large impact on loyalty in a B2B environment than in a B2C environment. Čater and Čater's (2010:1331) found that customer loyalty depends more on emotional motivation than on rational motivation to stay loyal to a brand. Rauyruen and Miller (2007:28) explored the influence of relationship quality on customer loyalty in a B2B context. They found that only satisfaction and perceived service quality influenced purchase intentions. They also found that only the overall organisational level of relationship quality influences customer loyalty and that employee level relationship quality does not play a significant role in influencing B2B customer loyalty. Shi and Chen (2011:140) studied several effects moderating the relationship between customer satisfaction and loyalty. They found that financial switching costs, affection bind and trust have significant moderating effects.

1.2 MOTIVATION FOR THE STUDY

It is not always clear whether brand loyalty exists in a B2B environment as business customers are considered rational decision-makers when evaluating value propositions. According to Gale (cited by Williams *et al.*, 2011:806) they will evaluate the expected product benefits against proposed prices when assessing expected value. In B2B markets customers are more sensitive to value due to the complexity of the products and the large size of the accounts (Bendapudi & Leone, 2002:97). If it can be established that brand loyalty exists in this market, brand loyalty can be evaluated and the influences contributing the most to brand loyalty in this environment can be established. This would enable marketers in B2B environments to better understand which factors to focus on when marketing and branding their products. It would also help them to position their brands more specifically in this environment.

The coatings (paint) market in South Africa is a very big market consisting of many manufacturers with total industry revenue of more than R4.4 billion annually (South Africa.info:2006). Of this, by far the most prevalent is water based paints, mainly for use as architectural paints. The most critical ingredient in paint is the binder. For water based systems, the binder is a polymer that is added as a colloid dispersion in

water. Water based binders are also commonly known as emulsions or as latex (technically more correct). Due to the size of the paint market and the criticality and amount of binder used in paint, there is a lot of competition between binder suppliers. Apart from directly imported binders, there are eleven local manufacturers of water based binders in South Africa. Five of these are multinationals with manufacturing facilities across the world. It has been observed that some paint manufacturers seem to stay with their binder suppliers beyond the rational reasons of quality and price. As mentioned, customers in a B2B environment are typically rational decision-makers, seemingly basing their buying behaviour purely on value. This would imply that no real brand loyalty should exist in such an environment. It is clear that the supply of binder to paint manufacturers, who sell on to consumers, is a typical B2B market.

1.3 PROBLEM STATEMENT

This study focuses on assessing brand loyalty in a B2B environment and more specifically, the highly competitive water based binder industry. The research measures the tendency of paint manufacturers to stay with their current binder suppliers as well as which factors may prevent them from defecting. The research also attempts to determine why paint manufacturers become loyal to a certain binder manufacturer brand and also to determine if there are moderating factors that cause a customer to defect even if he is completely satisfied with his current supplier.

1.4 OBJECTIVES

1.4.1 Primary objective

The primary objective of this study is to analyse brand loyalty in a B2B environment in the South African paint industry. .

1.4.2 Secondary objectives

In order to achieve the above, the secondary objectives are as follows:

- Identify key influential elements of brand loyalty in a B2B environment;

- Determine whether a significant relationship exist between brand loyalty and repurchasing behaviour;
- Determine what factors moderate the relationship between satisfaction and repurchase behaviour in a B2B environment;
- Determine the effect of environmental and situational factors on brand loyalty; and
- Determine up to what value difference customers will stay with their current supplier. In other words to determine what the minimum value difference is at which a customer would defect.

1.5 RESEARCH METHODOLOGY

The study consists of a literature and an empirical study. The study aims to measure and identify the most significant influences on brand loyalty in the water based paint binder industry by using a modified measuring instrument developed by Moolla (2010).

1.5.1 Literature study

The study is based on a thorough literature study of the current body of knowledge. It includes mediums such as books, peer reviewed articles, Internet searches, popular articles and magazines where relevant. The literature study increased knowledge of identified influences customers in a B2B environment experience regarding their repurchase behaviour and brand loyalty.

1.5.2 Population

A population is the full set of all the cases from which the study sample is taken (Welman *et al.*, 2005:53). In the context of this study this means that the population comprises all the water based paint manufacturers in South Africa.

1.5.3 Sample

All water based paint manufacturers known by the researcher were sampled as the population is not very large. The South African Paint Manufacturers Association (SAPMA) membership list was used as a base for selecting the sample. This was supplemented with additional, non-member, manufacturers known to the researcher from his experience in this industry. The latest membership records of the South African Paint Manufacturers Association (SAPMA) show that there are 90 members

who are water based paint manufacturers (SAPMA, 2013). This figure is understated because many small manufacturers are not members of SAPMA. The SAPMA members' list was therefore used as the primary target list, while additional non-member manufacturers' details were obtained by interviewing people that have close contact with manufacturers in the paint industry.

1.5.4 Measuring instrument

The measuring instrument used will be a version of the instrument developed by Moolla (2010), modified to suit the B2B environment. The original instrument was developed for the FMCG (fast moving consumer goods) industry and would therefore need to be modified to suit the intended application. The model was modified reconfirming or adding constructs identified in literature related to studies of brand loyalty in the B2B environment. The developed questionnaire was administered via email, telephonically or in person where possible. This was possible because the researcher is well acquainted with the respondents and the industry. Permission was obtained from the respondents to indicate their willingness to participate. Respondents were assured that the information received would be treated as confidential and that the results were used for research purposes only. This is important as the researcher is known in the industry and has business ties with one of the water based binder suppliers. Permission was also obtained from the associated manufacturer by means of submitting the research proposal to them for approval.

1.5.5 Statistical analysis

The validity of the questionnaire was determined using exploratory factor analysis. Factor analysis is a technique used to examine interdependent relationships without making the distinction between dependent and independent variables. The suitability of using factor analysis was checked by applying the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity (Field, 2007 as cited by Salim, 2011:32). The reliability of the data was performed by calculating the coefficient Cronbach's alpha. A minimum reliability coefficient of 0.70 was set for this study (Hair *et al.*, cited by Moolla, 2010:154).

1.6 LAYOUT OF THE STUDY

The dissertation consists of four chapters.

Chapter One

In the first chapter a general introduction to the study is given. This includes the problem statement, objectives, and an overview of the market concerned in the study.

Chapter Two

In chapter two the different elements of brand loyalty as well as their relevance to the market in question are discussed. A detailed literature study on brand loyalty in the B2B environment is presented contrasting differences between B2B and B2C markets as it concerns brand loyalty. The conceptual framework, that forms the base of the study, is presented in detail.

Chapter Three

In chapter three the research methodology is outlined where after the results of the empirical study is presented and discussed.

Chapter Four

Chapter four is the final chapter. It summarises all the findings of the research that was conducted. Conclusions and recommendations of how to improve brand loyalty in the water based paint binder industry are presented. Areas for future research are also identified.

1.7 POSSIBLE IMPACT ON INDUSTRY

Managers can use the information obtained through this study to identify the variables that have a significant impact on brand loyalty and brand equity in a B2B environment. The information can be used to formulate a business strategy to brand their product with focus on the areas that are most likely to contribute to improved brand loyalty and customer retention. Understanding the moderating factors between satisfaction and loyalty enables marketing managers to exploit those factors

to their benefit when trying to increase market share by enticing satisfied potential customers to defect from their current suppliers.

1.8 SUMMARY

In chapter one the concept of brand loyalty in the B2B environment is introduced and compared to the more traditional research field of consumer brand loyalty. The study is motivated by the need to better understand the brand loyalty of rational decision-makers as is found in the B2B environment. The focus of the study is the B2B environment, but more specifically the water based binder industry as viewed by paint manufacturers in South Africa. The objective of analysing brand loyalty in a B2B environment is achieved through the identification of key elements of brand loyalty and measuring their influence on buyer behaviour. The study is based on a literature study on the available body of knowledge as well as an empirical study. The full known population was sampled as it is not very large. The measuring instrument is a version of an instrument developed by Moolla (2010). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity was used together with Cronbach's alpha to analyse the empirical data. The next chapter will comprise a detailed literature study on brand loyalty, with some focus on the B2B environment.

2 CHAPTER 2: BRANDS AND BRAND LOYALTY

2.1 INTRODUCTION

Branding has become a top priority with management in recent years due to a more acute realisation that an organisation's brand is one of its more valuable intangible assets (Keller, 2006:1).

Brand loyalty is affected by numerous factors. A literature review has been conducted to determine which factors influence brand loyalty in the South African paint industry. The aspect that was focussed on was supply of binder, a major component in paint, to the different paint manufacturers. This is seen as a business to business transaction, as the consumer is not directly involved as is the case in the more common business to consumer transactions. The focus of this literature review is to establish which factors are seen as important for brand loyalty in a B2B environment, and what the key perspectives are that businesses that buy from other businesses as it relates to the brand identity, as well as the different elements of a brand.

According to Kotler and Armstrong (2012:255) a brand can be defined as a combination of various aspects of a product or service. Amongst these aspects are the name, sign, symbol or design of the product or service that identifies the maker or seller of the product or service. Customers see the product brand as an important part of the product and as such it can add value to the product. Customers develop relationships with brands that they have come to trust. A brand is about more than the physical attributes of the product, but most often has an emotional component to it. A brand becomes the basis on which numerous special attributes of the product can be built around.

Stewart (2010:1) defines brand as "the sum of the perceptions that are held about you, your company or your products. This includes perceptions held by both external and internal audiences and stakeholders". She argues that a brand is the emotional response or gut-feel that is elicited in a person about a product, an organisation or a service. As the organisation does not have direct control over the perceptions that are held by customers, the customers own the brand, not the organisation.

Marketers have been sceptical of the benefits of branding in a B2B environment (Leek & Christodoulides, 2011:1060). The conventional view is that the organisational decision-making process is a very rational process where product properties and functionality are analysed and focussed upon. There does not seem to be a place for the emotional qualities often associated with brand in a B2C context (Leek & Christodoulides, 2012:106).

In a study by Cater and Cater (2010:1331) it was however found that customers in a B2B relationship seem to value the emotional “we like” more than the rational factors of “we need” and “we benefit” that was thought to apply in a B2B relationship.

Table 2-1:- Consumer and B2B market characteristics

Consumer markets	B2B industrial markets
Emphasis on the tangible product and intangibles in the purchase decision	Emphasis on tangible product and augmented services in the purchase decision
Standardized products	Customized products and services
Impersonal relationships between buyer and selling company	Personal relationships between buyer and salesperson
Relatively unsophisticated products	Highly complex products
Buyers growing in sophistication	Sophisticated buyers
Reliance on mass market advertising	Reliance on personal selling

Source: Mudambi (2002:527)

2.2 OVERVIEW OF THE SOUTH AFRICAN PAINT INDUSTRY

At 275-300 million Litres per annum, the Southern African market is small to medium in world terms but it is the largest paint market in Africa, accounting for over 25% of the Continent's total paint production. Of this, total sales of decorative paints account for 200-240 million litres per annum of which approximately 150 million litres are water based paints. These vary in quality from some of the highest, most premium quality in the world to some of the lowest quality (Green, 2013:1).

The South African paint industry is a closely competed industry. It consists of 91 manufacturers that are registered members of the South African Paint Manufacturers Association (SAPMA). This represents approximately 65 – 70% of the manufacturers in South Africa (SAPMA.org 2013). Of these manufacturers, the majority manufacture water based coatings including architectural paints. A major raw material used in the manufacture of water based paints is a polymer binder, or latex, that functions to bind the pigment particles together to form a continuous, mechanically resilient film (Green, 2013:10). Due to the size of the industry, the manufacture of latex to supply the paint industry is very attractive. In South Africa there are numerous manufacturers of these latices used in the paint industry namely:

- DOW chemicals;
- BASF;
- Synthomer;
- The Synthetic Latex Company;
- Makeean;
- Gold Reef;
- Boehme;
- Scott Bader;
- Sancryl; and
- Clariant.

Source: Interview with Philip Green

Due to the large number of manufacturers there is more manufacturing capacity than is needed which causes the market to be very competitive and price sensitive. The market leaders in the industry namely DOW, BASF and Synthomer are all large

multinational companies with well-established and respected brands. Customers using these brands seem to be willing to pay a premium to use them as the quality and performance of products from these brands are perceived to be superior. All the other manufacturers offer similar products, with varying levels of customer loyalty.

2.3 BRAND LOYALTY

Brand loyalty as defined by Investopedia is when consumers become committed to your brand and make repeat purchases over time. Brand loyalty is a result of consumer behaviour and is affected by a person or company's preferences. Loyal customers will consistently purchase products from their preferred brands regardless of convenience or price (Investopedia, 2013)

Companies that succeed in cultivating loyal customers develop brand ambassadors. These customers will talk positively about a brand among their peers. This is free word-of-mouth marketing and is often very effective.

Brand loyalty offers benefits like a willingness to pay a higher price, costing less to serve the customer and increasing the number of customers through the attraction of new ones. One of the benefits of brand loyalty, is the lower cost of customer retention compared to the cost of new customer acquisition. The lower costs are linked with serving repeat purchaser as well as increased revenues due to the willingness to buy at premium prices (Khan & Mahmood, 2012:33).

While most work on brand loyalty and equity have been done in consumer markets, the role and importance of brand equity in the B2B sector has also received attention in the past decades. Early studies were however less conclusive on the relative impact of the brand (Alexander *et al.*, 2009:2).

Extensive research on the measurement of brand loyalty including the constructs regarded as important influences in establishing brand loyalty was conducted by Moolla (2010:21).

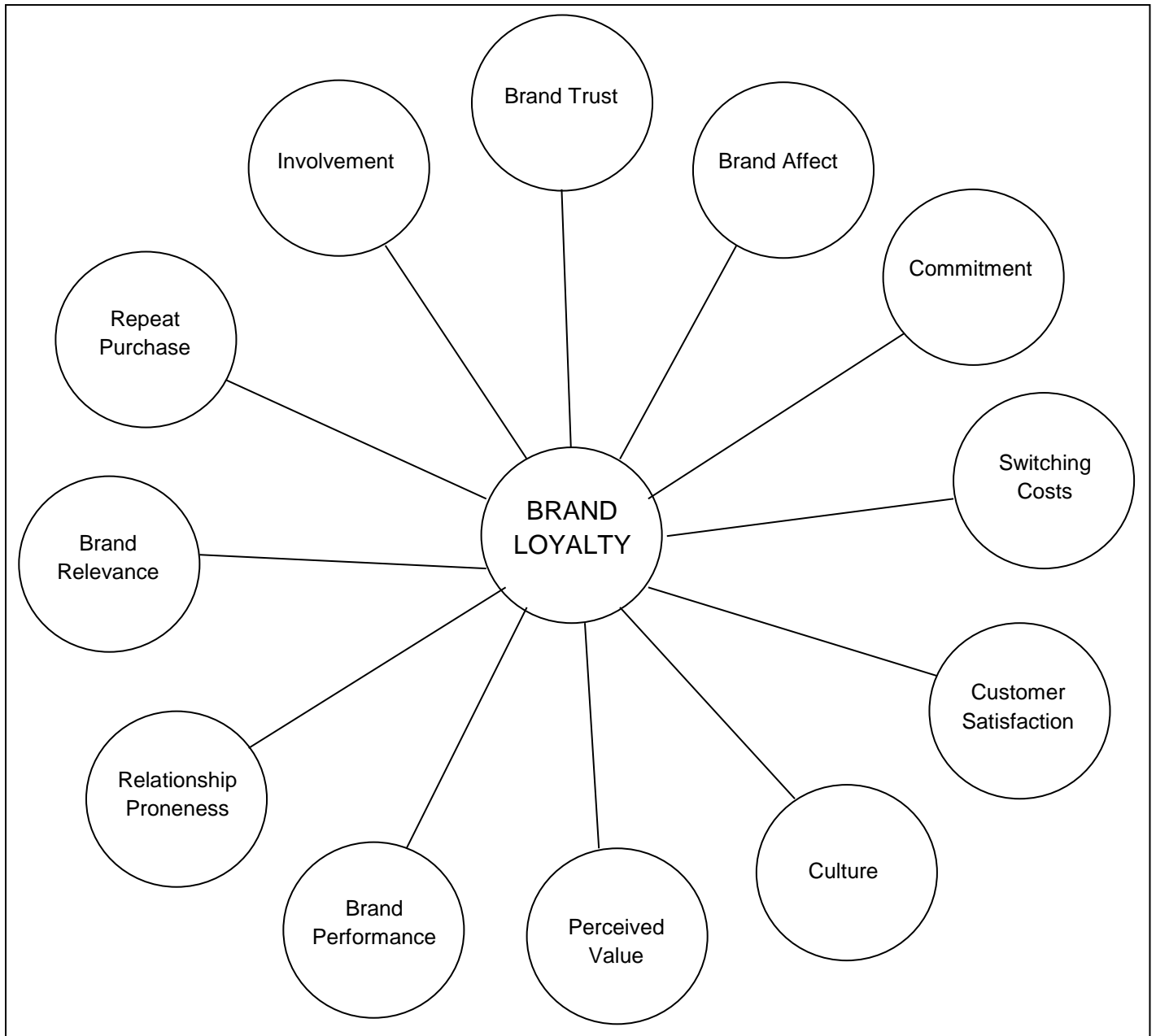


Figure 2-1 - Conceptual Brand Loyalty Framework

Source: Moolla (2010:21)

This study found that there are twelve major factors that influence brand loyalty. These are:

- Customer satisfaction;
- Switching costs;
- Brand trust;
- Repeat purchase;
 - Purchase frequency; and

- Purchase pattern;
- Involvement;
- Perceived value;
 - Price and quality; and
 - Social and emotional.
- Commitment;
- Relationship proneness;
- Brand affect;
- Brand relevance;
- Culture; and
- Brand performance.

2.3.1 Customer satisfaction

The level of satisfaction that a customer experiences when he buys a product depends on the product's perceived performance relative to a buyer's expectations. If the product's performance falls short of expectations the customer is dissatisfied. If the product performs as expected, the customer is satisfied. If the product performs better than expected, the customer is delighted. Most studies show that higher levels of customer satisfaction lead to greater customer loyalty, which then leads to better performance for the company. The objective of a firm is to deliver high customer satisfaction relative to competitors, but it does not attempt to maximise it, as the resulting cost may lead to lower profits (Kotler & Armstrong, 2012:37).

Customer satisfaction in the business to business context can be defined as a positive affective state resulting from the evaluation of all aspects of a firm's working relationship with another firm (Geyskens *et al.*, 1999:234).

Customer satisfaction can typically be conceptualized in two ways namely service encounter or transaction specific satisfaction and secondly overall or cumulative satisfaction (Bolton & Drew, 1991:375).

While transaction specific satisfaction may give specific diagnostic information about a particular product or service encounter, cumulative satisfaction, or satisfaction that

accumulates over a number of transactions or encounters is a more fundamental indication of the firm's past, current and future performance (Oliver *et al.*, 1997:314).

Lam *et al.* (2004:296) argue that there are two dimensions to customer loyalty namely repeat patronage, or customer retention and the recommendation to other customers, which relates to attraction. They found that these two dimensions are positively related to customer satisfaction and switching costs. Satisfied customers seem willing to repeat patronising the service provider, and are also likely to recommend the service to other customers. The same researchers also found that while customer satisfaction completely mediates impact of customer satisfaction on the recommend dimension, the mediation is only partial for the patronage dimension. Further to this, they argue that it appears that customers are mainly driven by their affective (satisfaction) in recommending a service to other potential customers, but are influenced by both their satisfaction and perceived value of a product or service when considering whether to use that product or service again.

2.3.2 Switching costs

Heide and Weiss (1995:32) define switching costs as the costs involved in changing from one supplier to another.

Switching costs encompasses monetary costs and non-monetary costs like time spent and psychological effort. It can also include the loss of loyalty benefits as a result of ending the current relationship with a supplier (Heide & Weiss, 1995:33). A customer may make transaction specific investments on a relationship with a particular supplier, and the customer may have also developed specific routines and procedures to deal with this supplier. These investments and familiarity with specific procedures will form part of the total switching costs as they will be rendered useless if the relationship is terminated (Jap & Ganeson, 2000:241).

Switching costs may also reflect the dependence on a certain supplier. This refers to a buyer's need to maintain the relationship with a specific supplier to achieve certain desired goals (Frazier, 1983:159).

Switching costs, which can be in the form of monetary expenses, time and psychological effort, helps the supplier to retain its customers. Additionally, switching costs seem to encourage customers to recommend the product or service

to other customers, possibly due to the link between switching costs and the benefit that is derived from the relationship between the customer and this particular supplier. Some of the mentioned relationships have been studied by researchers in a B2C setting; it was found that it is also valid in a B2B setting (Lam *et al.*, 2004:307).

2.3.3 Brand trust

Anderson and Narus (1990:45) define trust in a business to business environment as the tendency of a buyer to feel that the supplier is credible and caring and that the buyer believes that the supplier and its employees will perform actions that will result in positive outcomes and will not behave in an unexpected manner with negative outcomes.

Doney *et al.* (2007:1099) support the view that trust encompasses two essential elements namely credibility and benevolence. Trust that a partner will stand by his words fulfils promised role obligations and is sincere, has the result that the partner is perceived as credible. Trust in a partner's benevolence is a belief that the partner is interested in the wellbeing of the firm and will not take unexpected actions with a negative impact on the firm. A firm therefore has to judge the reliability and integrity of the partner firm.

Moorman *et al.* (1993:82) view trust as a behavioural intention or behaviour that indicates a reliance on a partner and involves vulnerability and uncertainty.

Doney and Cannon (1997:36) define trust in buyer seller relationships as "the perceived credibility and benevolence of a target of trust". This definition seems to be relevant in a B2B environment as buyers try to reduce the risk surrounding the purchase of the product or service by selecting a firm they can trust. These are firms that are deemed as capable of performing reliably and have showed that it is interested in the buyer's well-being (Doney *et al.*, 2007:1099).

Rauyruen *et al.* (2009:182) found that perceptions of service quality and trust of a supplier play an important role in influencing customer loyalty in a B2B context. They also found that trust in a supplier contributes to attitudinal loyalty, demonstrating how important it is to manage the brand and to portray a good and reliable image of the whole organisation.

2.3.4 Involvement

The involvement construct is crucial when the purchasing process of individuals as well as business-to-business consumers is considered, especially as it pertains to brand loyalty (Bennet *et al.*, 2005:99).

A central aspect of relationship marketing is communication with customers. Customers need to be involved in a marketing dialogue in order to achieve brand involvement and loyalty. This in turn affects the prospects of establishing a positive market relationship (Anderson, 2005:285). Anderson (2005:288) further argues that involving customers in product or service activities may support brand involvement, as it allows customers to have an influence in product development.

Martin (1998:9) referred to involvement as the degree to which a consumer has psychological identification and affective, emotional ties with the stimulus. In this context he refers to the stimuli as the product category or specific brand. He further argues that the complexity and intensity of the customer's attitudes and feelings towards the brand they are very involved with extends beyond the simple preference of one brand over another. Customers that are very involved with a brand may actually perceive a relationship with the particular brand.

Bennet *et al.* (2005:104) found that involvement decreased with experience, providing evidence that involvement is highest with the early experiences with the particular product or service. It is believed that gains more experience with a product, and it becomes more familiar to the purchaser, the level of decision-making and information seeking is reduced. Therefore as the purchase becomes more of a routine procedure, the less the likelihood is of the purchaser becoming involved and the more likely it becomes that the buying experience will become a habit, supporting loyalty to that brand.

2.3.5 Commitment

Glynn (2007:404) defines commitment as the desire of the customer to continue using the brand. Customer commitment to the brand could also mean that the customer could offer additional business opportunities to that manufacturer.

Relationship commitment can be seen as the belief of an exchange partner that continuing the relationship with another is so important that it justifies maximising

efforts at maintaining it. The committed party is worth working on to ensure that the relationship continues indefinitely (Morgan & Hunt, 1994:23)

Important aspects of commitment are that it is enduring and that it reflects a positive valuation of the relationship. People are unlikely to be committed to something that they do not value, but if they do, the commitment does not change often. Trust increases the extent to which partners engage in risky exchanges, therefore trust should increase the likelihood that customers will become committed to a relationship (Moorman *et al.*, 1992:316).

According to Fullerton (2005:99) commitment typically has two components namely affective commitment and continuance commitment. If a consumer trusts and enjoys doing business with a partner he is affectively committed to that business partner. Customers experience continuance commitment if they are bound to their partner because they perceive it as difficult to get out of the relationship and they see few alternatives. This may be due to the scarcity of alternatives, side-bets and switching costs. In a business-to-business environment contractual arrangements are one of the main reasons for continuance commitment.

Cater and Cater (2010:1322) suggest that there are actually more components, and also includes positive calculative, negative calculative and normative commitment as components of commitment. According to Sharma *et al.* (2006:71) negative calculative commitment or locked-in commitment refers to staying in the relationship due to a lack of alternatives or perceived switching costs. This is similar to Fullerton's (2005:99) continuance commitment. Positive calculative commitment stems from a rational calculation of benefits arising from continuing the relationship. Normative commitment is described as an attachment due to feeling obligated to stay with the particular brand. The relationship is continued due to moral imperatives (Sharma *et al.*, 2006:71).

2.3.6 Perceived value

While literature contains a variety of definitions of customer perceived value, three elements that are common to almost all are the following:

- Value has multiple components;
- Value perceptions are subjective; and

- Competition is important (Eggert & Ulaga, 2002:110).

Eggert and Ulaga (2002:110) defines customer perceived value in business markets specifically, as the perception of key decision makers in the customer's organisation of the trade-off between the multiple benefits and sacrifices of a supplier's offering, taking into consideration the available alternative suppliers' offering in a specific use situation.

Work by Molinari *et al.* (2008:369) found positive word of mouth to be a very important issue regarding customer perceived value, that is, what customers perceive they are giving for what they perceive they are getting. Positive word of mouth works directly and indirectly through value. It is important to the value of the brand that customers spread the word about the good service they received from the company.

Customers tend to be more loyal to a company if they perceive that they are receiving greater value than they would if they were buying from a competitor. Although the importance of customer loyalty in marketing theory and practice is acknowledged, and some attempts made to investigate the relationships between customer satisfaction, switching costs, loyalty and customer value in B2C settings, the complex interrelationships between these constructs, especially in the B2B environment, are still not well understood (Lam *et al.*, 2004:294).

2.3.7 Repeat purchase

Repeat-purchase as defined by businessdictionary.com (2013) is "the buying of a product by a consumer of the same brand name previously bought on another occasion." Repeat purchase behaviour is often used by marketing research professionals as a measure of brand loyalty.

Patterson and Spreng (1997:428) found that satisfaction has a significant effect on repurchase intentions; the effect of value on repurchase intentions was not significant. They found, however, that the effect of value on repurchase intention is mediated through satisfaction.

How customer satisfaction translates into repeat purchase behaviour is central to relationship marketing. Studies have, however, found that satisfaction alone is not a strong predictor of repurchase behaviour (Paulssen & Birk, 2007:983). It is important

to take moderating variables into account when evaluating repurchase behaviour in a business-to-business setting (Paulssen & Birk, 2007:995).

This is clearly illustrated by Reichheld (1996:58) who reports that although around 90% of industry customers report that they are satisfied or even very satisfied with their current product or service, only between 30% and 40% actually repurchase.

Patterson (2004:1312) also found that satisfaction retains customers leading to repurchase, but that it operates with differential impact depending on various perceived switching barriers. Switching barriers that were identified and found to moderate the satisfaction-repurchase behaviour was cost (time, inconvenience) of looking for a new service provider, the loss of a friendly and comfortable relationship, risk perceptions, loss of special privileges, learning costs and having to educate a new provider about personal preferences all moderate the nature of the relationship between satisfaction and repeat purchase. Firms should actively consider how these barriers may be employed to retain customers and ensure repeat purchase.

2.3.8 Brand affect

Brand affect can be defined as a brand's potential to extract a positive emotional response in a consumer as a result of its use (Chaudhuri & Holbrook, 2001:82).

The emotional attachment construct is well aligned with the affective basis of truly loyal repurchasing. Marketers can induce steadfast repurchase behaviour by influencing antecedents of emotional brand attachment (Grisaffe & Nguyen, 2011:1057).

According to Grisaffe and Nguyen (2011:1057) there are five primary antecedents possessing different degrees of marketer controllability.

- **Antecedents 1 & 2** – Superior marketing characteristics and traditional customer outcomes. These two were discussed together as they are closely linked. Brands with superior marketing characteristics produce customer outcomes fundamental to marketing efforts.
- **Antecedent 3** – user derived benefits. One such benefit is the construction or reinforcement of identity. When a brand helps a consumer to reach self and social oriented goals, a strong attachment forms.

- **Antecedent 4** – Socialisation and intergenerational influence. This also produces emotional brand attachment. Family based brand adoptions, learning within trusted family contexts also seem to lead to strong brand attachment.
- **Antecedent 5** – Sentimental or emotional memories. Affective laden memories also lead to emotional brand attachment. These types of memories symbolise nostalgic events or memories, people or eras.

Many of these antecedents that are present in normal B2C environments do not seem to fit well in the B2B environment.

According to Lynch and De Chernatony (2004:404) the limited work on business branding to a large extent ignored the role of emotion and the extent to which organisational purchasers may be influenced by emotional brand attributes. Organisational buying behaviour is based on structure, process and content. The content aspect refers to the criteria used to make a procurement decision. These are normally described in terms of economic and non-economic criteria. The economic factors include things like price, specification, delivery, quality, reliability and customer service. As B2B buyers are assumed to be more knowledgeable about the products they buy, as well as more rational in their decision-making, more emphasis has traditionally been placed on influencing these considerations. This focus on rationality has supported the view that an organisational buyer is rational, not emotional in making a buying decision. Lynch and De Chernatony (2004:415) further argue that there is evidence of the recognition of the possible value that can be added through the establishment of an emotional connection with buyers in some markets. Lynch and De Chernatony (2004:415) found that organisational purchasers are influenced by both emotional and rational brand values. By acknowledging this finding, B2B sales organisations can incorporate the power of emotion into their brand communications.

2.3.9 Relationship proneness

Customer relationship proneness can be defined as a customer's relatively stable and conscious tendency to engage in relationships with retailers of a particular product category (De Wulf *et al.*, 2001:38).

Parish and Holloway (2010:62) propose that customer relationship proneness has a positive effect on providers, manifesting as trust and commitment. Relationship prone customers tend to view their relationships in a very positive way, only seeing what is good about the relationship. They are therefore likely to be more trusting of service providers. Maintaining a relationship with his service provider can make a customer reluctant to defect because of their high levels of trust and commitment. Their results indicate that relationship proneness impacts two key outcomes namely the share of customer and adherence.

According to Odekerken *et al.* (2003:180), consumer relationship proneness refers to the stable tendency of consumers to engage in relationships with their suppliers and can therefore be considered a personality trait. It is emphasized that there is in this instance a conscious tendency to engage in relationships. This is different to normal loyalty based on inertia or convenience.

Odekerken *et al.* (2003:187) also show that consumers are likely to be more willing to establish a relationship when their involvement is high for certain product categories. It provides support for the notion that product category involvement underlies the other individual characteristics of consumers such as relationship proneness.

As relationship proneness is seen as a personality trait, organisations as a whole do not seem to be predisposed towards relationship proneness. Little literature could be found that measures the impact of relationship proneness on business-to-business transactions.

2.3.10 Brand relevance

Building strong brands is not necessarily a good strategy for all industries. The reason for this is that brands are not equally important to purchasing decisions in every market. Brand relevance is defined as “the degree to which the brand plays a key role in consumers’ choice process for a product in a given product category” (Hammerschmidt *et al.*, 2008:49).

Fischer *et al.* (2010:824) argue that brand relevance in category (BRiC) refers to the decision weight a brand carries relative to other product benefits in a specific

category, for example, price, assuming that the brand provides benefit to the customer like a reduction in perceived risk.

Backhaus (2011:1083) proposes that the assessment of brand relevance is important for three reasons. Firstly there is evidence that brand relevance differs across categories in B2B markets (Glynn, 2012:671). Secondly, brand building investment strategies in categories with low brand relevance levels are likely to be a waste of money as these investments are not likely to generate good financial returns. In categories where there is high brand relevance, customers are more willing to pay for a brand and exhibit improved loyalty, translating into better returns on investment (Fischer *et al.*, 2010:826). Thirdly brand relevance is linked to brand equity. Only brands that influence decision-making can be strong brands. Drivers of brand relevance are therefore worthwhile to consider (Backhaus, 2011:1083).

Brand relevance in a B2B environment differs for different customers. Mudambi (2002:530) defined three customer groups namely: highly tangible, branding receptive and low interest. Members of the first group pay close attention to price and measureable attributes with little regard for intangibles such as brand. The last group does not care about any of these attributes, while only the brand receptive group pays attention to branding.

Backhaus *et al.* (2011:1089) found that if a brand lowers the perceived risk of the purchase decision it strongly influences the importance of the brand. Compared with B2C markets Backhaus *et al.* (2011:1089) found that the brand function rank order is reversed, with functional benefits outweighing emotional benefits in industrial transactions. Backhaus *et al.* (2011:1089) also found that significant differences in brand relevance exist across product categories in the B2B context. It is therefore feasible to concentrate investment in categories with higher brand relevance.

2.3.11 Brand performance

Brand performance and the measurement thereof are of great importance to brand managers in all industries. According to Chaudhuri and Holbrook (2001:81) typical outcomes of good brand performance is a greater market share and a premium price as compared to the leading competitor. This may result from greater customer loyalty, which in turn may be determined by trust in the brand and feelings of affect

towards the brand. Market share is a relatively straightforward measure of brand performance. Relative price in this context is defined as the price of a specific brand relative to that of its leading competitor. Relative price is used as an aspect of brand performance with the prerequisite that the price should be considered in conjunction with the costs of maintaining the brand.

Chauduri and Holbrook (2001:89) also found that the two components of loyalty namely purchase loyalty and attitudinal loyalty has different outcomes in terms of brand performance. Purchase loyalty explains market share but not relative price, while attitudinal loyalty explains relative price but not market share.

Mudambi (2002:532) argues that B2B branding highlights the importance of the buyer's perspective. If a buyer is faced with the purchase of a new or unfamiliar purchase, the company brand can signal expected brand performance. Buyers will often turn to the top performing brand. There is however more to a top performing brand than market share. If the leading brand does not correspond to the buyer's priorities, it does not provide good value.

The power of branding is evident from the effect of brands on share price. The financial market performance of 23 of the 30 German DAX companies were compared, and showed that companies with strong brands recovered significantly faster from the stock market slump after the 9/11 terrorist attacks than the companies with the weaker brands. Strong performing brands provide companies with a higher return. B2B companies need to revise their worth as measured strictly by physical assets, and embrace the value of a strong brand (Kotler & Pfoertsch 2007:359).

Brand performance is also often measured by how loyal customers are in repeat purchases. This is often expressed as a percentage of the total, for example, 10% of the customers were 100% loyal to the brand. This, together with measures of how many customers buy the brand and how often, are routinely reported as brand performance. Ehrenberg *et al.* (2004:1307) found that big and small brands differ greatly regarding how many buyers they have, but far less in how loyal these buyers are. These measures for most brands were found to be spread around a normal average and largely dominated by predictable patterns of buyer behaviour. In the

B2C setting, customers mostly choose from a split-loyalty list, typically buying one brand more than the other.

2.3.12 Culture

Past research on cultural issues has shown that culture can have a strong influence on consumers' values, perceptions and actions (Chow *et al.*, 2000:89).

Such influences can have significant business implications for marketers, especially those that operate in international markets. Marketing decisions on product development, distribution, pricing and communication can be affected by cultural values (Lam, 2008:7).

Hofstede (1985:347) identified four dimensions of culture:

1. **Power distance**, which is the extent to which members of a society accept that power, is not distributed equally in organisations.
2. **Uncertainty avoidance**, which is the degree to which members of a society feel uncomfortable with uncertainty. This leads them to support beliefs that promise certainty.
3. **Individualism**, which is a preference of individuals to take care of themselves and their immediate families only as opposed to *collectivism* which stands for a preference for close communities taking care of each other in exchange for loyalty.
4. **Masculinity**, which is a preference for heroism, achievement, assertiveness and material success, as opposed to *Femininity* which is a preference for relationships, modesty and quality of life. In a masculine society the woman also prefer assertiveness, while in a feminine society the men also prefer modesty.

Lam (2008:15) studied individual's proneness to brand loyalty using the four cultural aspects identified by Hofstede (1985:347) and found that respondents scoring high in individualism were less likely to switch brands, whereas low scorers tended to follow group norms, making them more likely to switch brands. People scoring high in uncertainty avoidance, or less risk taking appetite, also had greater proneness to brand loyalty. Masculinity or assertiveness was not found to have a significant effect on proneness to brand loyalty. People with low power distance are not much

influenced by the higher power group and would be expected to be more brand loyal, but this also was not found to be the case.

The significance of cultural effect on proneness to brand loyalty has important implications for companies selling across national and international cultures, but also within geographical boundaries (Lam, 2008:15).

In a study in the business-to-business service industry it was stressed that relationship management almost certainly has a culture specific element to it. Culture influences how managers behave and make decisions and may have an impact within the broader conceptualisation of trust antecedents in a business-to-business setting. (Gounaris, 2005:137).

Another element of culture's effect on brand loyalty is the somewhat indirect assertion that a company in a business-to-business environment should establish a corporate culture within the organisation of "living the brand". This has a strengthening effect on the brand (Baumgarth, 2010:666).

2.4 SUMMARY

To be successful in the business-to-business world, a branding approach is required that covers everything from the design and development of marketing programs, to the implementation processes and activities that are interconnected and interdependent. Marketing, and especially brand management, will be critical to a company's success in the future (Kotler & Pfoertsch, 2007:361).

This chapter gave a brief overview of supply of binder (latex) into the South African paint industry as an illustration of a typical industrial business-to-business relationship in which the study of brand loyalty was performed.

A literature review of brand loyalty, its constructs and how these constructs influence brand loyalty was conducted. The constructs were defined and a general overview given of each of the constructs. The literature review was conducted from the specific viewpoint of the business-to-business environment. Each of the constructs was reviewed for relevance in the business-to-business environment according to the currently available body of knowledge. The volume of available literature on

branding and brand loyalty in the business-to-business environment seems to only start in significant amounts from 2000 onwards as the interest into this field is growing but still lagging behind the large body of knowledge that is available in the business-to-consumer markets. The framework proposed by Moolla (2010:21) for use in the fast moving consumer goods sector served as the guideline for the review. Applicability of each of the elements was discussed in the B2B context where possible.

The next chapter will discuss the research methodology that was followed as well as results and statistical analysis of the research data that was collected.

3 CHAPTER 3: RESEARCH METHODOLOGY AND RESULTS

3.1 INTRODUCTION

This chapter presents the research methodology and the empirical results of the study. The brand loyalty influences that were identified in the literature study were validated, measured and reported on. The chapter is divided into three parts namely:

- Research methodology
- Statistical analysis
- Discussion of the results

The first section describes the population, the sample, as well as the methods used to administer the questionnaire and collection of data.

The second section of the chapter deals with the statistics used to analyse the data. It is shown that the conceptual framework developed by Moolla (2010) is validated by means of factor analysis and tested for reliability by using Cronbach's alpha. Thereafter brand loyalty was measured by means of inferential statistics. The importance of the respective brand loyalty influences are discussed and also correlated with selected demographic profiles.

3.2 RESEARCH METHODOLOGY

The research methodology (as presented in Chapter 1) refers. The data for this study was collected using a validated brand loyalty questionnaire developed by Moolla (Moolla & Bisschoff, 2010). This questionnaire was specifically developed to measure brand loyalty. A seven point Likert scale was used in the questionnaire, ranging from "strongly disagree" to "strongly agree". The questionnaire is attached as Annexure A.

The population of this study consists of all South African water based paint manufacturers. Convenience sampling was used. The SAPMA members' list was used as a starting point and expanded to include manufacturers that are not SAPMA members, but are known to the researcher. A total of 110 questionnaires were emailed. No sample was drawn and the population of 110 was targeted. Where

possible, respondents were personally visited to collect completed questionnaires. Several follow-up telephone calls were also made to urge the respondents to complete and return the questionnaires. Even after several reminders, a total of 51 completed questionnaires were received back. This signifies a 46% response rate. All questionnaires indicated as received were completed fully. Where questionnaires were incomplete, the respondent was contacted to obtain the missing information.

The data were analysed with a statistical program called “Statistical Package for the Social Sciences (SPSS) version 21 (SPSS, 2013).

3.3 RESULTS

3.3.1 Demographic profile

The general demographic profile of the respondents includes age, gender and ethnicity and is represented in Figures 3.1 – 3.3. Demographic information of the company and related information included the province the business the respondent represents reside in, the respondent’s position in the company as well as the company annual turnover. This information is represented in figures 3.4 – 3.6.

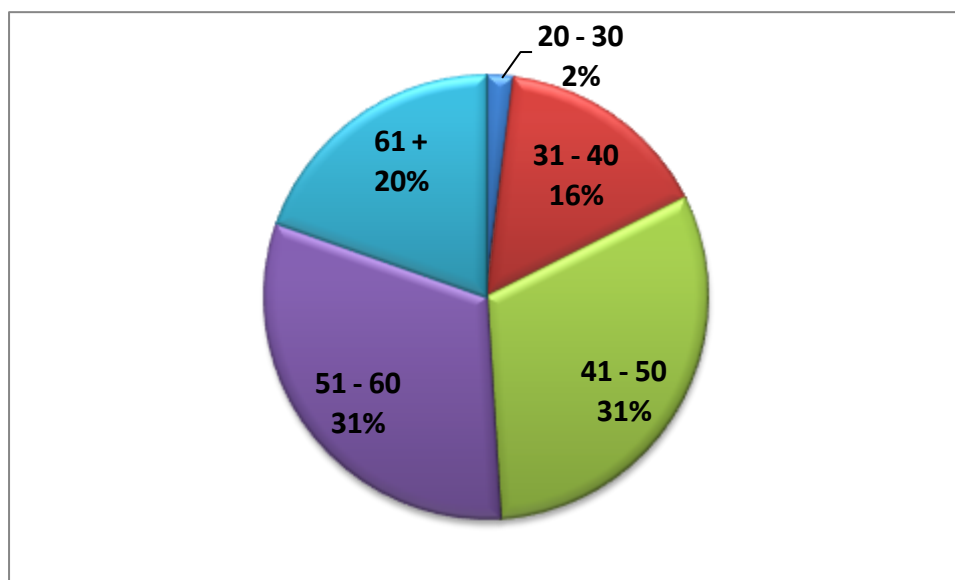


Figure 3-1: AGE GROUP

Figure 3.1 illustrates that the majority of the respondents (98%) are older than 30 years old. This is a result of the fact that most of the respondents are in a relatively senior position in the company they represent. Beyond 30 years old, there is a

relatively even age distribution. Another interesting statistic is that more than half (51%) of the respondents were over 50 years old.

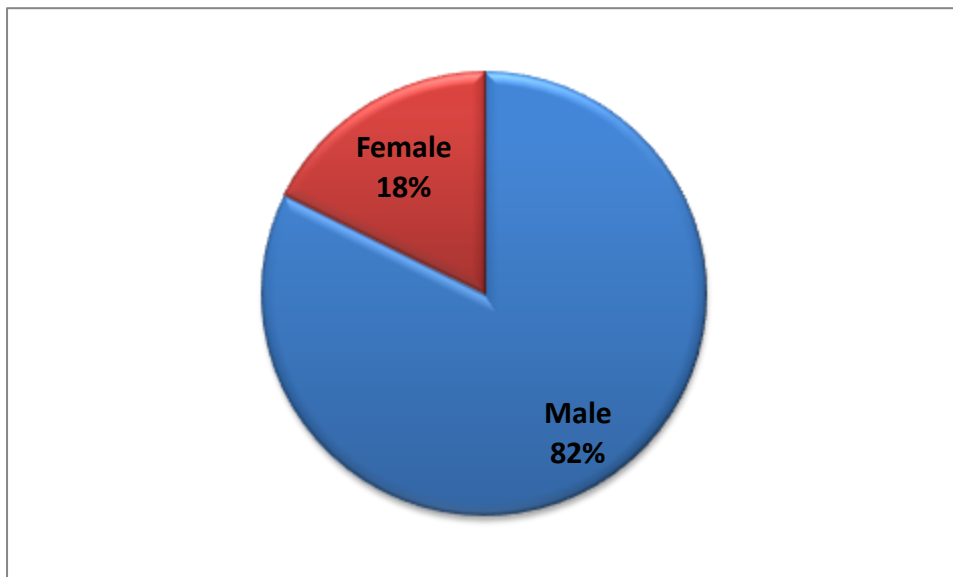


Figure 3-2: GENDER

Figure 3-2 represents the results in terms of gender. By far the majority of respondents were male (82%). This is not unexpected because the majority of employees in the paint industry are male.

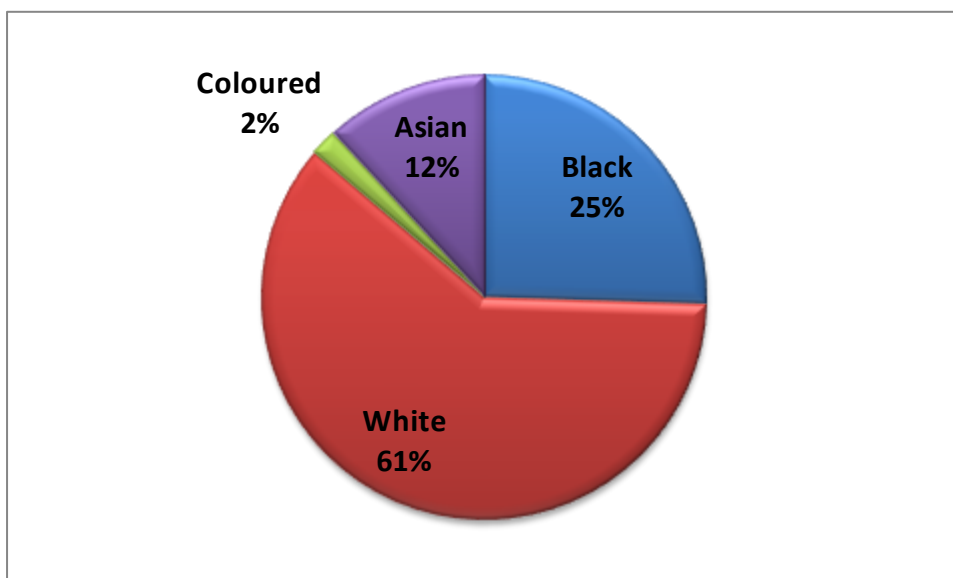


Figure 3-3: ETHNICITY

Figure 3-3 depicts the ethnicity profile of the respondents who completed the survey questionnaires. The majority of the respondents were White (61%) followed by Blacks (25%) and Asians (12%). Only 2% of the respondents were Coloured.

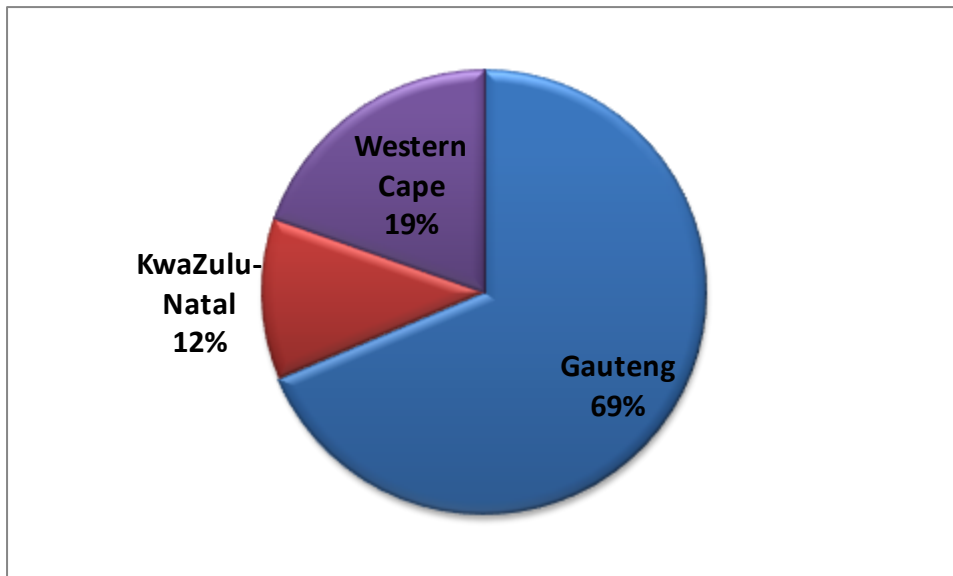


Figure 3-4: BUSINESS LOCATION

Figure 3-4 represents the distribution of locations of the businesses that the respective respondents represent. The majority of businesses were located in Gauteng (69%), followed by the Western Cape at 19% and KwaZulu-Natal at 12%. No responses were received from any of the remaining six provinces. The reason for this distribution is due to the fact that outside of these provinces there is very little paint manufacturing activity. By far the most activity in this industry is in Gauteng.

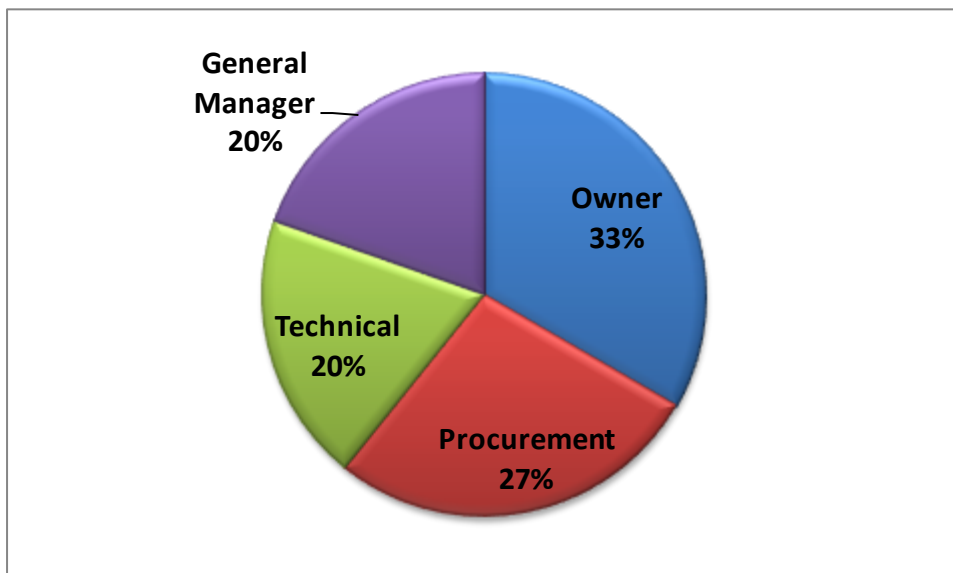


Figure 3-5: POSITION IN THE COMPANY

Figure 3-5 depicts the results in terms of the position or role the respondent fulfils in the company it represents. A slight majority of the respondents (33%) were

Owners/Director in the company they represent followed by Procurement at 27%, Technical at 20% and General Managers at 20%.

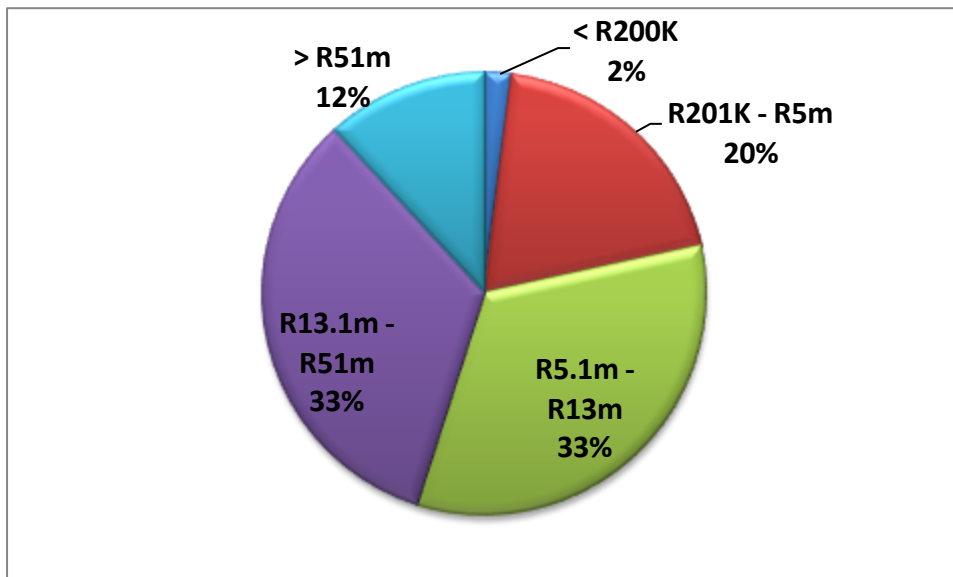


Figure 3-6: BUSINESS ANNUAL TURNOVER

Figure 3-6 illustrates that 98% of the respondents represented companies that had annual turnovers in excess of R200K. 20% fell between R201K and R5m, 33% each for R5.1m – R13m and R13.1m – R51m. 12% of the represented companies had annual turnovers in excess of R51m. According the National Small Business Act (102 of 1996) (SA, 1996) business size in the manufacturing sector is classified according to annual turnover as follows:

- Micro - < R200K
- Very small – R201K – R5m
- Small – R5.1m – R13m
- Medium – R13.1m – R51m
- Large - > R51m.

Most of the businesses in this study fall in the small to medium category (66%).

3.4 VALIDITY OF RESEARCH INSTRUMENTS

The validity of the questionnaire was determined by the use of exploratory factor analysis to confirm that the questions formulated to measure each of the brand loyalty influences actually do statistically group (load) together.

The suitability of using factor analysis as a validation tool was checked by applying the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) as well as the Bartlett's test of Sphericity. The generally accepted norm is to achieve KMO > 0.70 and the Bartlett's sphericity significance at $p < 0.05$. However, Field (2005:640) reasons that a KMO of between 0.5 and 0.7 is mediocre, but sufficient for pilot studies. The KMO assesses the assumption that there is latent structure to the data.

Bartlett's test for sphericity tests the null hypothesis that the items in the questionnaire correlation matrix are uncorrelated. The null hypothesis will be rejected at $p < 0.05$, proving that the correlation matrix does not have an identical matrix (Field, 2005:644).

3.4.1 Customer satisfaction (CUS)

The *Customer Satisfaction* tests are summarised in Table 3.1.

Table 3-1: KMO and Bartlett's Test - Customer Satisfaction

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		
		.589
Bartlett's Test of Sphericity	Approx. Chi-Square	41.415
	df	10
	Sig.	.000

The KMO score is lower than 0.7 which means the data should be treated with caution. It is however higher than the minimum of 0.5 required for analysis. The Bartlett's p-value is satisfactory at 0.000. This means that the data can be used for factor analysis, but it should be interpreted with caution regarding the adequacy of the sample.

Table 3-2: Factor Analysis of Customer Satisfaction

	Question	Factor	
		1	2
CUS03	My loyalty towards a particular binder brand increases when I am satisfied with that brand	.713	
CUS02	Distinctive product attributes in binders keep me brand loyal	.690	
CUS05	I attain pleasure from the binder brands I am loyal towards	.581	
CUS04	I do not repeat a purchase if I am dissatisfied with a particular binder brand		.812
CUS01	I am very satisfied with the binder brand I purchase		.521

Factor analysis of the *Customer Satisfaction* influence indicates that there are two factors within the influence. *Customer Satisfaction* is characterised by sub-factor 1 consisting of questions CUS03, CUS02 and CUS03 and sub-factor 2 consisting of questions CUS04 and CUS01. All the questions have satisfactory factor loadings.

The total variance explained is 67.4% with sub-factor 1 explaining 39.6% and sub-factor 2 explaining 27.9% of the variance.

3.4.2 Switching costs (SCR)

The *Switching Costs* results are summarised in Table 3.2. The KMO score is lower than the desired 0.7, but higher than 0.5. The Bartlett's p-value is good, measured at 0.000. The results should be treated with caution as the sampling adequacy is marginal.

Table 3-3: KMO and Bartlett's Test - Switching Costs

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.618
Bartlett's Test of Sphericity	Approx. Chi-Square	67.195
	df	10
	Sig.	.000

Factor analysis of the *Switching Cost* influence indicates that there are two factors likely to be present within this influence. The *Switching Cost* influence is characterised by sub-factor 1 consisting of SCR03, SCR01 and SCR02. Sub-factor 2 is characterised by SCR05. SCR04 is omitted due to a low factor loading. The rest of the questions have satisfactory factor loadings.

Table 3-4: Factor Analysis of Switching Cost

Question		Factor	
		1	2
SCR03	I avoid switching binder brands due to the risks involved	.845	
SCR01	I do not switch binder brands due to the effort required to reach a level of comfort	.770	
SCR02	I do not switch binder brands due to the high cost implications	.734	
SCR05	I prefer not to switch binder brands as I stand to lose out on the benefits from loyalty programmes		.707
SCR04	I switch binder brands according to the prevailing economic conditions		.355

The total variance explained is 71.2%, with sub-factor 1 explaining 44.2% and sub-factor 2 explaining 27% of the variance.

3.4.3 Brand trust (BTS)

The *Brand Trust* results are summarised in Table 3.3. The KMO score is lower than the desired 0.7, but higher than 0.5. The Bartlett's p-value is good, measured at 0.000. The results should be treated with caution as the sampling adequacy is marginal.

Table 3-5: KMO and Bartlett's Test - Brand Trust

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.536
Bartlett's Test of Sphericity	Approx. Chi-Square	60.671
	df	6
	Sig.	.000

During the extraction, the communality of a variable exceeded 1.0 and the extraction was terminated. Since communalities are squared correlations, you would expect them always to lie between 0 and 1. It is a mathematical peculiarity of the common factor model, however, that final communality estimates might exceed 1. If a communality equals 1, the situation is referred to as a Heywood case (SAS, 2011), and if a communality exceeds 1, it is an ultra-Heywood case. An ultra-Heywood case implies that some unique factor has negative variance, a clear indication that something is wrong. The likely cause in this case is not enough data to provide stable estimates. An ultra-Heywood case renders a factor solution invalid. A rotated factor solution for this influence was therefore not possible. This means that the questions measuring the influence could not statistically be validated. Although the influence is retained based on the validation by Moolla (2010), the importance of the influence should be interpreted with this limitation in mind.

3.4.4 Repeat Purchase (RPR)

Table 3-6: KMO and Bartlett's Test - Repeat Purchase

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.563
Bartlett's Test of Sphericity	Approx. Chi-Square	38.041
	df	6
	Sig.	.000

The *Repeat Purchase* results are summarised in Table 3.6. The KMO score is lower than the desired 0.7, but higher than 0.5. The Bartlett's p-value is good, measured at 0.000. The results should be treated with caution as the sampling adequacy is marginal.

Table 3-7: Factor Analysis of Repeat Purchase

Question		Factor 1
RPR03	I maintain a relationship with a binder brand that focuses and communicates with me	.803
RPR01	I prefer to maintain a long term relationship with a binder brand	.722
RPR02	I maintain a relationship with a binder brand in keeping with my personality	.442
RPR04	I have a passionate and emotional relationship with the binder brands I am loyal to	.363

Factor analysis of the *Repeat Purchase* influence indicates that all the questions loaded onto one factor. All the questions, except RPR04 have satisfactory factor loadings (> 0.4). RPR04 is omitted from further analysis.

The total variance explained is 50.6%. *Repeat Purchase* is therefore adequately measured by questions RPR01, RPR02 and RPR03

3.4.5 Involvement (INV)

Table 3-8: KMO and Bartlett's Test - Involvement

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.530
Bartlett's Test of Sphericity	Approx. Chi-Square	56.378
	df	6
	Sig.	.000

The *Involvement* results are summarised in Table 3.8. The KMO score is lower than the desired 0.7, but higher than 0.5. The Bartlett's p-value is good, measured at 0.000. The results should be treated with caution as the sampling adequacy is marginal.

During the extraction, the communality of a variable exceeded 1.0 and the extraction was terminated. Since communalities are squared correlations, you would expect them always to lie between 0 and 1. It is a mathematical peculiarity of the common factor model, however, that final communality estimates might exceed 1. If a communality equals 1, the situation is referred to as a Heywood case (SAS, 2011), and if a communality exceeds 1, it is an ultra-Heywood case. An ultra-Heywood case implies that some unique factor has negative variance, a clear indication that something is wrong. The likely cause in this case is not enough data to provide stable estimates. An ultra-Heywood case renders a factor solution invalid. A rotated factor solution for this influence was therefore not possible. This means that the questions measuring the influence could not statistically be validated. Although the influence is retained based on the validation by Moolla (2010), the importance of the influence should be interpreted with this limitation in mind.

3.4.6 Perceived value (PVL)

Table 3-9: KMO and Bartlett's Test - Perceived Value

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.591
Bartlett's Test of Sphericity	Approx. Chi-Square	56.039
	df	6
	Sig.	.000

The *Perceived Value* results are summarised in Table 3.7. The KMO score is lower than the desired 0.7, but higher than 0.5. The Bartlett's p-value is good, measured at 0.000. The results should be treated with caution as the sampling adequacy is marginal.

Table 3-10: Factor Analysis of Perceived Value

Question		Factor 1
PVL03	Price worthiness is a key influence in my loyalty towards binder brands	.987
PVL02	I have an emotional attachment with the binder brands I am loyal towards	.566
PVL01	My binder brand loyalty is based on product quality and expected performance	.557
PVL04	The binder brands that I am loyal to enhances my social self-concept	.437

Factor analysis of the *Perceived Value* influence indicates that all the questions loaded onto one factor. All the questions have satisfactory factor loadings (> 0.4).

The total variance explained is 55.1%. *Perceived Value* is therefore adequately measured by all the questions for this influence.

3.4.7 Commitment (COM)

Table 3-11: KMO and Bartlett's Test - Commitment

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.686
Bartlett's Test of Sphericity	Approx. Chi-Square	80.966
	df	10
	Sig.	.000

The *Commitment* results are summarised in Table 3.11. The KMO score is lower than the desired 0.7, but only very slightly. The Bartlett's p-value is good, measured at 0.000. The data is suitable for factor analysis.

Table 3-12: Factor Analysis of Commitment

Question		Factor	
		1	2
COM03	I identify with the binder brands that I use and feel part of the brand community	.915	
COM04	The more I become committed to a binder brand, the more loyal I become	.758	
COM05	I remain committed to binder brands even through price increases and declining popularity	.662	
COM02	I do not purchase/sample other binder brands if my binder brand is unavailable		.819
COM01	I have pledged my loyalty to particular binder brands		.351

Factor analysis of the *Commitment* influence indicates that there are two factors likely to be present within this influence. The *Commitment* influence is characterised by sub-factor 1 consisting of COM03, COM04 and COM05. Sub-factor 2 is characterised by COM02. The question COM01 is omitted due to a low factor loading (<0.4). The rest of the questions have satisfactory factor loadings.

The total variance explained is 74.9% with sub-factor 1 explaining 51.5% and sub-factor 2 explaining 23.4% of the variance.

3.4.8 Relationship Proneness (RPS)

Table 3-13: KMO and Bartlett's Test - Relationship Proneness

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.548
Bartlett's Test of Sphericity	Approx. Chi-Square	22.224
	df	10
	Sig.	.014

The *Relationship Proneness* results are summarised in Table 3.13. The KMO score is lower than the desired 0.7, but higher than the absolute minimum of 0.5. The Bartlett's p-value is satisfactory, measured at 0.014 (>0.05). The sampling adequacy is marginal and factor analysis results should be interpreted with caution.

Table 3-14: Factor Analysis of Relationship Proneness

Question		Factor	
		1	2
RPS01	My loyalty towards binder brands is purely habitual	.681	
RPS05	Loyalty programs are the reason I repeat binder brand purchases	.558	
RPS03	I always sample new binder brands as soon as they are available	.395	
RPS04	I establish a binder brand purchasing pattern and seldom deviate from it	.233	
RPS02	I do not necessarily purchase the same binder brands all the time		.695

Factor analysis of the *Relationship Proneness* influence indicates that there are two factors likely to be present within this influence. The *Relationship Proneness* influence is characterised by sub-factor 1 consisting of RPS01, RPS05 and RPS03. Sub-factor 2 is characterised by RPS02. RPS04 is omitted due to a low factor loading. The rest of the questions have satisfactory factor loadings.

The total variance explained is 57.6% with sub-factor 1 explaining 34.8% and sub-factor 2 explaining 22.8% of the variance.

3.4.9 Brand affect (BAF)

Table 3-15: KMO and Bartlett's Test - Brand Affect

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.691
Bartlett's Test of Sphericity	Approx. Chi-Square	63.477
	df	3
	Sig.	.000

The *Brand Affect* results are summarised in Table 3.15. The KMO score is lower than the desired 0.7, but only very slightly. The Bartlett's p-value is good, measured at 0.000. The data is suitable for factor analysis.

Table 3-16: Factor Analysis of Brand Affect

Question		Factor 1
BAF03	I am distressed when I am unable to purchase a particular binder brand	.938
BAF01	I attain a positive emotional response through the usage of a binder brand	.741
BAF02	The binder brands that I am loyal towards makes a difference in my business	.733

Factor analysis of the *Brand Affect* influence indicates that all the questions loaded onto one factor. All the questions have satisfactory factor loadings (> 0.4).

The total variance explained is 76.2%. *Brand Affect* is therefore adequately measured by all the questions for this influence.

3.4.10 Brand relevance (BRV)

Table 3-17: KMO and Bartlett's Test - Brand Relevance

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.673
Bartlett's Test of Sphericity	Approx. Chi-Square	119.291
	df	6
	Sig.	.000

The *Brand Relevance* results are summarised in Table 3.17. The KMO score is lower than the desired 0.7, but only very slightly. The Bartlett's p-value is good, measured at 0.000. The data is suitable for factor analysis.

Table 3-18: Factor Analysis of Brand Relevance

Question		Factor 1
BRV03	I know that a binder brand is relevant through the brand messages communicated	.997
BRV04	The binder brands that I am loyal towards are constantly updating and improving so as to stay relevant	.767
BRV02	The binder brands that I am loyal towards has freshness about them and portray positive significance	.753
BRV01	The binder brands that I am loyal towards stands for issues that actually matters	.576

Factor analysis of the *Brand Relevance* influence indicates that all the questions loaded onto one factor. All the questions have satisfactory factor loadings (> 0.4).

The total variance explained is 69.8%. *Brand Relevance* is therefore adequately measured by all the questions for this influence.

3.4.11 Brand performance (BPF)

Table 3-19: KMO and Bartlett's Test - Brand Performance

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.562
Bartlett's Test of Sphericity	Approx. Chi-Square	31.236
	df	3
	Sig.	.000

The *Brand Performance* results are summarised in Table 3.19. The KMO score is lower than the desired 0.7, but higher than the absolute minimum of 0.5. The Bartlett's p-value is good, measured at 0.000 (>0.05). The sampling adequacy is marginal and factor analysis results should be interpreted with caution.

Table 3-20: Factor Analysis of Brand Performance

Question		Factor 1
BPF03	I am loyal only towards the top performing binder brands	.942
BPF01	I evaluate a binder brand based on perceived performance	.682
BPF02	I will switch binder brand loyalty should a better performing binder brand be available	.339

Factor analysis of the *Brand Performance* influence indicates that all the questions loaded onto one factor. All the questions, except BPF02, have satisfactory factor loadings (> 0.4). BPF02 is omitted from further analysis.

The total variance explained is 60.9%. *Brand Performance* is therefore adequately measured by Questions BPF03 and BPF01 for this influence.

3.4.12 Culture (CUL)

Table 3-21: KMO and Bartlett's Test - Culture

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.500
Bartlett's Test of Sphericity	Approx. Chi-Square	6.911
	df	1
	Sig.	.009

The *Culture* results are summarised in Table 3.21. The KMO score is lower than the desired 0.7, but equal to the absolute minimum of 0.5. The Bartlett's p-value is satisfactory, measured at 0.009 (>0.05). The sampling adequacy is marginal and factor analysis results should be interpreted with caution.

Table 3-22: Factor Analysis of Culture

		Factor
Question		1
CUL02	Religion plays a role in my choice and loyalty to binder brands	.603
CUL01	My choice of binder brands is in keeping with the choice made by other members in my race group	.603

Factor analysis of the *Culture* influence indicates that all the questions loaded onto one factor. All the questions have satisfactory factor loadings (> 0.4).

The total variance explained is 68.2%. *Culture* is therefore adequately measured by all the questions for this influence.

3.5 RELIABILITY OF RESULTS

Internal consistency and reliability of data is measured by the Cronbach Alpha coefficient (α). George and Mallery (2003:231) suggests that a α coefficient of larger than 0.9 is excellent, larger than 0.8 is good, larger than 0.7 as acceptable, larger than 0.6 as questionable, larger than 0.5 as poor and smaller than 0.5 as unacceptable.

The reliability of the different brand loyalty influences is summarised in Table 3.19.

Table 3-23: Reliability of the influences and their factors

Influence	Factor	Questions	Cronbach's Alpha (all questions)	Cronbach's Alpha (after discarding some questions)
Customer satisfaction	1	CUS02, CUS03, CUS05	.686	.686
	2	CUS01, CUS04	.591	.591
Switching costs	1	SCR01, SCR02, SCR03 (SCR04)	.588	.812
	2	SCR05	N/A*	N/A*
Brand trust	1	BTS01, BTS02, BTS03, BTS04	.676	.676
Repeat purchase	1	RPR01, RPR02, RPR03, (RPR04)	.600	.610
Involvement	1	INV01, INV02, INV03, INV04	.659	.659
Perceived value	1	PVL01, PVL02, PVL03, PVL04	.714	.714
Commitment	1	COM03, COM04, COM05, (COM01)	.0.709	.811
	2	COM02	N/A*	N/A*

Relationship proneness	1	RPS01, RPS03, RPS05, (RPS04)	.507	.566
	2	RPS02	N/A*	N/A*
Brand affect	1	BAF01, BAF02, BAF03	.837	.837
Brand relevance	1	BRV01, BRV02, BRV03, BRV04	.854	.854
Brand performance	1	BPF01, (BPF02), BPF03	.676	.783
Culture	1	CUL01, CUL02	.529	.529

Note: Deleted questions are shown in brackets

Cronbach's alpha could not be calculated for sub-factor 2 for influences SCR, COM and RPS, as there is only one item in that factor.

From the table it is apparent that some of the influences and factors did not return reliability coefficients above 0.6, implying that their reliability is poor. None of the influences returned coefficients lower than the unacceptable level of 0.5. The level of 0.5 is deemed as the cut-off margin because this study is exploratory in nature and also employs an interval scale (Cortina (1993) in Field, 2005:667)

Coefficients are improved with omission of the questions that were found not to be valid from the preceding factor analysis. Questions that are in brackets were omitted as per the preceding factor analysis. Omitting these questions also improved the coefficient, as seen in Table 3.23.

From the table it is clear that all the influences except possibly *Relationship Proneness* and *Culture* are reliable after deletion of invalid questions.

Regarding the reliability coefficients of *Relationship Proneness* and *Culture* that were only slightly above the 0.5 lower limit of reliability set in this study, it should be noted that repeat studies may be different from the results obtained here. Cortina (1993) in Field (2005:668) pointed out that low Alpha coefficients do not mean that the results obtained are not important or relevant in the current research setting, but they are less likely to represent themselves in future repetitive studies.

Table 3-24: Omitted questions

Influence	Question	Reason
Switching Cost	SCR04	Loaded < 0.4 during factor analysis
Repeat Purchase	RPR04	Loaded < 0.4 during factor analysis
Commitment	COM01	Loaded < 0.4 during factor analysis
Relationship Proneness	RPS04	Loaded < 0.4 during factor analysis
Brand Performance	BPF02	Loaded < 0.4 during factor analysis

The Cronbach's alpha coefficients pertaining to the data after the questions were omitted improved the reliability as shown in Table 3.23.

3.6 IMPORTANCE OF RESEARCH VARIABLES

The questionnaire is designed on a seven point Likert scale with the following options available to respondents:

- Strongly disagree (1)
- Disagree (2)
- Disagree somewhat (3)
- Undecided (4)
- Agree somewhat (5)
- Agree (6)
- Strongly agree (7)

The mean response values that summarises the influences of brand loyalty in the water based paint industry are summarised in tables 3.20 to 3.32.

As the Likert scale mean values are not very intuitive in interpretation, they were adapted into a percentage value. For example, a score of 3 would result in $(3/7) \times 100 = 42.9\%$. The same was done for the standard deviation.

The percentages are then interpreted as follows (Bisschoff & Hough, 1995 in Bisschoff & Lotriet, 2008):

- < 60% : Of lower importance
- 60% – 75% : Important, develop to become excellent
- >75% : Very important

3.6.1 Customer satisfaction (CUS)

The mean scores and standard deviations per influence's question set are summarised in the Table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-25: Mean scores of Customer Satisfaction

Question		Mean %	Std. Dev %
CUS03	My loyalty towards a particular binder brand increases when I am satisfied with that brand	88.5	11.1
CUS02	Distinctive product attributes in binders keep me brand loyal	83.5	11.2
CUS05	I attain pleasure from the binder brands I am loyal towards	82.6	14.4
Mean value		84.3	12.5
CUS04	I do not repeat a purchase if I am dissatisfied with a particular binder brand	83.2	17.8
CUS01	I am very satisfied with the binder brand I purchase	83.5	15.5
Mean value		82.9	16.6

Both the sub-factors within this influence gave mean scores well above 75% indicating that *Customer Satisfaction* is a very important influence in brand loyalty in the South African paint manufacturing industry. The spread is relatively narrow indicating that most of the respondents feel the same about this influence.

3.6.2 Switching costs (SCR)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-26: Mean scores of Switching Cost

Question		Mean %	Std. Dev %
SCR03	I avoid switching binder brands due to the risks involved	79.3	20.5
SCR01	I do not switch binder brands due to the effort required to reach a level of comfort	74.5	22.7
SCR02	I do not switch binder brands due to the high cost implications	65.5	18.6
Mean value		72.9	21.3
SCR05	I prefer not to switch binder brands as I stand to lose out on the benefits from loyalty programmes	44.5	25.7
Mean value		44.5	25.7

The first sub-factor that deals with risk, effort and costs of switching scored as important, and is quite close to being very important, meaning that this influence will likely have a large impact on brand loyalty. The second sub-factor dealing with loyalty programs does not seem very important, signifying that loyalty programs is not very likely to improve brand loyalty. The spread for both the sub-factors are quite high. This indicates that opinions on this matter differ widely between respondents.

3.6.3 Brand trust (BTS)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-27: Mean scores of Brand Trust

		Mean	Std. Dev
Question		%	%
BTS01	I trust the binder brands I am loyal towards	85.4	11.6
BTS02	I have confidence in the binder brands that I am loyal to	82.4	12.3
BTS03	The binder brands I purchase has consistently high quality	89.1	10.9
BTS04	The reputation of a binder brand is a key factor in me staying brand loyal	89.1	10.1
Mean value		87.1	11.6

The *Brand Trust* influence returned very high mean scores (>75%) indicating that this influence is seen as very important to customer brand loyalty. Questions relating to reputation and quality both scored exceptionally high. The spread is quite low, indicating that most of the respondents feel the same about this influence.

3.6.4 Repeat purchase (RPR)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-28: Mean scores of Repeat Purchase

Question		Mean %	Std. Dev %
RPR03	I maintain a relationship with a binder brand that focuses and communicates with me	81.2	12.3
RPR01	I prefer to maintain a long term relationship with a binder brand	87.7	11.8
RPR02	I maintain a relationship with a binder brand in keeping with my personality	65.8	22.1
Mean value		78.6	18.4

Repeat Purchase scored as very important to customers at 78.6%. It seem like customers prefer to maintain a long relationship with a brand (87.7%). Personality does not seem to play an important role in this context. The spread is relatively wide, signalling some polarity between respondents.

3.6.5 Involvement (INV)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-29: Mean scores of Involvement

Question		Mean %	Std. Dev %
INV01	Loyalty towards a binder brand increases the more I am involved with it	79.0	16.0
INV02	Involvement with a binder brand intensifies my interest towards that brand.	81.0	14.2
INV03	I consider other binder brands when my involvement with my binder brand diminishes	69.2	18.4
INV04	My choice of a binder brand is influenced by the involvement others have with their binder brand	65.3	18.8
Mean value		74.3	18.0

Involvement with their brand is seen as important, touching on very important (74.3%). It does not seem like customers care much about the involvement other customers have with their brand (65.3%). Once again the spread is quite wide, indicating some differing opinions about the importance of this influence.

3.6.6 Perceived value (PVL)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-30: Mean scores of Perceived Value

Question		Mean %	Std. Dev %
PVL03	Price worthiness is a key influence in my loyalty towards binder brands	81.5	18.8
PVL02	I have an emotional attachment with the binder brands I am loyal towards	80.1	17.6
PVL01	My binder brand loyalty is based on product quality and expected performance	89.1	13.9
PVL04	The binder brands that I am loyal to enhances my social self-concept	63.0	21.4
Mean value		78.6	20.4

Perceived Value is seen as very important to brand loyalty in this industry. Once again the concept of quality and expected performance comes out strong at 89.1%. Respondents do not seem to care much for the social self-concept a brand may enhance (63%). The spread is quite wide, indicating some differing opinions.

3.6.7 Commitment (COM)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-31: Mean scores of Commitment

Question		Mean %	Std. Dev %
COM03	I identify with the binder brands that I use and feel part of the brand community	71.1	18.2
COM04	The more I become committed to a binder brand, the more loyal I become	74.8	20.3
COM05	I remain committed to binder brands even through price increases and declining popularity	52.1	19.1
Mean value		65.7	21.6
COM02	I do not purchase/sample other binder brands if my binder brand is unavailable	45.4	21.1
Mean value		45.4	21.1

Two sub-factors were identified within the *Commitment* influence. The first sub-factor is seen as important at 65.7%, with the second not being important to brand loyalty for respondents sampled in this study (45.4%). It seems like customers may switch brands relatively easily if the brand becomes expensive, unpopular or unavailable. This makes sense in a business environment, as the customer cannot do business without the product. The spread of the results indicate there are differing opinions between respondents about this influence.

3.6.8 Relationship Proneness (RPS)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-32: Mean scores of Relationship Proneness

Question		Mean %	Std. Dev %
RPS01	My loyalty towards binder brands is purely habitual	53.8	18.2
RPS05	Loyalty programs are the reason I repeat binder brand purchases	49.9	25.5
RPS03	I always sample new binder brands as soon as they are available	68.1	17.3
Mean value		57.1	22.0
RPS02	I do not necessarily purchase the same binder brands all the time	47.9	17.8
Mean value		47.9	17.8

Relationship Proneness did not score as important to customers in this study. Both sub-factors scored below 60%. The spread indicates some polarity between respondents.

3.6.9 Brand affect (BAF)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-33: Mean scores of Brand Affect

Question		Mean %	Std. Dev %
BAF03	I am distressed when I am unable to purchase a particular binder brand	81.8	16.4
BAF01	I attain a positive emotional response through the usage of a binder brand	77.0	19.8
BAF02	The binder brands that I am loyal towards makes a difference in my business	79.3	19.0
Mean value		80.0	18.4

Brand Affect scored as very important to brand loyalty behaviour of customers. All questions scored significantly higher than 75%. The relatively wide spread of results indicate that some respondents may feel differently about this influence.

3.6.10 Brand relevance (BRV)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-34: Mean Scores of Brand Relevance

Question		Mean %	Std. Dev %
BRV03	I know that a binder brand is relevant through the brand messages communicated	75.4	17.2
BRV04	The binder brands that I am loyal towards are constantly updating and improving so as to stay relevant	86.8	16.1
BRV02	The binder brands that I am loyal towards has freshness about them and portray positive significance	77.0	15.4
BRV01	The binder brands that I am loyal towards stands for issues that actually matters	81.5	16.2
Mean value		80.1	16.7

All scores fall well above 75% indicating that this influence is seen as important to most customers and should have a positive impact on their brand loyalty. It seems that constantly updating and improving products are especially important to customers is the water based paint industry at a mean score of 86.8. The response spread is not alarmingly high, indicating agreement between respondents.

3.6.11 Brand performance (BPF)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-35: Mean scores of Brand Performance

Question		Mean %	Std. Dev %
BPF03	I am loyal only towards the top performing binder brands	72.8	18.4
BPF01	I evaluate a binder brand based on perceived performance	81.2	18.8
Mean value		77.1	19.0

Brand Performance is very important to customers in this industry, as indicated by the mean score above 75%. In an industrial environment it is important for customers to use only products that perform well. Some differing opinions on this matter are apparent, looking at the relatively wide data spread.

3.6.12 Culture (CUL)

The mean scores and standard deviations per influence's question set are summarised in the table below. The mean indicates the importance of a question on the brand loyalty of water based paint manufacturers. The standard deviation gives an indication of the spread of results.

Table 3-36: Mean scores of Culture

Question		Mean %	Std. Dev %
CUL02	Religion plays a role in my choice and loyalty to binder brands	29.7	18.0
CUL01	My choice of binder brands is in keeping with the choice made by other members in my race group	25.8	15.4
Mean value		27.1	16.9

Culture in the traditional sense of religion and ethnicity do not seem to be important at all, giving a mean score of 27.1%, which is well below the 60% target for important

influences. The spread indicates some differing opinions, but generally the consensus seems to be that *Culture* in the traditional sense is not important.

3.7 SUMMARY OF MEAN VALUES

The mean value of the brand loyalty influences and where relevant, their sub factors, is summarised in Table 3.37 below. The influences and sub-factors were ranked according to importance.

Table 3-37: Importance ranking: Influences and sub-factors.

Importance rank	Influence description	Influence %
1	Brand Trust	87.1
2	Customer Satisfaction 1	84.3
3	Customer Satisfaction 2	82.9
4	Brand Affect	80.0
5	Brand Relevance	80.0
6	Repeat Purchase	78.6
7	Perceived Value	78.6
8	Brand Performance	77.1
9	Involvement	74.3
10	Switching Costs 1	72.9
11	Commitment 1	65.7
12	Relationship Proneness 1	57.1
13	Relationship Proneness 2	47.9
14	Commitment 2	45.4
15	Switching Costs 2	44.5
16	Culture	27.1

Graphically, the importance of the influences is shown in the figure below.

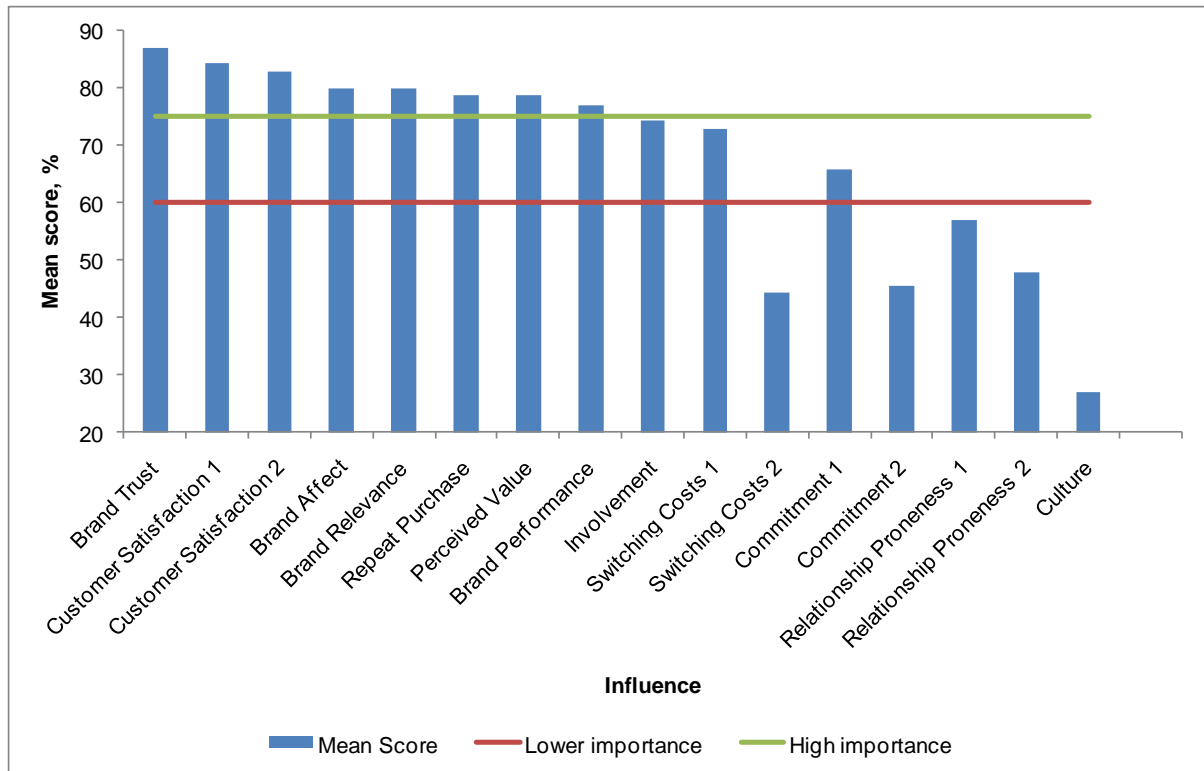


Figure 3-7: Brand Loyalty Influence

Figure 3.7 gives a graphical representation of the mean scores per influence or sub-factor where applicable. *Brand Trust* came out as the most important factor influencing customer brand loyalty in the water based paint industry. This is followed by *Customer Satisfaction* (both sub-factors), *Brand Affect*, *Brand Relevance*, *Repeat Purchase*, *Perceived Value* and *Brand Performance*. *Involvement* is on the margin of high importance. *Switching Costs*, sub-factor 1, and *Commitment*, sub-factor 1, are rated as important, while *Relationship Proneness*, both sub-factors, *Commitment*, sub-factor 2, and *Switching Costs*, sub-factor 2, is of lower importance. *Culture* is of lowest importance to customers in the South African paint industry when it comes to selecting a binder.

3.8 RELATIONSHIP BETWEEN DEMOGRAPHICS AND INFLUENCES

Due to the spread of data found in quite a number of the influences, it was decided to see if any significant correlations exist between some of the demographic profiles and the different influences. For the purpose of this part of the study, sub-factors were not taken into account, as the data set was small, and therefore the factor analysis should be interpreted with caution, as mentioned. The aim is also not to interpret extensively, but only to give an overview of possible polarity within the respondent group. Additionally, because two of the influences, namely *Brand Trust* and *Involvement*, could not be validated with the factor analysis, it was thought best to treat these influences as separate questions, and not as a whole influence. Both these influences were found to be of high importance, and were therefore not omitted from this analysis.

3.8.1 Position in Company

The Kruskal-Wallis test was used for Position In Company. Kruskal-Wallis is a non-parametric method for testing whether samples originate from the same distribution. If the Kruskal-Wallis test is significant, it means that at least one of the samples is different from the others (Field, 2005:540). In cases where the Kruskal-Wallis test is significant, a Mann-Whitney test would help analyse the specific sample pairs for significant differences (Field, 2005:522).

Effect sizes can be interpreted as follows (Field, 2005:32):

- $r \sim 0.2$ – small effect
- $r \sim 0.5$ – medium effect
- $r \sim 0.8$ – large effect

Table 3-38: Kruskal-Wallis test: Position In Company

Construct/ Question	Position in Company	N	Median	Range	Kruskal-Wallis test p-value
CUS	Owner/Director	17	5.8000	1.80	.539
	Procurement	14	5.9000	2.00	
	Technical	10	5.9000	1.20	
	General Manager	10	5.4000	2.00	
SCR	Owner/Director	17	5.5000	4.25	.001*
	Procurement	14	4.0000	2.00	
	Technical	10	4.3750	3.75	
	General Manager	10	5.1250	1.75	
RPR	Owner/Director	17	6.3333	3.00	.001*
	Procurement	14	4.8333	2.67	
	Technical	10	4.8333	2.00	
	General Manager	10	5.6667	2.00	
PVL	Owner/Director	17	5.0000	3.00	.233
	Procurement	14	6.0000	4.25	
	Technical	10	5.7500	3.00	
	General Manager	10	5.7500	2.00	
COM	Owner/Director	17	4.7500	2.50	.000*
	Procurement	14	3.3750	2.50	
	Technical	10	4.0000	2.50	
	General Manager	10	4.8750	4.50	
RPS	Owner/Director	17	3.2500	2.50	.08
	Procurement	14	3.8750	2.50	
	Technical	10	4.2500	2.50	
	General Manager	10	4.0000	4.25	
BAF	Owner/Director	17	5.0000	5.67	.027*
	Procurement	14	6.0000	3.33	
	Technical	10	6.0000	3.00	
	General Manager	10	6.0000	2.33	
BRV	Owner/Director	17	5.2500	4.25	.053
	Procurement	14	5.7500	3.50	

Construct/ Question	Position in Company	N	Median	Range	Kruskal-Wallis test p-value
BPF	Technical	10	5.8750	3.50	.211
	General Manager	10	6.2500	2.00	
	Owner/Director	17	5.5000	3.00	
	Procurement	14	6.0000	3.00	
	Technical	10	6.0000	4.50	
CUL	General Manager	10	5.2500	2.50	.115
	Owner/Director	17	2.0000	6.00	
	Procurement	14	1.7500	2.50	
	Technical	10	1.5000	1.00	
	General Manager	10	1.7500	1.50	
BTS01	Owner/Director	17	6.0000	3.00	.04*
	Procurement	14	6.0000	2.00	
	Technical	10	7.0000	1.00	
	General Manager	10	5.0000	2.00	
BTS02	Owner/Director	17	6.0000	5.00	.258
	Procurement	14	6.0000	2.00	
	Technical	10	6.0000	1.00	
	General Manager	10	5.0000	2.00	
BTS03	Owner/Director	17	5.0000	2.00	.001*
	Procurement	14	6.5000	1.00	
	Technical	10	7.0000	1.00	
	General Manager	10	6.5000	1.00	
BTS04	Owner/Director	17	7.0000	2.00	.216
	Procurement	14	6.0000	2.00	
	Technical	10	6.0000	2.00	
	General Manager	10	6.0000	2.00	
INV01	Owner/Director	17	6.0000	4.00	.002*
	Procurement	14	5.0000	5.00	
	Technical	10	5.0000	4.00	
	General Manager	10	6.0000	2.00	

Construct/ Question	Position in Company	N	Median	Range	Kruskal-Wallis test p-value
INV02	Owner/Director	17	5.0000	2.00	.013*
	Procurement	14	6.0000	5.00	
	Technical	10	6.0000	4.00	
	General Manager	10	6.5000	2.00	
INV03	Owner/Director	17	5.0000	3.00	.721
	Procurement	14	5.0000	4.00	
	Technical	10	5.5000	2.00	
	General Manager	10	4.0000	6.00	
INV04	Owner/Director	17	4.0000	2.00	.446
	Procurement	14	6.0000	4.00	
	Technical	10	4.5000	4.00	
	General Manager	10	4.0000	6.00	

* Indicates significance. The significance level is 0.05.

From Table 3.38 the following influences and questions were found to be significant: *Switching Costs*, *Repeat Purchase*, *Commitment*, *Brand Affect*, *Brand Trust01*, *Brand Trust 03*, *Involvement01* and *Involvement02*. This is an indication that the brand loyalty for that influence or question is influenced by the position the respondent holds with the company it represents.

A Mann-Whitney test indicated the following:

- *Switching costs* (SCR) was greater for Owner/Director (Mdn=5.5) than for Procurement (Mdn=4), $p=0.001$, $r=0.52$.
- *Switching costs* (SCR) was greater for Owner/Director (Mdn=5.5) than for Technical (Mdn=4.375), $p=0.023$, $r=0.4$.
- *Repeat purchase* (RPR) was greater for Owner/Director (Mdn=6.3333) than for Procurement (Mdn=4.8333), $p=0.004$, $r=0.47$.
- *Repeat purchase* (RPR) was greater for Owner/Director (Mdn=6.3333) than for Technical (Mdn=4.8333), $p=0.016$, $r=0.42$.
- *Commitment* (COM) was greater for General Manager (Mdn=4.875) than for Procurement (Mdn=3.375), $p=0.024$, $r=0.4$.

- *Commitment* (COM) was greater for Owner/Director (Mdn=4.75) than for Procurement (Mdn=3.375), $p=0.001$, $r=0.54$.
- *Commitment* was greater for Owner/Director (Mdn=4.75) than for Technical (Mdn=4.0), $p=0.009$, $r=0.45$.
- *Brand Affect* (BAF) was greater for General Manager (Mdn=6.0) than for Owner/Director (Mdn=5.0), $p=0.045$, $r=0.38$.
- *Brand Trust* Question 01 was greater for Technical (Mdn=7.0) than for Owner/Director (Mdn=6.0), $p=0.036$, $r=0.39$.
- *Brand Trust* Question 03 was greater for Procurement (Mdn=6.5) than for Owner/Director (Mdn=5.0), $p=0.014$, $r=0.43$.
- *Brand Trust* Question 03 was greater for General Manager (Mdn=6.5) than for Owner/Director (Mdn=5.0), $p=0.035$, $r=0.39$.
- *Brand Trust* Question 03 was greater for Technical (Mdn=7.0) than for Owner/Director (Mdn=5.0), $p=0.003$, $r=0.49$.
- *Involvement* Question 01 was greater for Owner /Director (Mdn=6.0) than for Procurement (5.0), $p=0.025$, $r=0.4$.
- *Involvement* Question 01 was greater for General Manager (Mdn=6.0) than for Procurement (Mdn=5.0), $p=0.009$, $r=0.44$.
- *Involvement* Question 02 was greater for General Manager (Mdn=6.5) than for Owner/Director (Mdn=5.0), $p=0.007$, $r=0.45$.

The following conclusions could possibly be made from the results:

1. *Switching Costs* and *Repeat Purchase* seem to be more important to the Owner/Director group.
2. *Brand Trust* Q03 seems to be of lesser importance to the Owner/Director Group.

3.8.2 Correlations with Age Group and Business Annual Turnover

Due to the small data set, Spearman's rho was used to determine correlations (Field, 2005:129).

The correlation coefficients can be interpreted as follows:

- Correlation Coefficient ~ 0.1 – small effect;
- Correlation Coefficient ~ 0.3 – medium effect; and

- Correlation Coefficient ~0.5 – large effect.

3.8.2.1 Age Group

Table 3-39: Non-parametric Correlations: Age Group

Construct/Question	Correlation coefficient	Sig. (2 tailed)
CUS	0.154	0.285
SCR	0.330	0.019*
RPR	0.340	0.016*
PVL	-0.107	0.460
COM	0.289	0.042*
RPS	-0.222	0.120
BAF	-0.125	0.388
BRV	-0.004	0.980
BPF	0.160	0.267
CUL	-0.022	0.879
BTS01	-0.071	0.624
BTS02	-0.160	0.266
BTS03	-0.369	0.008*
BTS04	0.262	0.066
INV01	0.131	0.365
INV02	-0.238	0.096
INV03	-0.288	0.043*
INV04	-0.187	0.193

* Indicates significant correlations at the 0.05 level.

Switching Cost (medium effect), *Repeat Purchase* (medium effect) and *Commitment* (medium effect) all showed a positive correlation with age. This means that the older age groups found these influences of higher importance. *Brand Trust Q03* (medium effect) showed a negative correlation. This means that older age groups found this question to be of lesser importance than younger age groups.

3.8.2.2 Business Annual Turnover

Due to the small data set, Spearman's rho was used to determine correlations.

Table 3-40: Non-parametric Correlations: Business Annual Turnover

Construct/Question	Correlation coefficient	Sig. (2 tailed)
CUS	-0.120	0.407
SCR	-0.158	0.274
RPR	-0.063	0.664
PVL	-0.409	0.003*
COM	0.172	0.231
RPS	-0.509	0.000*
BAF	-0.326	0.021*
BRV	-0.461	0.001*
BPF	-0.467	0.001*
CUL	-0.062	0.667
BTS01	-0.318	0.024*
BTS02	-0.013	0.931
BTS03	-0.216	0.132
BTS04	0.110	0.448
INV01	-0.043	0.769
INV02	-0.272	0.056
INV03	-0.190	0.186
INV04	-0.133	0.358

* Indicates significant correlations at the 0.05 level.

Perceived Value (medium effect), *Relationship Proneness* (large effect), *Brand Affect* (Medium effect), *Brand Relevance* (medium effect), *Brand Performance* (medium effect) and *Brand Trust Q01* (medium effect), all correlate negatively with Business Annual Turnover. This means that larger businesses seem to attach less importance to these influences and questions.

3.9 SUMMARY

In this chapter the empirical results of the study were presented. The results showed that the conceptual framework that was utilised to measure brand loyalty by measuring the twelve influences as identified by Moolla (2010) is for the most part a valid tool to use in the business to business environment; more specifically the water base paint manufacturing industry. Two of the influences could not however be validated, but as mentioned; the data set was rather small that could likely have led to the failure to validate. The framework could be applied after some minor changes to the questionnaire to measure brand loyalty in the water based paint industry.

Chapter four concludes this research project. It consists mainly of conclusions and recommendations for marketing managers in the water based paint industry that represents the business-to-business environment. Mention is also made of problems that were encountered.

4 CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

In this chapter the conclusions and recommendations that were deduced from the results in chapter three are presented. This chapter will give a concise outline of the findings together with recommendations that can be used by managers supplying raw materials into the water based paint manufacturing industry, and could also, with caution, be applied to business-to-business commerce in general. The findings could assist management in these industries to help formulate strategies to build better brand loyalty by providing focus areas and to assist with the allocation of resources in its business operations.

4.2 CONCLUSIONS AND RECOMMENDATIONS

4.2.1 VALIDITY AND RELIABILITY

CONCLUSION 1

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity, are suitable measures to determine if a data set is suited to exploratory factor analysis. Based on the KMO results and Bartlett's Test of Sphericity, factor analysis was an appropriate tool to use for the analysis of the data. The KMO values were however quite low, likely due to the small data set, and was therefore interpreted with caution. Possibly due to this limitation, two of the influences could not be validated. Within four of the influences, a second sub-factor was identified. The data were confirmed as reliable by the Cronbach Alpha coefficients.

RECOMMENDATION 1

The questionnaire developed by Moolla (Moolla & Bisschoff, 2010) to measure brand loyalty of FMCG can be used as a starting point to measure brand loyalty in a business-to-business environment; in this case the water based paint manufacturing industry. The minor adaptations made to the questionnaire to suit the industry should be maintained. Due to the small data set resulting in low KMO values casting some doubt over the sample size adequacy, it is recommended that the study be

repeated with a bigger data set to eliminate or at least reduce any uncertainty pertaining to the results of the factor analysis.

4.2.2 BRAND LOYALTY INFLUENCES

CONCLUSION 2

Ten of the twelve influences of brand loyalty have been confirmed to be valid to measure brand loyalty in a business-to-business environment as illustrated by the water based paint industry. Some questions in some of the influences were discarded. From this it can be concluded that of the valid influences, some are measured differently in the water based paint industry than in the FMCG industry.

RECOMMENDATION 2

It is recommended that the adapted questionnaire without the omitted questions, be used in the water based paint industry. The standard FMCG questionnaire does not seem to give a good reflection of brand loyalty in this industry. The two influences that could not be validated were still found to be very important as seen in the high mean scores. It is therefore recommended that the study be repeated with more data, possibly in a bigger industry, to better understand these two influences and to establish if they can be validated.

CONCLUSION 3

Of the ten influences that could be validated, four were identified to have sub-influences. Some of the influences therefore seem to be dualistic in nature, while the remaining influences represented a single influence.

RECOMMENDATION 3

Where sub-influences are identified within a main influence, results should be interpreted as such. Sub-influences should therefore be interpreted individually with regards to importance.

CONCLUSION 4

Most of the influences were measured to be important (> 60%). *Commitment, Relationship Proneness* and *Switching Cost (sub-factor 2)* and *Culture* measured as less important influences. *Switching Cost (sub-factor 2)* relates to customer loyalty programs. It is quite clear that customer loyalty programs are not a big motivation to support brand loyalty. *Culture* was found to be of least importance.

RECOMMENDATION 4

Management attention should be focussed on the most important influences and develop them fully. This will result in the best returns. Due to the limited benefit of loyalty programs, this approach is perhaps not the best for use in a business-to-business environment such as the water based paint industry. *Culture* as measured by this questionnaire was seen as less important and should therefore receive less management attention. It should be noted that *Culture* as measured in this questionnaire is possibly not suited to the business environment. A better approach in measuring culture would be to measure company culture instead of individual culture, as discussed in the literature study in chapter two.

CONCLUSION 5

From the correlations done with the demographic information it is clear that some polarity exists within the data. The position a person holds with a company as well as the size of the company, has an impact on how important a specific influence is deemed.

RECOMMENDATION 5

Managers should identify in which group a targeted company and contact person falls to determine which influences to target when dealing with that specific company. An owner in a large company would value certain influences more than for example a procurement manager in a small company. More research would be needed to understand this better.

CONCLUSION 6

This study had a relatively small sample size. Although it was representative of the South African paint industry, the small population and subsequent small sample size created some difficulty interpreting the results. This first step in measuring brand

loyalty in a representative business-to-business environment is a valuable one on the road to creating a better understanding of brand loyalty in the business-to-business environment.

RECOMMENDATION 6

It is recommended that this study be repeated in other industries in the business-to-business environment to confirm, refine and expand on the results of this study.

4.3 AREAS FOR FUTURE RESEARCH

This study has identified the following areas for future research:

- Expansion of this study to include other industries in the business-to-business environment in order to confirm and expand on the results of this study and to test its universal applicability in the business-to-business environment.
- Special attention should be paid to the two influences that could not be successfully validated during this study.
- Adaptation of the research questions for the measurement of culture in order for it to suit a business, and not a consumer, environment. Questions should be developed to measure business and company culture and then tested for validity as an influence of brand loyalty. This is reinforced by the finding that the results are polarized along the lines of position in a company as well as company size. It is conceivable that those factors may form part of company culture.

4.4 SUMMARY

The aim of this study was to determine if the brand loyalty model developed for the FMCG industry could be applied to a business-to-business environment, in this case represented by the water based paint manufacturing industry. If the model was found to apply, the aim was to test if the model needs some modification and adaptation to fit the industry better.

In Chapter one the purpose of the study was defined as well as objectives listed. The population was also defined. The approach to achieve the set objectives was also defined. The structure of the following chapters was also defined.

In Chapter Two, brand loyalty as defined in a business-to-business environment was reviewed by doing a thorough literature study of the current body of knowledge. The

population of the intended study, being the South African water based paint industry, was described. Twelve influences that were identified were discussed in the context of the business-to-business environment.

Chapter Three discussed the research methodology employed followed by thorough statistical analysis and discussion of the empirical results. The data collection methods were also discussed in detail. Data was analysed for validity by means of a factor analysis and tested for reliability by means of Cronbach's Alpha.

Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity was utilised to determine the appropriateness of factor analysis.

Spearman's rho, as well as Kruskal-Wallis test combined with a Mann-Whitney test, was used to determine correlations with demographic data.

In Chapter Four, the final chapter, conclusions were drawn, recommendations made and areas for future research identified.

REFERENCES

Alexander, N.S., Bick, G., Abratt, R. & Bendixen, M. 2009. Impact of branding and product augmentation on decision making in the B2B market. *South African Journal of Business Management*, 40(1):1-20.

Anderson, J.C. & Narus, J.A. 1990. A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing*, 54(1):42-58.

Anderson, P.H. 2005. Relationship marketing and brand involvement of professionals through web-enhanced communities: the case of Coloplast. *Industrial Marketing Management*, 34:285-297.

Backhaus, K., Steiner, M. & Lugger, K. 2011. To invest, or not to invest, in brands? Drivers of brand relevance in B2B markets. *Industrial Marketing Management*, 40:1082-1092.

Baumgarth, C. 2010. "Living the brand": brand orientation in the business-to-business sector. *European Journal of Marketing*, 44(5):653-671.

Bendapudi, N. & Leone, R.P. 2002. Managing business-to-business customer relationships following key contact employee turnover in a vendor firm. *Journal of Marketing*, 66(4):83-101.

Bennet, R., Hartel, C.E.J. & Mccoll-Kennedy, J.R. 2005. Experience as a moderator of involvement and satisfaction on brand loyalty in a business-to-business setting 02-314R. *Industrial Marketing Management*, 34:97-107.

Bisschoff, C.A. & Lotriet, R.A. 2008. PUK Rugby Instituut. Strategiese Plan: Ondersoek en daarstelling van strategiese besluite. Noordwes Universiteit. Unpublished.

Business Dictionary. 2013. Repeat-Purchase.

<http://businessdictionary.com/definition/repeat-purchase.html> Date of access: 28 Jul. 2013.

Bolton, R.N. & Drew, J.H. 1991. A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research*, 17(3):375-384.

Čater, T. & Čater, B. 2010. Product and relationship quality influence on customer commitment and loyalty in B2B manufacturing relationships. *Industrial Marketing Management*, 39(1):1321:1333.

Chaudhuri, A. & Holbrook, M.B. 2001. The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(4):81-93.

Chow, C.W., Deng, F.J. & Ho, J.L. 2000. The openness of knowledge sharing within organisations: A comparative study of the United States and the People's Republic of China. *Journal of Management Accounting Research*, 12:65-95.

Cretu, A.E. & Brodie, R.J. 2007. The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial Marketing Management*, 36(1):230-240.

De Wulf, K., Odekerken-Schroder, G. & Iacobucci, D. 2001. Investments in consumer relationships: A cross-country and cross-industry exploration. *Journal of marketing*, 65(10):33-50.

Doney, P.M. & Cannon, J.P. 1997. The examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, 61(4):35-51.

Doney, P.M., Barry, J.M. & Abratt, R. 2007. Trust determinants and outcomes in global B2B services. *European Journal of Marketing*, 41(9):1096-1116.

Eggert, A. & Ulaga, W. 2002. Customer perceived value: a substitute for satisfaction in business markets? *Journal of Business & Industrial Marketing*, 17(2):107-118.

Ehrenberg, A.S.C., Uncles, M.D. & Goodhardt, G.J. 2004. Understanding brand performance measures: using Dirichlet benchmarks. *Journal of Business Research*, 57:1307-1325.

Field, A. 2005. Discovering statistics using SPSS. 2nd edition. London: Sage

Fischer, M., Volckner, F. & Sattler, H. 2010. How important are brands? A cross-category, cross-country study. *Journal of Marketing Research*, 47(10):823-839.

Frazier, G.L. 1983. On the measurement of interfirm power in channels of distribution. *Journal of Marketing Research*, 20(5):158-166.

Fullerton, G. 2005. The impact of brand commitment on loyalty to retail service brands. *Canadian Journal of Administrative Sciences*, 22(2):97-110.

George, D. & Mallery, P. 2003. SPSS for Windows step by step: A simple guide and reference. 11.0 update. 4th ed. Boston, MA: Allyn & Bacon.

Geyskens, I., Steenkamp, J.B.E.M. & Kumar, N. 1999. A meta-analysis of satisfaction in marketing channel relationships. *Journal of Marketing Research*, 36(5):223-238.

Glynn, M.S. 2012. Primer in B2B brand-building strategies with a reader practicum. *Journal of Business Research*, 65:666-675.

Glynn, M.S., Motion, J. & Brodie, R.J. 2007. Sources of brand benefits in manufacturer-reseller B2B relationships. *Journal of Business & Industrial Marketing*, 22(6):400-409.

Gounaris, S.P. 2005. Trust and commitment influences on customer retention: insights from business-to-business services. *Journal of business research*, 58:126-140.

Green, P. 2013. SLC basic water based paint training [training course]. 24 Jun., Sasolburg.

Green, P. 2013. Paint industry information [personal interview]. 15 Aug., Sasolburg.

Grisaffe, D.B. & Nguyen, H.P. 2011. Antecedents of emotional attachment to brands. *Journal of Business Research*, 64:1052-1059.

Hammerschmidt, M., Donnevert, T. & Bauer, H.H. 2008. Brand efficiency and brand relevance: introducing and linking both concepts. *American Marketing Association Winter Educators' Conference Proceedings*, Austin/Texas, S. 48-57.

Heide, J.B. & Weiss, A.M. 1995. Vendor consideration and switching behaviour from buyers in high-technology markets. *Journal of Marketing*, 59(7):30-43.

Hofstede, G. 1985. The interaction between national and organizational value systems[1]. *Journal of Management Studies*, 22(6):347-357.

Investopedia. 2013. Brand Loyalty. <http://www.investopedia.com/terms/b/brand-loyalty.asp> Date of access: 17 Jun. 2013.

Jap, S.D. & Ganesan, S. 2000. Control mechanisms and the relationship life cycle: Implications for safeguarding specific investments and developing commitment. *Journal of Marketing Research*, 37(5)227-245.

Keller, L.K. & Lehmann, R.R. 2006. Brands and Branding: Research findings and Future Priorities. *Marketing Science*, 25(6):740-759.

- Khan, M.A. & Mahmood, Z. 2012. Impact of brand loyalty factors on brand equity. *International Journal of Academic Research*, 4(1)33-37.
- Kotler, P. & Armstrong, G. 2012. Principles of marketing. 14th ed. Harlow: Pearson Education.
- Kotler, P. & Pfoertsch, W. 2007. Being known or being one of many: the need for brand management for business-to-business companies. *Journal of Business and Industrial Marketing*, 22(6):357-362.
- Lam, D. 2007. Cultural influence on proneness to brand loyalty. *Journal of International Consumer Marketing*, 19(3):7-21.
- Lam, Y.S., 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.
- Leek, S. & Christodoulides, G. 2011. Brands: Just for consumers? Introduction to the special issue on B2B branding. *Industrial Marketing Management*, 40(1):1060-1062.
- Leek, S. & Christodoulides, G. 2012. A framework of brand value in B2B markets: The contributing role of functional and emotional components. *Industrial Marketing Management*, 41(1):106-114.
- Lynch, J. & De Chernatony, L. 2004. The power of emotion: Brand communication in business-to-business markets. *Brand Management*, 11(5):403-419.
- Martin, C.L. 1998. Relationship marketing: A high-involvement product attribute approach. *Journal of Product and Brand Management*, 7(1):6-26.
- Michell, P., King, J. & Reast, J. 2001. Brand values related to industrial products. *Industrial Marketing Management*, 30(1):415-425.

Molinari, L.K., Abratt, R. & Dion, P. 2008. Satisfaction, quality and value and effects on repurchase and positive word-of-mouth behavioural intentions in a B2B services context. *Journal of Services and Marketing*, 22(5):363-373.

Moolla, A.I. 2010. A conceptual framework to measure brand loyalty.
Potchefstroom: NWU. (Thesis – PhD).

Moolla, A.I. & Bisschoff, C.A. 2010. The methodology in the construction of a measuring instrument for the influences of brand loyalty in fast moving consumer goods. 4th IBC Conference Proceedings, 13-14th October. Victoria Falls, Zambia.

Moorman, C., Deshpande, R. & Zaltman, G. 1993. Factors affecting trust in market research relationships. *Journal of Marketing*, 57(1):81-101.

Moorman, C., Zaltman, G. & Deshpande, R. 1992. Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, 29(8):314-328.

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

Mudambi, S. 2002. Branding importance in business-to-business markets. Three buyer clusters. *Industrial Marketing Management*, 31:525-533.

National Small Business Act **see** South Africa

Odekerken-Schroder, G., De Wulf, K. & Schumacher, P. 2003. Strengthening outcomes of retailer-consumer relationships. The dual impact of relationship marketing tactics and consumer personality. *Journal of Business Research*, 56:177-190.

Ohnemus, L. 2009. B2B branding: A financial burden for shareholders? *Business Horizons*, 52(1):159-166.

Oliver, R.L., Rust, T.R. & Varki, S. 1997. Customer delight: Foundations, Findings, and Managerial Insight. *Journal of Retailing*, 73(3):311-336.

Pan, Y., Sheng, S. & Xie, F.T. 2012. Antecedents of customer loyalty: An empirical synthesis and re-examination. *Journal of Retailing and Consumer Services*, 19(1):150-158.

Parish, J.T. & Holloway, B.B. 2010. Customer relationship proneness: a re-examination and extension across service exchanges. *Journal of Services Marketing*, 24(1):61-73.

Patterson, P.G. 2004. A Contingency model of behavioural intentions in a services context. *European Journal of Marketing*, 38(9):1304-1315.

Patterson, P.G. & Spreng, R.A. 1997. Modelling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: an empirical examination. *International Journal of Service Industry Management*, 8(5):414-434.

Paulssen, M. & Birk, M. 2007. Satisfaction and repurchase behaviour in a business-to-business setting: Investigating the moderating effect of manufacturer, company and demographic characteristics. *Industrial Marketing Management*, 36:983-997.

Persson, N. 2010. An exploratory investigation of the elements of B2B brand image and its relationship to price premium. *Industrial Marketing Management*, 39(1):1269-1277.

Rauyruen, P. & Miller, K. E. 2007. Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research*, 60(1):21-31.

Rauyruen, P., Miller, K.E. & Groth, M. 2009. B2B services: linking service loyalty and brand equity. *Journal of Services Marketing*, 23(3):175-186.

Reichheld, F.F. 1996. The customers you lose hold the information you need to succeed. Learning from customer defections. *Harvard Business Review*, March-April: 56-69.

SA **See** South Africa

Salim, S.F. 2011. An assessment of brand loyalty of banking clients. Potchefstroom: NWU. (Mini-dissertation – MBA).

SAPMA. Members list. <http://sapma.sapma.org.za/directory-of-members> Date of access: 20 January 2013.

SAS Institute Inc. 2011. SAS OnlineDoc[®] 9.3. Cary, NC: SAS Institute.

Sharma, N., Young, L. & Wilkinson, I. 2006. The commitment mix: dimensions of commitment in international trading relationships in India. *Journal of International Marketing*, 14(3):64-91.

Shi, W., Chen, J. & Ma, J. 2011. A study of customer loyalty based on switching cost and brand attachment. *The Journal of China Universities of Posts and Telecommunications*, 18(1):136:141.

South Africa. 1996. National Small Business Act 102 of 1996 as amended in 2003. Pretoria: Government Printers.

South Africa.Info. 2006.

<http://www.southafrica.info/business/investing/opportunities/paint-220807.htm>. Date of access: 20 January 2013.

SPSS Inc. (2013). IBM SPSS Statistics Version 21, Release 21.0.0, Copyright© IBM Corporation and its licensors. <http://www-01.ibm.com/software/analytics/spss/>

STEWART, L. 2010. Difference between brand and branding.

<http://indiecreatives.com/index.php/2010/11/02/do-you-know-the-difference-between-brand-vs-branding> Date of access:13 Jul. 2013.

Welman, Kruger & Mitchell 2005. Research methodology. 3rd ed. Cape Town: Oxford University.

Williams, P., Khan, M.S., Ashill, N.J & Naumann, E. 2011. Customer attitudes of stayers and defectors in B2B services: Are they really different? *Industrial Marketing Management*, 40(1):805-815.

APPENDIX ONE: QUESTIONNAIRE

Research questionnaire to determine brand loyalty influences in a business-to-business setting, specifically relating to the choice of binder/emulsion/latex used.

This survey is seven pages long and should only take 5-10 minutes to complete.

Please place a cross in the appropriate column.

Age group

20 – 30	
31 – 40	
41 – 50	
51 – 60	
61 +	

Province the business reside in

Gauteng	
Kwa-Zulu Natal	
Eastern Cape	
Western Cape	
Northern Cape	
North West	
Limpopo	
Mpumalanga	
Free State	

Gender

Male	
Female	

Ethnicity

Black	
White	
Coloured	
Asian	

Position in company

Owner/Director	
Procurement	
Technical	
General manager	

Business annual turnover

< 200K	
R201K – R5m	
R5.1m – R13m	
R13.1m – 51m	
> 51m	

No	Code	Question	Strongly disagree	Disagree	Disagree somewhat	Undecided	Agree somewhat	Agree	Strongly agree
1	CUS01	I am very satisfied with the binder brand I purchase	1	2	3	4	5	6	7
2	CUS02	Distinctive product attributes in binders keep me brand loyal	1	2	3	4	5	6	7
3	CUS03	My loyalty towards a particular binder brand increases when I am satisfied with that brand	1	2	3	4	5	6	7
4	CUS04	I do not repeat a purchase if I am dissatisfied with a particular binder brand	1	2	3	4	5	6	7
5	CUS05	I attain pleasure from the binder brands I am loyal towards	1	2	3	4	5	6	7
6	SCR01	I do not switch binder brands due to the effort required to reach a level of comfort	1	2	3	4	5	6	7
7	SCR02	I do not switch binder brands due to the high cost implications	1	2	3	4	5	6	7
8	SCR03	I avoid switching binder brands due to the risks involved	1	2	3	4	5	6	7
9	SCR04	I switch binder brands according to the prevailing economic conditions	1	2	3	4	5	6	7
10	SCR05	I prefer not to switch binder brands as I stand to lose out on the benefits from loyalty programmes	1	2	3	4	5	6	7
11	BTS01	I trust the binder brands I am loyal towards	1	2	3	4	5	6	7
12	BTS02	I have confidence in the binder brands that I am loyal to	1	2	3	4	5	6 ⁸⁵	7

No	Code	Question	Strongly disagree	Disagree	Disagree somewhat	Undecided	Agree somewhat	Agree	Strongly agree
13	BTS03	The binder brands I purchase has consistently high quality	1	2	3	4	5	6	7
14	BTS04	The reputation of a binder brand is a key factor in me staying brand loyal	1	2	3	4	5	6	7
15	RPR01	I prefer to maintain a long term relationship with a binder brand	1	2	3	4	5	6	7
16	RPR02	I maintain a relationship with a binder brand in keeping with my personality	1	2	3	4	5	6	7
17	RPR03	I maintain a relationship with a binder brand that focuses and communicates with me	1	2	3	4	5	6	7
18	RPR04	I have a passionate and emotional relationship with the binder brands I am loyal to	1	2	3	4	5	6	7
19	INV01	Loyalty towards a binder brand increases the more I am involved with it	1	2	3	4	5	6	7
20	INV02	Involvement with a binder brand intensifies my interest towards that brand.	1	2	3	4	5	6	7
21	INV03	I consider other binder brands when my involvement with my binder brand diminishes	1	2	3	4	5	6	7
22	INV04	My choice of a binder brand is influenced by the involvement others have with their binder brand	1	2	3	4	5	6	7

No	Code	Question	Strongly disagree	Disagree	Disagree somewhat	Undecided	Agree somewhat	Agree	Strongly agree
23	PVL01	My binder brand loyalty is based on product quality and expected performance	1	2	3	4	5	6	7
24	PVL02	I have an emotional attachment with the binder brands I am loyal towards	1	2	3	4	5	6	7
25	PVL03	Price worthiness is a key influence in my loyalty towards binder brands	1	2	3	4	5	6	7
26	PVL04	The binder brands that I am loyal to enhances my social self-concept	1	2	3	4	5	6	7
27	COM01	I have pledged my loyalty to particular binder brands	1	2	3	4	5	6	7
28	COM02	I do not purchase/sample other binder brands if my binder brand is unavailable	1	2	3	4	5	6	7
29	COM03	I identify with the binder brands that I use and feel part of the brand community	1	2	3	4	5	6	7
30	COM04	The more I become committed to a binder brand, the more loyal I become	1	2	3	4	5	6	7
31	COM05	I remain committed to binder brands even through price increases and declining popularity	1	2	3	4	5	6	7
32	RPS01	My loyalty towards binder brands is purely habitual	1	2	3	4	5	6	7
33	RPS02	I do not necessarily purchase the same binder brands all the time	1	2	3	4	5	6	7

No	Code	Question	Strongly disagree	Disagree	Disagree somewhat	Undecided	Agree somewhat	Agree	Strongly agree
34	RPS03	I always sample new binder brands as soon as they are available	1	2	3	4	5	6	7
35	RPS04	I establish a binder brand purchasing pattern and seldom deviate from it	1	2	3	4	5	6	7
36	RPS05	Loyalty programs are the reason I repeat binder brand purchases	1	2	3	4	5	6	7
37	BAF01	I attain a positive emotional response through the usage of a binder brand	1	2	3	4	5	6	7
38	BAF02	The binder brands that I am loyal towards makes a difference in my business	1	2	3	4	5	6	7
39	BAF03	I am distressed when I am unable to purchase a particular binder brand	1	2	3	4	5	6	7
40	BRV01	The binder brands that I am loyal towards stands for issues that actually matters	1	2	3	4	5	6	7
41	BRV02	The binder brands that I am loyal towards has freshness about them and portray positive significance	1	2	3	4	5	6	7
42	BRV03	I know that a binder brand is relevant through the brand messages communicated	1	2	3	4	5	6	7
43	BRV04	The binder brands that I am loyal towards are constantly updating and improving so as to stay relevant	1	2	3	4	5	6	7

No	Code	Question	Strongly disagree	Disagree	Disagree somewhat	Undecided	Agree somewhat	Agree	Strongly agree
44	BPF01	I evaluate a binder brand based on perceived performance	1	2	3	4	5	6	7
45	BPF02	I will switch binder brand loyalty should a better performing binder brand be available	1	2	3	4	5	6	7
46	BPF03	I am loyal only towards the top performing binder brands	1	2	3	4	5	6	7
47	CUL01	My choice of binder brands is in keeping with the choice made by other members in my race group	1	2	3	4	5	6	7
48	CUL02	Religion plays a role in my choice and loyalty to binder brands	1	2	3	4	5	6	7

THANK YOU FOR YOUR TIME – IT IS MUCH APPRECIATED

LETTER FROM LANGUAGE EDITOR

November 9, 2013



TO WHOM IT MAY CONCERN

Re: Letter of confirmation of language editing

The dissertation “An assessment of a business-to-business brand loyalty environment: The South African paint industry” by Quentin van den Heever (23122986) was language, technically and typographically edited. The sources and referencing technique applied was checked to comply with the specific Harvard technique as per North-West University prescriptions. Final corrections as suggested remain the responsibility of the student.

Antoinette Bisschoff

Officially approved language editor of the NWU since 1998
Member of SA Translators Institute (no. 100181)