

THE IMPACT OF VALUE BASED LINE EXTENSIONS ON CROSS BRAND CANNIBALIZATION

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ABSTRACT (EXECUTIVE SUMMARY)

Simba, a salty snacks manufacturer, launched a line extension for low priced market segments. Volume growth was explosive but higher priced product volumes stagnated. A link was inferred between these events and the line extension was de-emphasized. The higher priced product volumes recovered. This study used cannibalization measurement techniques to search for correspondence between the sales execution of the product launch and instances of cannibalization. It was found that frequently the lower priced and higher priced products grew simultaneously, vindicating the segmentation thinking. Cannibalization was strongly associated with abuses of the compensation system and the misapplication of sales service methods. These highly localised but severe instances of cannibalization generated the overall stagnation of higher priced products. The identification of these antecedents to cannibalization enables more accurate execution of price segmentation strategies.

DECLARATION

I, Ernest Gregory Smith, declare that this project report is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

.....

30th day of April 2005

DEDICATION

To my wife, Sandi, for letting me have all the family time hours needed to finish this.

ACKNOWLEDGEMENT

I would like to thank Simba for letting me have access to the information required to perform the analysis. I would like to thank my supervisor, Geoff Bick for his time and guidance.

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GLOSSARY

Pp – percentage point e.g. a change from 5 % to 7% is described as “ a 2pp change”

FMCG – fast moving consumer goods

LSM - living standard measure

Rsp - retail selling price

Pc 25g – 25 gram pack of potato chips

NN22g – 22 gram pack of niknaks

BMI – bench mark international

SKU – stock keeping unit

POP – point of presence

MI – marketing inertia

Q4 – quarter 4 – specifically a period from early September to end December

CSD – Cannibalization , Subordination or Domination

CA plot – Correspondence Analysis plot

SIRS – small independent retailers

1 INTRODUCTION

1.1 Context of the study

The salty snacks industry in South Africa can be segmented by snack type and pack size. Snacks are made from potatoes, maize and nuts. Snacks are served in 15g to 2kg pack sizes. Market share readings used by market leaders such as Simba are generally provided for stores that sell pack sizes smaller than 250g. Based on this store universe Simba concluded that it had a 60% market share on volume (unit of measure kilograms) and value. Given the volumes of Simba this would imply a market of 55000 tons p.a.

A survey of manufacturers of salty snacks determined that the market was in fact three times bigger than this. A visit to a supermarket serving Living Standard Measure (LSM) 6-10 customers would lead one to conclude that the dominant pack size and type was the 150g potato chip bag. The dominant pack size is in fact a 2kg extruded maize snack. A small bag of potato chips (30g) retails at R2.5 giving an retail selling price (rsp) per kg of R83. A 2kg extruded maize snack retails for R16.99 giving an rsp per kg of R8.5. The factor of ten difference in rsp's shows the drivers of the market share of the large extruded maize snack in the South African market. A manufacturer that extracts R80 per kg from the market is always going to limit its market share.

From q4 1998 to q4 1999 Simba launched a value based extension of its Niknaks brand in small bags (NN22g). The launch was a success with massive volume growth but the lower marginal contribution of the value line led to many debates about cannibalization and profit dilution. Subsequently it has become an accepted fact that the root cause of

profitability decline from 1998 to 2000 was the success of the value line. Furthermore the sales force were labelled as the culprits in chief in that they sold the easy low margin products while neglecting the more intensive selling required for higher margin products.

1.2 Purpose of the study

The imperative for profit growth can drive a manufacturer to participate in the lower priced segment of the market by introducing value lines which are meant to be incremental volumes that leverage the assets and contribute margin, while leaving the established high price market intact. Potato chip small bag (PC25g) business declined as a share of the volume after the launch of the value line. This decline occurred in channels and regions that contribute strongly to the volume. It also experienced absolute volume loss in the Western Cape and wholesale channel. The growth of PC25g was dwarfed by NN22g. Nevertheless there is volume growth in many channels and regions of PC25g. This begs the question of whether the value line introduction was incremental and did not impact PC25g growth or vice versa.

1.3 The Research problem and sub problems

The research problem is to test for the presence of cannibalization and to note the circumstances under which it occurs. This will enable further attempts to introduce value line products to be correctly managed. There are associated sub problems.

- **Sub problem 1:** Can a link be established between the value line introduction and the cannibalization?
- **Sub problem 2:** Is the cannibalization homogenous across all channels, regions and service methods?

- **Sub problem 3:** What was the strategy around NN22g as evidenced by its distribution?
- **Sub problem 4:** Was there an attempt to segment the market and target the distribution of the new product to specific segments?
- **Sub problem 5:** How does the approach taken by Simba measure up against the existing understanding of value based products and their introduction to the market?

1.4 Assumptions

This study depends on a high granularity of sales data in order to assess cannibalization. This granularity is available for Simba sales but not for competitors. The impact of competitive product is estimated by studying the aggregate results of the BMI and Nielsen results for the time period under review. It is assumed to reflect account activity.

1.5 Delineations and limitations

This study does not cover impacts on PC25g due to supply chain variations. It does not allow for variations in sales execution and variations in sales force competency.

2 LITERATURE REVIEW

The literature review reveals three major themes that are relevant to this study.

1. Marketing initiatives and their organizational fit. No market is immune to cannibalization by new products (Chandy and Tellis , 1998). In the context of mature FMCG industries, the response to these threats do not occur in an organizational vacuum and can be aided or hindered by the existing organization (Bonoma ,1982). This section explores the problems associated with a response to a new threat from within an old organization.
2. Marketing initiatives that involve new products and pricing structures. In the context of mature FMCG industries, according to Ambler and Styles (1997), these initiatives inevitably involve products linked to the existing family of products. The impact of these changes to the original marketing strategy is explored in this section.
3. Cannibalization arising out of marketing initiatives. In order to discuss cannibalization it is necessary to test for its presence. This section reviews cannibalization measurement techniques.

2.1 Marketing initiatives and organizational fit.

2.1.1 Marketing and the broader organization

In order to achieve focus on a specific product and market segment large multi brand organizations employ product managers (Clewett & Stasch ,1982). It is expected of these product managers to share internal supporting resources with other product managers to achieve scale. These shared resources may not even report to the marketing function. The substantially reduced influence on these resources (e.g. sales force) means more variability in the outcome of the marketing programs. This problem is compounded when gradual but substantial changes in the environment (consumers, trade and sales force) invalidate the best practices that have driven success previously. Bonoma (1982) warns against this 'marketing inertia' (MI) i.e. past success and practice dictating the future. Hence an indicator of MI is past success. Furthermore the success of others can spur a company to respond to the changes from an organization that has not kept pace with them. One of the ways that this ill conceived response is driven is if a volume reward system exists. Volume gained though price at the expense of profit can then be expected because imitating other company's successes can lead to a mismatch between the market segment entered and the marketing effort applied, yielding sub optimal margins. Taking on new segments can also cause a mismatch because the company accepts business outside its strategic fit, outside the optimised set of activities that drove previous profit (Porter ,1996). Specifically: distribution channels are the most prone to inertia of all the marketing variables. Channel conflict indicates this inertia and the time to review distribution channels e.g. contemplated line extensions may not be appropriate

in the current outlets and therefore need new distributors. The most efficient tools for the target market segment can be derived from marketing programs that build logically on consistency, integration and leverage (Shapiro ,1985). Hence it is necessary to delineate the market segment early on. Strategic fit with the company and competition are required to enable distinctive positioning and hence sustainable competitive advantage.

Companies need to be aware of their uniqueness and how that enables market success (Cravens, Piercy and Prentice ,2000). Following the herd can cause dysfunction. This should rather be replaced with marketing sensing capability and the inclination to action.

2.1.2 Asset base and process conflicts

Chandy & Tellis (1998) stress the importance of proactive cannibalization in that no market segment is immune to cannibalization or disruptive technology. Hence by proactively cannibalizing existing brands and product technologies one can retain market share. They also note that radical innovations have the capacity to destroy the fortunes of large firms as customers desert the incumbent firm for the innovator leading to the de-leveraging of the investments made over many years in the existing technology and skill base. Conversely the innovation can be a source of sustainable profit for the innovator. The context of the article is the challenges facing high tech firms of various sizes when faced with an increasing rate of product innovation.

Chandy & Tellis (1998) then add that cannibalization caused by an innovation is not just sales cannibalization but also the process of making historical asset bases and organizational routines irrelevant. They refer to incremental new products and line

extensions as a form of “*negative synergy*” when sales cannibalization occurs (Chandy & Tellis, 1998:484).

Porter (1996) covers the conflict between market segment choices and the assets and routines of the firm. Operational effectiveness is contrasted with viable competitive positions. Operational effectiveness enables a firm to play in more market segments cost effectively. However the firm does not have a monopoly on the operational effectiveness and hence cannot be viably competitive over the long term. “Competitive strategy is about being different” (Porter, 1996:64). Different sets of activities are required in order to have a differentiable position in a particular market segment. This may eliminate access to certain market segments that require a more generic set of activities. The term ‘fit’ describes the compatibility of a set of activities with a given market segment and the way the set of activities enable each other. Examples are provided of companies that try to match the competitive position of others but do not have the requisite ‘fit’. They can match the price but are not able to extract all the value that their competitor with better ‘fit’ is able to extract. Product innovation can thus conflict heavily with establish routines and investments leading to an unsustainable competitive position.

Weigand (1977) discusses the fit between products, channels and markets. The assets of the company may not mesh well with the attempt to appeal to different market segments. Some elements of the companies supply chain may be under utilized or over extended causing the fit between the market segment and the companies assets to be achieved through the use of subcontracting or partnerships with other assets bases.

2.1.3 Service method and marketing initiatives

Stern & Sturdivant (1987) state that the quality of thought given to market positioning of a product is frequently not matched by the quality of thought around the distribution and service method. If the marketing mix is being redesigned then the service method should not be excluded from rigorous thought processes. Research instruments and conjoint analysis techniques should not just be applied to product features but also service features. At some stage in the process the question should be asked “What is the ideal service method for this new product class”. Industry folklore gets in the way of change and existing methods are misapplied to new products. (Stern & Sturdivant 1987:37)

In order to have a competitive edge manufacturers need to have greater control of the point of purchase (POP) (Quelch & Cannon-Boventure ,1982). Displays have to be appropriate to the market segment and be supported by an appropriate service method. Consistency and coordination are required in order to ensure that the same marketing mix variables are reproduced from outlet to outlet. Service methods that provide greater control over the POP are increasing in importance because:

- they are more productive than advertising and store discounting
- retailers are anxious to shift the responsibility to manufacturers in order to reduce cost
- impulse buying is becoming more dominant.

Specific mention is made of the Frito-Lay International van sales system comprising large, medium and small store service formats and the strength of these service methods in controlling the POP for the snack food sales. Frito-Lay International ideal store layouts can then be set up centrally and implemented across the whole outlet universe. The point is made that the more important the POP the more justification for a direct sales force that is an internal resource. Once this capability is established it is easier to add line extensions to brands as the direct sales force can bring it to market with good POP relatively quickly. This ease is compromised if the market segment is even subtly different from the bulk of the products sold. Retailers are happy to let a salesmen who knows salty snacks 'own' the salty snack section but will not allow this control to extend to other parts of the store. Hence an attempt to get the salty snack salesmen to sell confectionary will not see them control the POP as successfully. Packaging can be an enabler or impediment to the effort to control the POP in that if it is similar to the current product range it can be merchandised along with the current products. Should it be different it may well be placed elsewhere in the store or not accepted at all. This sort of complexity conflicts with the manufacturers need for channel support to the various marketing mix variables (Shapiro ,1985). Resources that are applied to the channels are frequently misapplied leading to unexpected and undesirable results. Changes in product and market strategy should inform distribution policy and the allocation of resources supporting distribution. Even if this is accomplished compensation policy can undermine training programs for sales forces (Henry ,1982). He advocates a system engineering approach to sales management where market strategy is integrated with sales force processes and advertising and promotion. He notes that salesmen seek easy prospects and

sure sales. This behaviour can be mitigated by channel segmentation of salesmen and matching service method to outlet. He then develops a detailed systems based map of activities for ensuring coordination between the sales force and marketing executive. Compensation should be aligned with company strategy (Coughlan & Sen ,1989). Depending on the salesperson, income is maximised subject to the maximum time available or time is minimized subject to the minimum level of required income. An exceptional value proposition which will generate sales rapidly will encourage the revenue maximising salesmen to beat his normal income by an even greater margin whereas it will encourage a time minimising salesman to reach his target income in an even shorter space of time and neglect the other required business. This sort of decentralised decision making can be avoided through the use of systematic cost and profit trade offs to maximize distribution margin (Herron ,1982). A detailed understanding and a costing system that holistically relates gross margin to distribution expense in order to aid distribution decisions is needed. In the absence of such a system sub optimal rules of thumb predominate and the decentralized decision making, which characterises distribution operations, is un-informed, having unexpected profit impacts.

2.2 Marketing initiatives that involve new products and pricing structures.

2.2.1 New Products

Grime, Diamantopoulos and Smith (2002) provide a review of the language that is used in research about new products that are linked to a core brand. The terms “line extension” and “brand extension” and their commonly understood meaning are discussed in their paper. A line extension uses a current brand name to enter a new market segment

in its product class e.g. for the carbonated soft drinks product class the diet cola segment can be entered by “Diet Coke” a line extension of “Coke”. A brand extension is when a current brand name is used to enter a completely different product class e.g. for the footwear product class the “caterpillar” heavy machinery brand name is a brand extension.

Nijssen (1999) contrasts brand extensions with line extensions. Line extensions appeal to the same market segment whereas brand extensions enter outside the current market segment. Line extensions do not always generate extra profits and most line extensions differ only marginally from the original product. Consequently they differentiate supply to a market segment (e.g. a new razor head from Gillette) whereas brand extensions can create a new market segment (e.g. Gillette branded shaving cream and after shave creams). Line extensions that feature changes in flavour and size are the most successful extensions but quality changes are less successful and cannibalization of existing products is a given if there is low differentiation. Easy to copy extensions add little value especially in the context of powerful retailers who will have a variety of undifferentiated products to choose from - effectively commodities. In addition to this retailers resist stock keeping unit (sku) proliferation. A well thought out brand extension can fragment the market and thus hurt the dominant product by reducing its field of play. This reduces the initial competitive response as brand extensions are not merely flavour or size changes but redesigned products that meet an existing need more effectively than the incumbents. Successful line and brand extensions are enabled by being first to market with high strategic fit and suitable advertising. Speed (1998) concurs with this and notes that brand extensions moderate cannibalization while line extensions support the process

of the transfer of attributes between the incumbent product and the new entrant. This lower level of differentiation opens the door for cannibalization. The traditional thought process of manufacturers on the need for line extensions is criticised by Dhalla & Yuseph (1976) who stress that the product life cycle concept is not supported by objective data. Having a model of brand sales that holistically gathers and weights the market influences on the brand best advances the maximization of a brand. The decline of the brand is not a foregone conclusion and hence the need to rush into line extensions can be counter productive.

The prevalence of line extensions cause the aforementioned problem of sku proliferation (Grime *et al.*, 2004; Ambler & Styles , 1997). Friend & Walker (2001) comment on the need for more sophistication in retail stock range decisions and price promotions. The increasing complexity is beginning to be mitigated by scale retailers through the use of sophisticated software systems. They note the cost implications of stock outs and excess inventory and how short shelf life items exacerbate these costs.

2.2.2 New Pricing Structures

Dean (1982) comments that the market may have a latent acceptance of a new product and the eventual appearance of the product will trigger explosive demand. The competitive cycle is then hastened depending on the relative ease of entry into the market by competitors. Pricing then moves from specialty to commodity mode as rivals imitate a product. The degeneration of pricing follows shortly thereafter. The “go/no go” decision on the launch of the product has to assume that the costs of launch will be recovered before the product becomes a commodity football for the market. The pricing of a new

product has an intimate interaction with the cost and ease of distribution e.g. if the low price is the dominant marketing mix variable then the channels of distribution which emphasize this will predominate. The faster inventory turns associated with a low priced product will enable lower margins. A greater emphasis on other product attributes will require more sales finesse, slower inventory turns and thus higher margins required by distribution partners. Should segmentation pricing be used then the company requires the ability to segment and seal off separate pricing regimes. Leakage between segments can be tolerated provided it is small. It helps if the product configuration differs by segment in order to defeat direct price comparison. Should the segmentation not hold Mazumdar (1996) develops a model that considers two products that cannibalize each other and the effect on total profit. A cannibalization rate is associated with each product. Sensitivities of the introduction timing are then run on the cannibalization rates, profitability difference and market potential. Inferences drawn from the model are that the higher the relative market potential and relative profitability of the new product the sooner it should be introduced. A value line would have higher market potential but lower per unit profit and so the potential versus the profitability would have to be played off against each other.

Winer (1986) concludes that variance in consumer demand for frequently purchased packaged consumer goods is most easily explained by price versus other marketing mix variables. In the context of frequent price promotion the expected price may be lowered such that off promotion volumes are small. A new reference price then enters the consumers mind for the brand and influences future purchasing decisions. This pricing

instability and changes to pricing structure generate price expectations that, if not conformed to, can drive consumer behaviours more than other marketing mix variables. In addition Meredith & Maki (2001) state that: for branded packaged goods from the same firm cannibalization is enabled by having similar attributes except for price. Their model revolves around price/quality tiers amongst packaged consumer goods. Brands considered to be in the same price/quality tier can cannibalize each others share given a price differential. A product in a lower tier can cannibalize a brand in a higher tier provide the price differential is high enough. Reference price theory then establishes a price gap between the premium and value line that is expected and tolerated. Deviations from the tolerated gap change buying behaviour. Reference price theory is temporal in nature and refers only to brands from one manufacturer. When comparisons occur between all brands in a category then a contextual aspect enters the consumers mind. Weak brand preference and wide brand sampling inflate the contextual impact on the reference price. The lowest price brand has the most significant impact on contextual reference. Cannibalization enablers are thus low perceived quality gaps amid low utility for other differentiators used to position the victim brand. Asymmetric responses to price decreases and increases exist as removing the price spread does not produce a proportionate decrease in cannibalization once it has begun. They concur that proactive cannibalization that is sometimes necessary to forestall competition (Chandy & Tellis ,1998).

Bolton (1989) shows that combinations of different marketing characteristics are shown to influence price elasticity causing variation across one market. Category price activity is not strongly associated with more price elastic brand sales and brands with high market

share are own price inelastic. Manufacturer advertising does not create price elasticity because it generally does not emphasize price whereas retailer advertising that emphasizes price drives price elasticity. Links between point of presence display activity and price elasticity depend on whether price comparison vs. brand comparison is encouraged by the display.

Frank & Massy (1965) show that independents are less responsive to pricing than chains, as chains are characterized by central decision making. Loyal consumers will do less stocking up. Low LSM groups tend to purchase small pack sizes. Hence price sensitivity is higher for smaller packages in the presence of low LSM groups.

Danaher & Brodie (2000) confirm drivers of sensitivity as follows:

- High market share drops price sensitivity.
- High perishability decreases price sensitivity.
- Competitive intensity drops the price sensitivity.
- Expensive categories have less price sensitivity.
- High deal frequency drops price sensitivity.

As a counterpoint to the other theories on price elasticity, Mulhern, William and Leone (1998) find that for liquor brands in a monopolistic environment: More promotions, more market share and more wealth mean more price sensitivity. This contrasts with other literature.

2.3 The measurement of cannibalization

The definition and measurement of cannibalization is addressed by Lomax, Hammond, East and Clemente (1997). Cannibalization is contrasted with incremental revenue. The point is made that it is naive not to expect some cannibalization but when cannibalization

exceeds expectations the economic results are unexpected. Cannibalization is also said to be first order i.e. a line extension steals revenue from its parent brand or second order i.e. a line extension from other brands in the portfolio.

Three methods of measuring cannibalization are then discussed in this article.

1. Gains loss analysis
2. Duplication of purchase
3. Expected share movements

Gains loss analysis gives a matrix of brands gaining share against brands losing share.

Each measured buying unit, be it a store or household, is analysed for volume swops amongst brands. **Duplication of purchase** measures the cross purchasing of brands. The proportion of individuals who buy any pair of brands can be predicted by calculating the separate and combined penetration of the two brands. Proportions higher than the prediction suggest cannibalization. **Expected share movements** assume that all brands lose share to the new entrant in proportion to their share prior to the launch. Deviations from this indicate cannibalization. All three methods can indicate cannibalization as they examine individual purchasing decisions but the impact of these decision might be lost once all the volume changes are aggregated to total market share level. The granularity of sales data is thus important in assessing the impact of cannibalization. All the sets of data used in the above methods require a pre and post sample of the market. Care has to be taken to ensure that influences on the post sample other than the new brand introduction are identified.

2.4 Research Questions

Based on the literature review the following research questions are posed.

Research Question 1: Was PC25g cannibalized and what is the role of NN22g in the cannibalization?

Answering research question 1 corresponds to the research problem and the first sub problem. It will require cannibalization measurement (Lomax *et al* ,1997) and determining if the cannibalization triggers mentioned in section 2.2.2 apply or not. It will also demonstrate if the segmentation of the market was correct i.e. do two separate markets exist – one for NN22g and another for PC25g. The absence or presence of cannibalization will demonstrate the validity of the segmentation.

Research Question 2: Do particular channels, regions and service methods show statistically significant behaviour in respect of cannibalization as defined above?

Research question 2 corresponds to research sub problem 2 and Section 2.1.3 above. This section is relevant as the existing understanding within Simba is that there was general cannibalization of pc25g across all channels, regions and service methods. Furthermore this cannibalization of PC25g by NN22g is thought to be an inherent characteristic of the sales force which will result no matter what measures are put in place. It is thought that Simba does not have the ability to implement a price segmentation strategy based on new products as per section 2.2.1 and section 2.2.2.

Research Question 3: Does the distribution of NN22g illustrate any particular channel, service method or regional strategy?

This question corresponds to research sub problem 3 and 4. If the market segmentation was valid did the organizational dynamics referred to in sections 2.1.1 and 2.1.2 come into play to blunt the implementation of the segmentation? Research Question 4 then follows logically and corresponds to research sub problem 5.

Research Question 4: Does the strategy reflected by the distribution concur with suggested approach derived from the literature?

3 METHODOLOGY:

3.1 Population and Sample

The population was all Simba accounts serviced in q4 1998 and q4 1999. It is easy and economical to analyse the entire population as the sample to be studied is the entire population. The sales data systems do summarise the purchases in some small cash accounts to consolidated accounts per sales territory i.e. a geography similar to a suburb. The granularity of the sales data of approx 40 small cash accounts would then be rolled into one.

3.2 Data collection method

Simba's systems provide a vast amount of data covering many thousands of accounts with detail by transaction date and by item code. This permits the classification of the data into dimensions i.e. dates into financial periods, accounts into channels and territories. Items can be classified into product categories. This enables any data to be segmented by these dimensions. The data was extracted from the BaaN database onto MS Access. The data was categorized and summarized in the database and then exported to excel. A pivot table was setup which enables the easy assessment of the various segments. As the method for measuring cannibalization requires volumes by line item by outlet the simple selection of this data from the data warehouse by the database was all that is required.

3.3 Reliability and Validity

The data can be extracted and manipulated readily from the sales data warehouse. There is no subjectivity as these are reported & audited sales figures. The classifications and segmentations to be used are standard Simba categories.

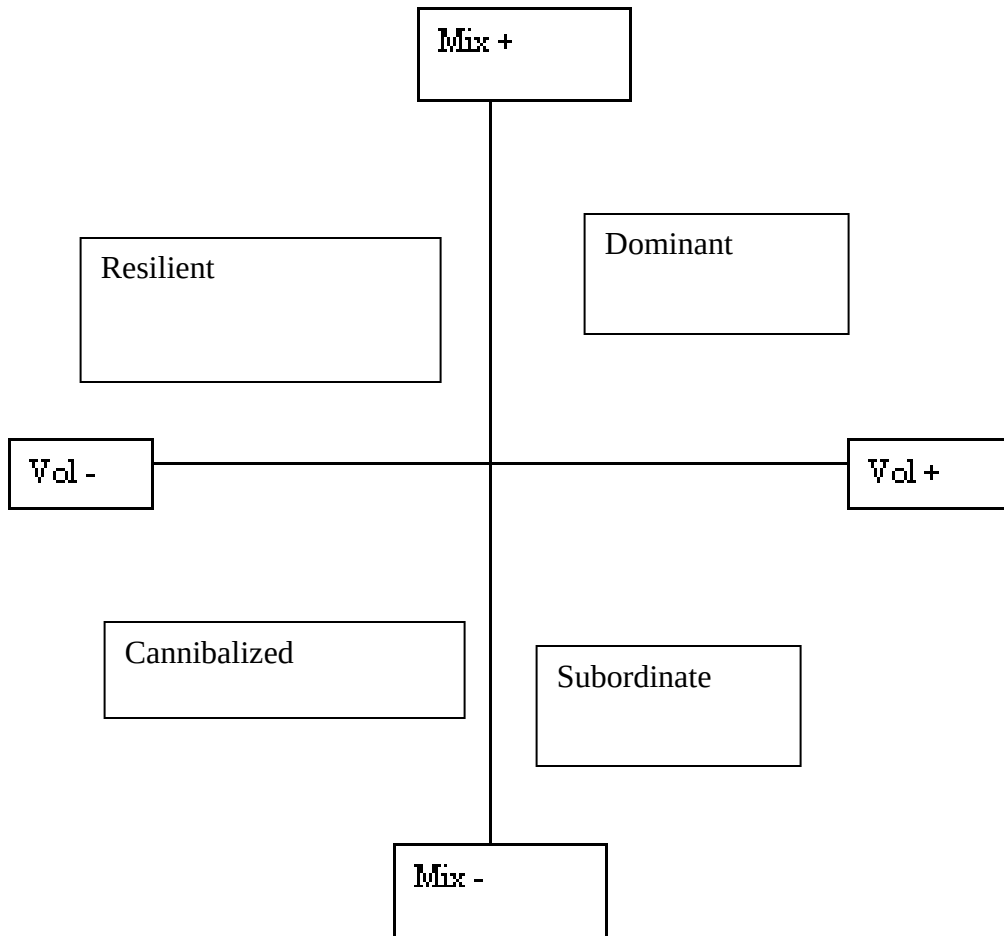
3.4 Cannibalization Method

The challenge for this study was not to collect data and segment it but to find relevant methods for measuring cannibalization that would be supported by Simba's data warehouse. The channels in which the products in question trade were not well covered by Nielsen or other such companies. Cannibalization techniques that relied upon competitor market data are thus excluded from the study. A method of using the data along the principles suggested by Lomax *et al* (1997) is outlined below. The word 'mix' is used to describe the contribution of products to the overall sales. Should there be changes in the contribution of products to the overall sales the 'mix' is said to have changed. If the products yield varying profit levels then a decline in more profitable products is referred to as a decline in the mix or as a poorer mix.

If two competing products are sold in the same outlet and the newer product grows as a % of all the products sold questions arise about cannibalization. It becomes more complicated when both products experience volume growth. This is the ideal - the products are appealing to different segments and giving better coverage of the market. The volumes are then incremental especially if the earlier entrant records above average

volume growth notwithstanding the success of the new entrant. The volume growth is measured relative to the preceding time period.

Figure 3-1: Categories of volume change



Source: Adapted from Lomax et al (1997)

The mix change for a product is expressed as the pp change in the contribution to overall sales of that product in that account. This leads to a two by two matrix of these two behaviours in that account. If a product improves in mix and volume it is dominant. If it improves in volume but declines in mix it is subordinate. If it loses volume and declines as a % of the mix then it is being cannibalized. If it loses volume but grows as a percent of the mix then this implies that the overall volumes declined but the product volumes

declined more slowly. This would be resilient behaviour. In testing the cannibalization of PC25g only those accounts in which PC25g and NN22g were sold in the same outlet were selected. The incidences of cannibalization as defined above were counted. For each account number in the dataset the total units by account in q4 '98 and q4 '99 were calculated as well as the total units for NN22g and for PC25g. The performance of PC25g in accounts where NN22g was sold was measured and categorized according to the above matrix. The results were filtered by region, channel and service method to determine if there was any statistical significance to the impact of these dimensions. Each of the dimensions of the filters is defined below:

Table 3-1: Dimensions of Sales Activities

Region	Central	Northern Cape, Northwest, OFS and Southern Gauteng
	East Cape	From PE to Beaufort West to East London
	Natal	KZN
	North	Northern province, Mpumalanga and Northern Gauteng
	Western Cape	Peninsula & Boland
Channel	Key Retail	PNP, Shoprite Checkers and Spar
	SIRS	Small independent retailers
	Other Accounts	Non food retailers
	C&G	Convenience and gas stations
	Wholesale	Organised (makro, metro) and independent wholesalers
Service Method	Agent	3 rd parties providing sales and logistics services
	Presell	Rep supported by a merchandising and delivery team
	normal	Van sales calling on C&G and SIRS
	small	Van sales calling on smallest SIRS
	large	Van sales calling on smaller key retail stores

χ^2 testing was used to determine if the tables are statistically significant. Once it was determined that the tables were statistically significant a method was required for ensuring that the source of cannibalization other than the introduction of NN22g are

highlighted. If a competitive single serve offering was launched at the same time as the NN22g then a gains loss analysis would be incomplete without an analysis of the competitive offering by outlet. Market data was analysed to determine whether this in fact took place. Analysis of single serve offerings at the time would then need to show that there is little evidence of other offerings impacting PC25g. Further if NN22g was shown not to be dominant in an account then it is difficult to infer that it was the source of a loss in PC25g volumes. Finally if the PC25g and NN22g have a combined volume that dominates outlet volumes then it seems more plausible that the two would influence each others volumes. The method followed can then be summarized as follows.

1. Cross reference market data to assess likelihood of competitive impact.
2. Determine the relative size of PC25g and NN22g in the Simba offering to the account.
3. Categorize the type of volume change for PC25g and NN22g occurring by account and assess for statistical significance

3.5 Correspondence Analysis

Correspondence Analysis was used to assess which of the region, service method and channel dimensions are strongly associated with the cannibalization, subordination or dominance (CSD) behaviours. The contingency tables were constructed by counting the occurrence of CSD behaviours in each of the dimensions. Given the disparate size of the various stores due to inherent channel and regional characteristics a measure was created to weight the contribution of the outlet e.g. the volume achieved through a wholesale

outlet can be 50 times that of a small outlet. Not weighting the wholesale outlet's CSD behaviour more heavily than the small outlet will cause the CSD behaviour of the various small outlets to swamp the behaviour of the wholesale channel. An average volume was chosen for a small store and that was used as to weight the wholesale outlets contribution i.e. the count of the behaviour observed for the contingency table was weighted up by the ratio between the wholesale outlet volume and the average small store volume. All stores were then reduced to a multiple or fraction of the average small store volume. This amplified or attenuated the CSD behaviour found. The CA plot methodology followed did not plot the attributes and the brands on the same Cartesian plane (Bendixen. ,1996). The influence of the attributes in forming the axes of the plots is used to name the axes and the brands are plotted relative to these axes. In this case the market segmentations according to channel, region and service method are used to name the axes and the CSD behaviours are positioned relative to them.

The categorization of the outlet according to one of the CSD behaviours obscures the strength of the volume change in that outlet. In order to introduce a finer measure of the CSD change the average percent volume change was determined for each of the CSD categories. A subset of the CSD categories was then created indicating strong or weak CSD behaviour. Hence an account with a below average decline in PC25g volume versus other cannibalized accounts would be characterized as weak cannibalization and plotted on the CA plot as "cann-".

The definitions for these subsets are listed below.

Table 3-2: Strength of CSD behaviours

CSD category	growth > average	growth < average	decline > average	decline < average
Cannibalization	n/a	n/a	Cann+	Cann-
Subordination	Sub+	Sub-	n/a	n/a
Domination	Dom+	Dom-	n/a	n/a

4 RESULTS:

This chapter begins with the listing of relevant market data which will be referred to in the discussion and then begins the cannibalization analysis according to the method outlined in chapter 3. The structure of the data enables drill down e.g. if a particular region shows cannibalization we can then drill down to the underlying channels in that region to see the drivers. Alternatively we can drill down to the service method of the region or channel. Not all tables will be statistically significant and trends cannot be extrapolated from those tables. In order to improve the readability of this section the many detailed tables are included in the Appendix. After presentation of the CSD data by different dimensions of analysis i.e.(regional , channel, service method) the associations between certain market dimensions and CSD behaviour are reviewed using correspondence analysis. Finally the data required to illustrate the distribution strategy is presented.

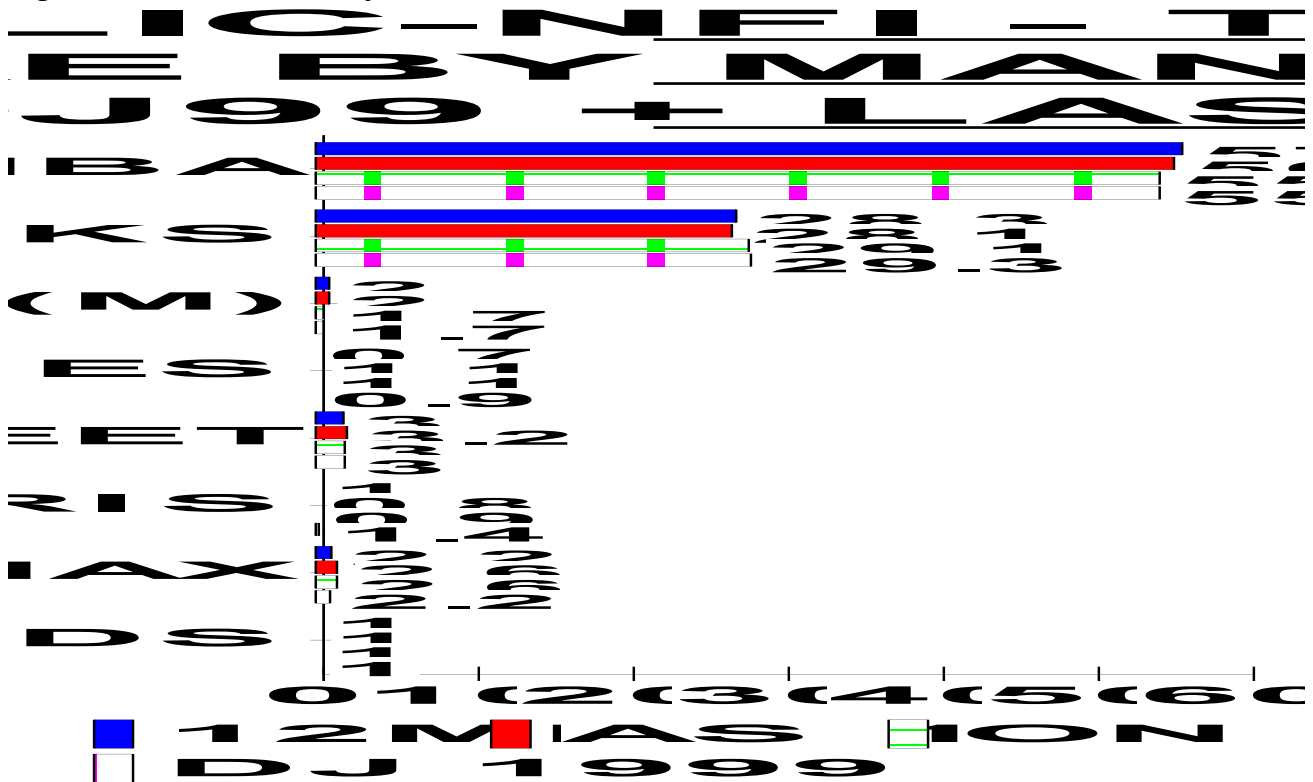
4.1 Analysis of Market data for the y/e q4 1999:

Given that a value based line extension is an attempt to appeal to value conscious consumers and that this study covers a wide geography the income levels by region the LSM distribution by province is included in Table 4-1 in the appendix for reference.

The BMI market share shown in Table 4-2 depends on claimed tonnages produced for the manufacturers. It can be seen that Simba experienced a 1.8pp decline over the three

years. The top ten players (representing 70% of the market) from the market lose combined share of -1pp. 7 of the players lose combined share of 5.4pp. 3 players gain share of 4.5pp. From 1998 to 1999 BMI shows a 1.4 pp decline for Simba. Simba's closest PC competition is from Willards and Baker Street with Willards losing share (1.6pp) and Baker Street gaining share (2.1pp). Although other manufacturers gained share in this time none of them had PC offerings. The BMI figures indicate that a potential source of PC competition for Simba then was the baker street offering. In order to assess this a closer look at the Nielsen figures of the time is required in order to assess the impact of the baker street PC offering.

Figure 4-1: Nielsen share by manufacturer

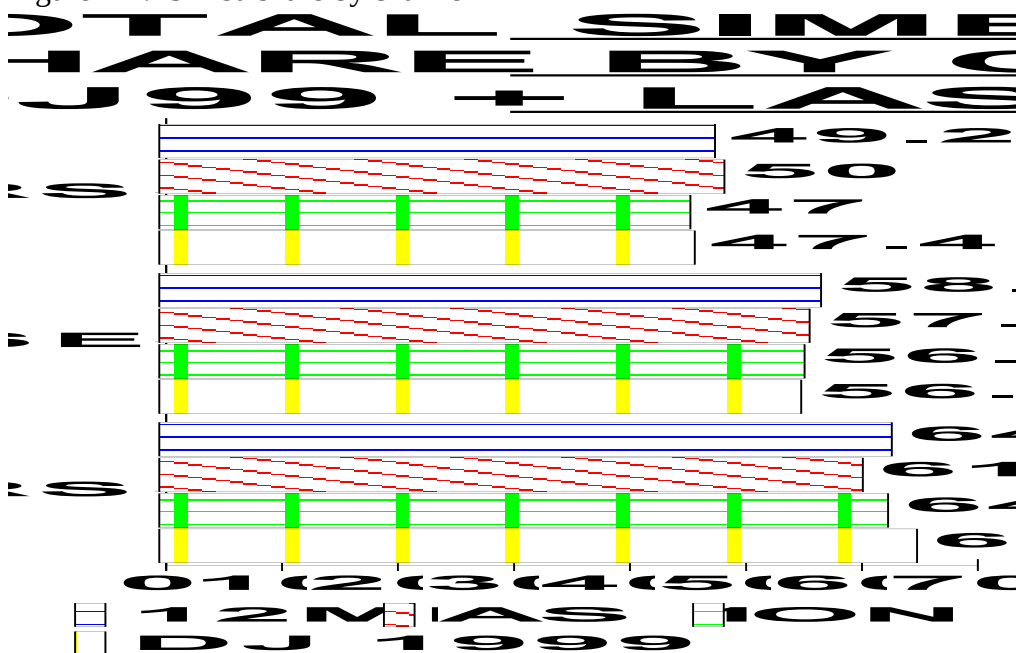


Source: AC Nielsen (2000)

From the Nielsen figures for DJ98 to DJ99 shown in Figure 4-1, it can be seen that a 1.5% decline is shown by DJ99 versus the 12 month moving average. The implication is

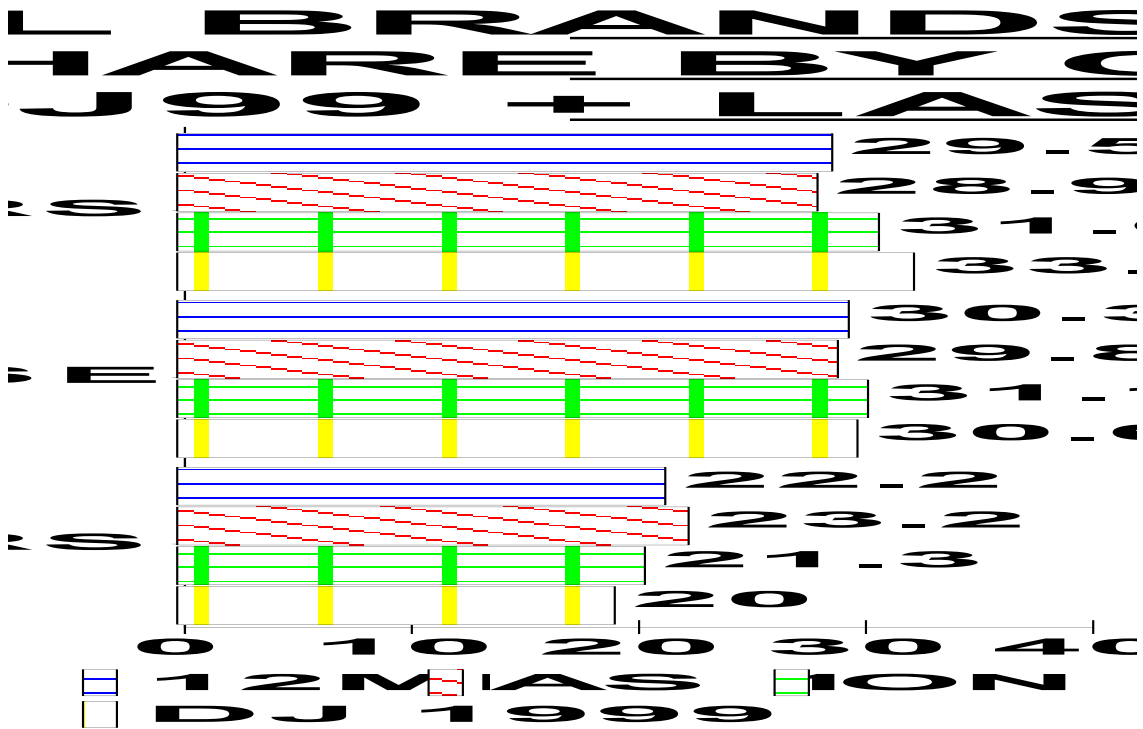
that the absolute share change from DJ98 to DJ99 is more severe. In contrast with the BMI data Willards is shown to be gaining share (1pp) along with Messaris (0.4pp). This reflects how Nielsen under reads the wholesale channel and bottom end retail. Baker street is shown having flat share and their PC offering, Royces, is showing having declining share. At the same time retailers own brands are static in share. Share by channel for Simba in Figure 4-1 shows the decline by Simba in Majors and Impulse offset by gains in grocers. Willards main source of share growth was in majors as shown in Figure 4-3. PC growth by the Willards Lites brand at the expense of Lays is revealed to be the source of this growth in Figure 4-8 and in Figure 4-6.. Royces is not shown to be a driver of share change in the PC category as per Figure 4-4. The Simba PC brand is show to grow share in Figure 4-5. Niknaks loses share in majors but grows strongly in grocers in Figure 4-7.

Figure 4-2: Simba share by channel



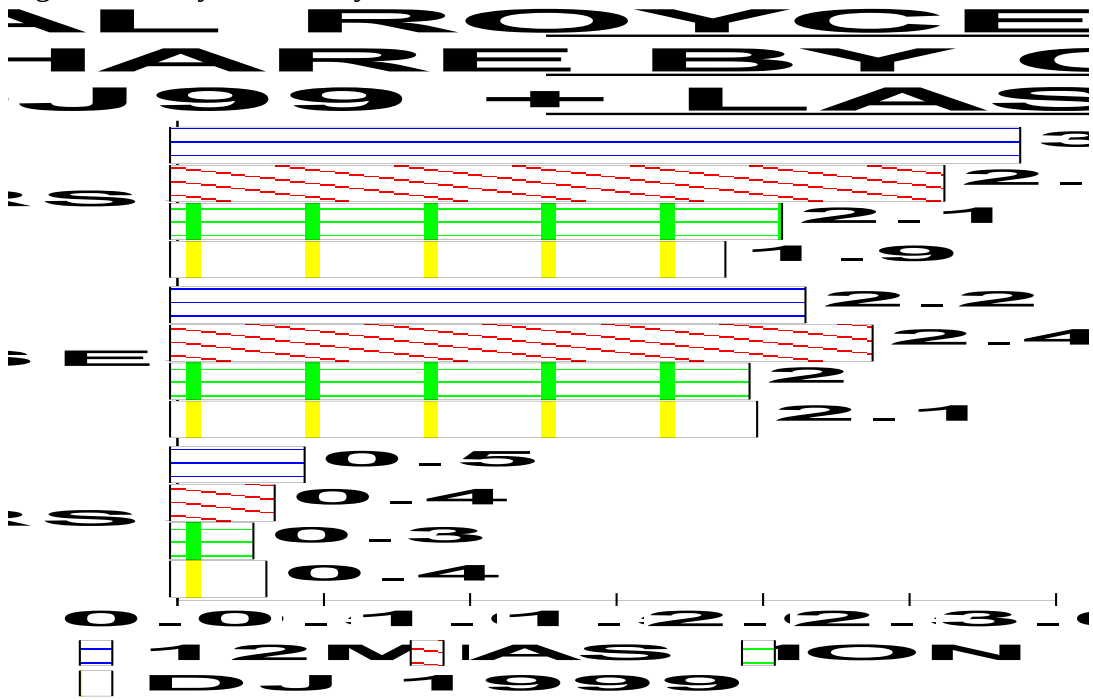
Source: AC Nielsen (2000)

Figure 4-3: Willards share by channel



Source: AC Nielsen (2000)

Figure 4-4: Royces share by channel



Source: AC Nielsen (2000)

Figure 4-5: Simba potato chip share by channel

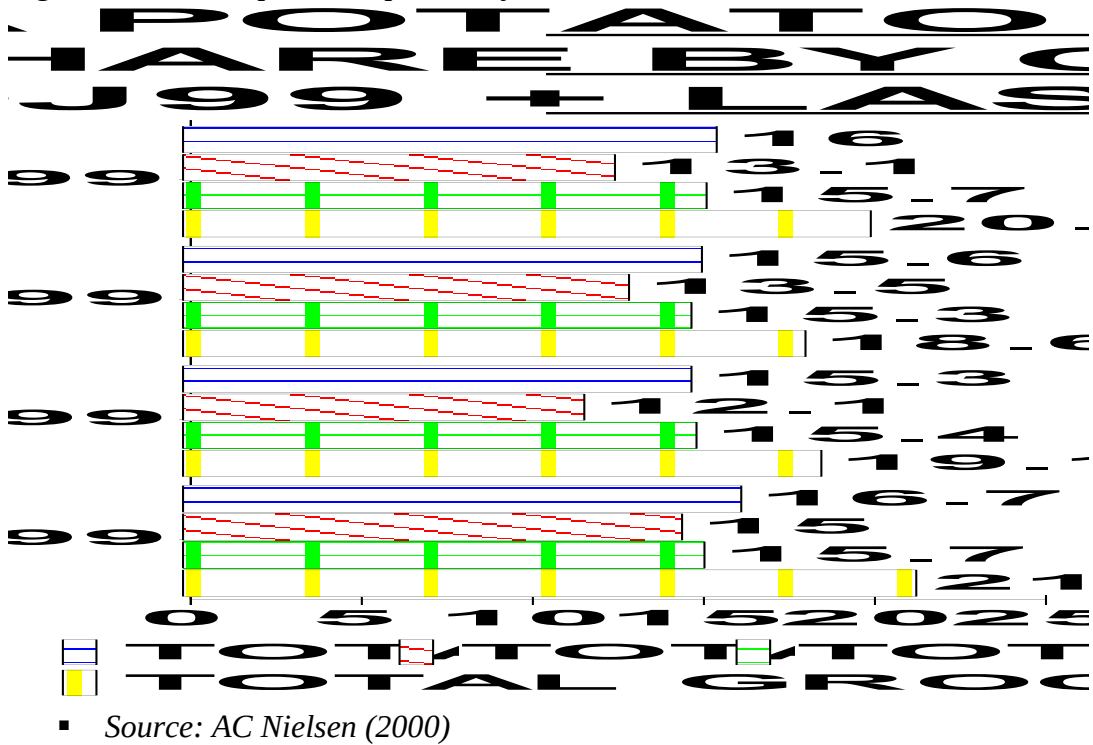


Figure 4-6: Simba Lays Potato Chip share by channel

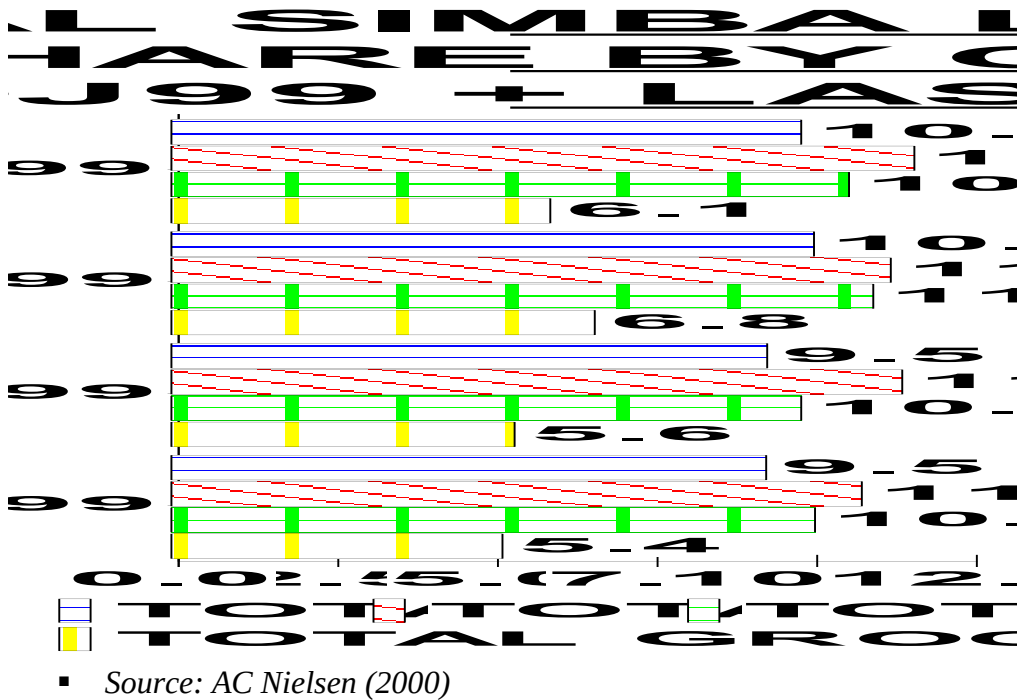
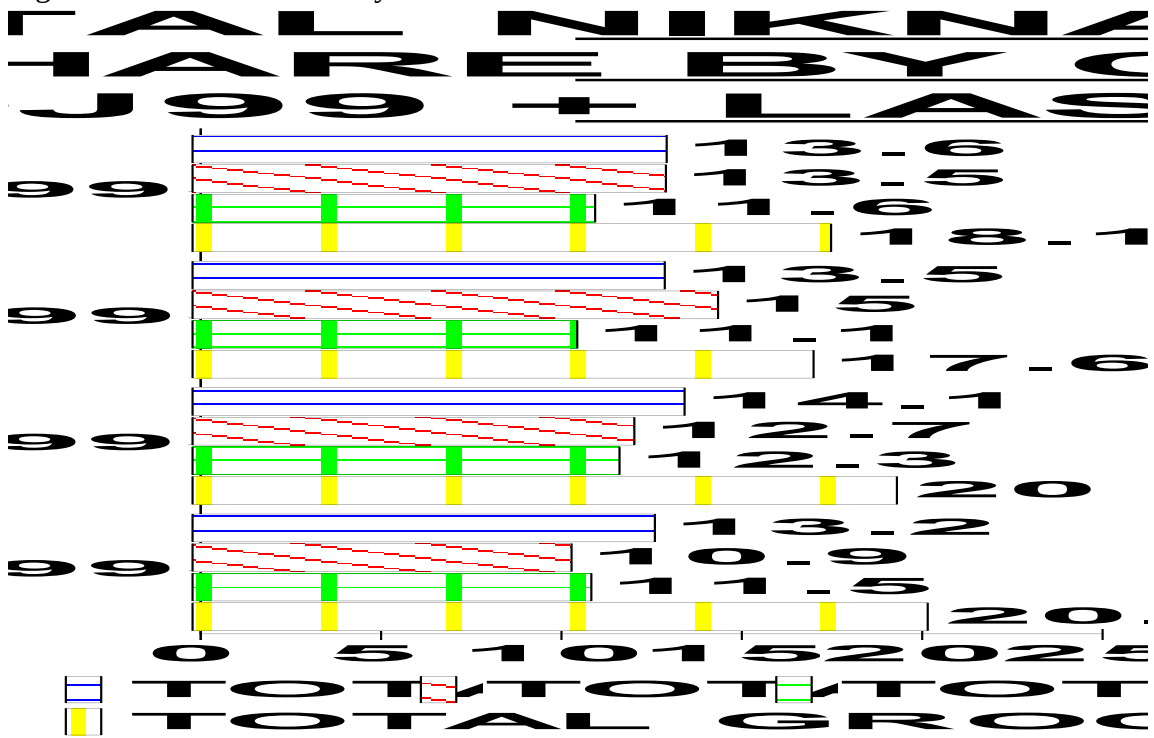
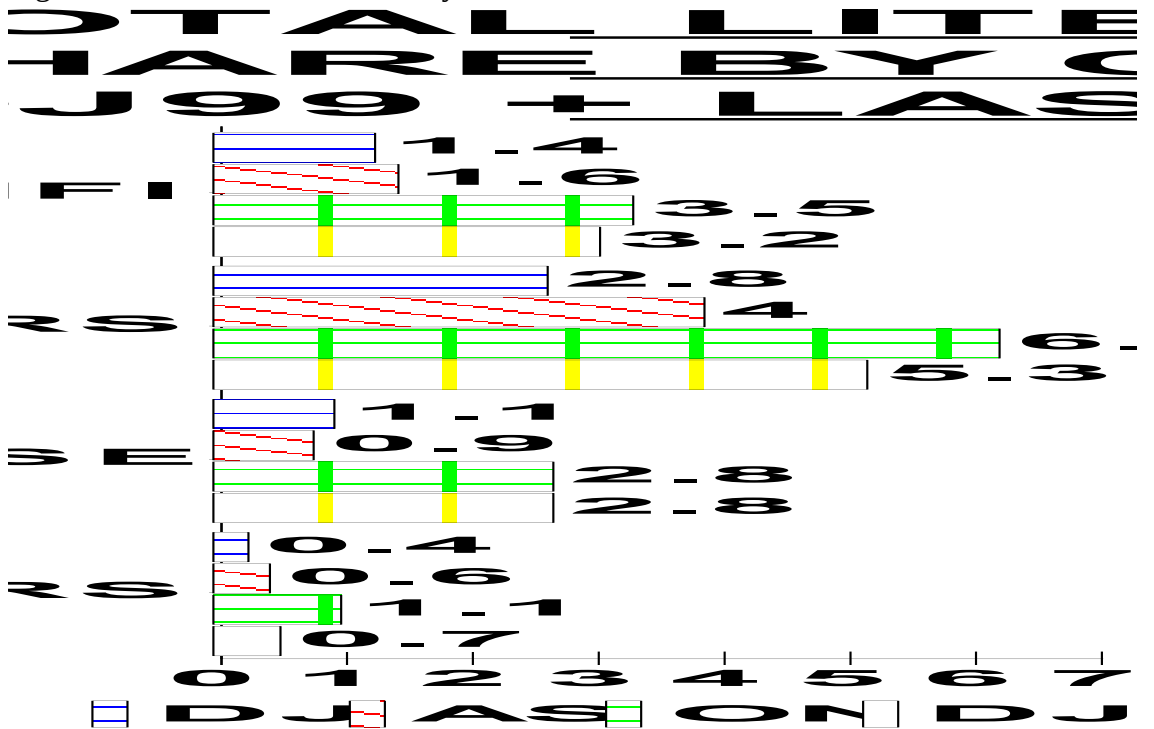


Figure 4-7: Niknaks share by channel



Source: AC Nielsen (2000)

Figure 4-8: Willards Lites share by channel



Source: AC Nielsen (2000)

Figure 4-9: Willards Crinkle Cut share by channel

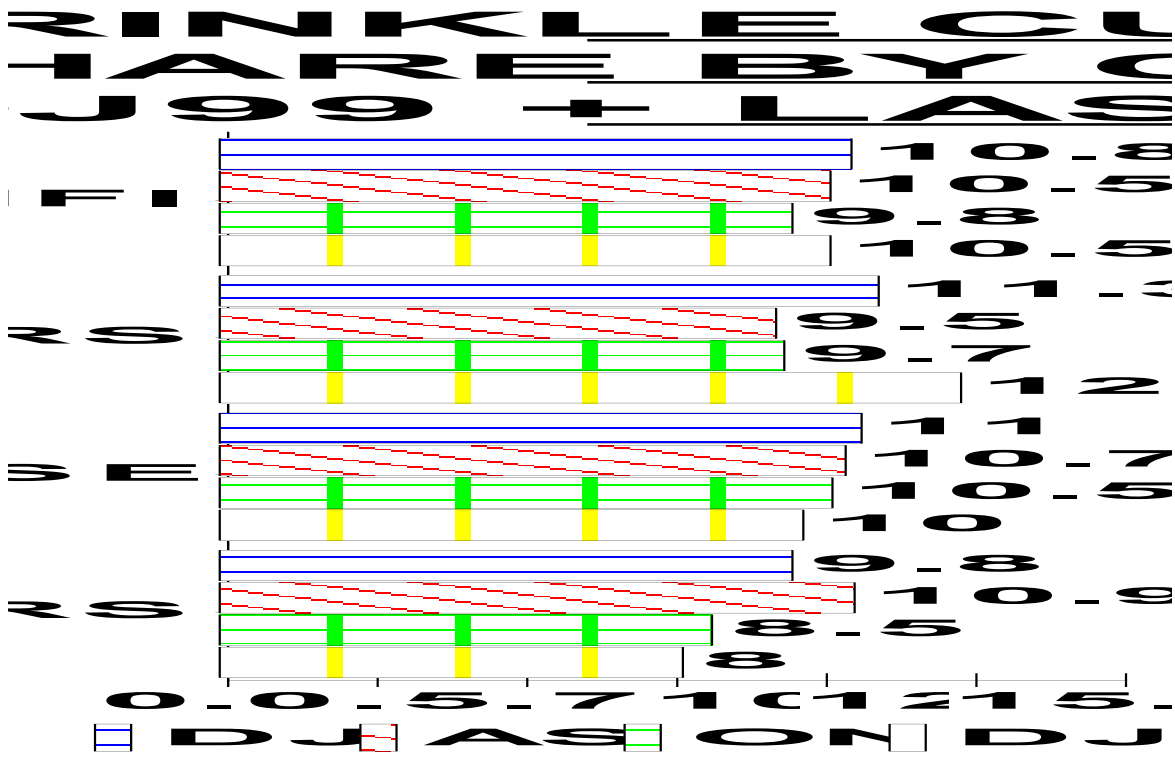
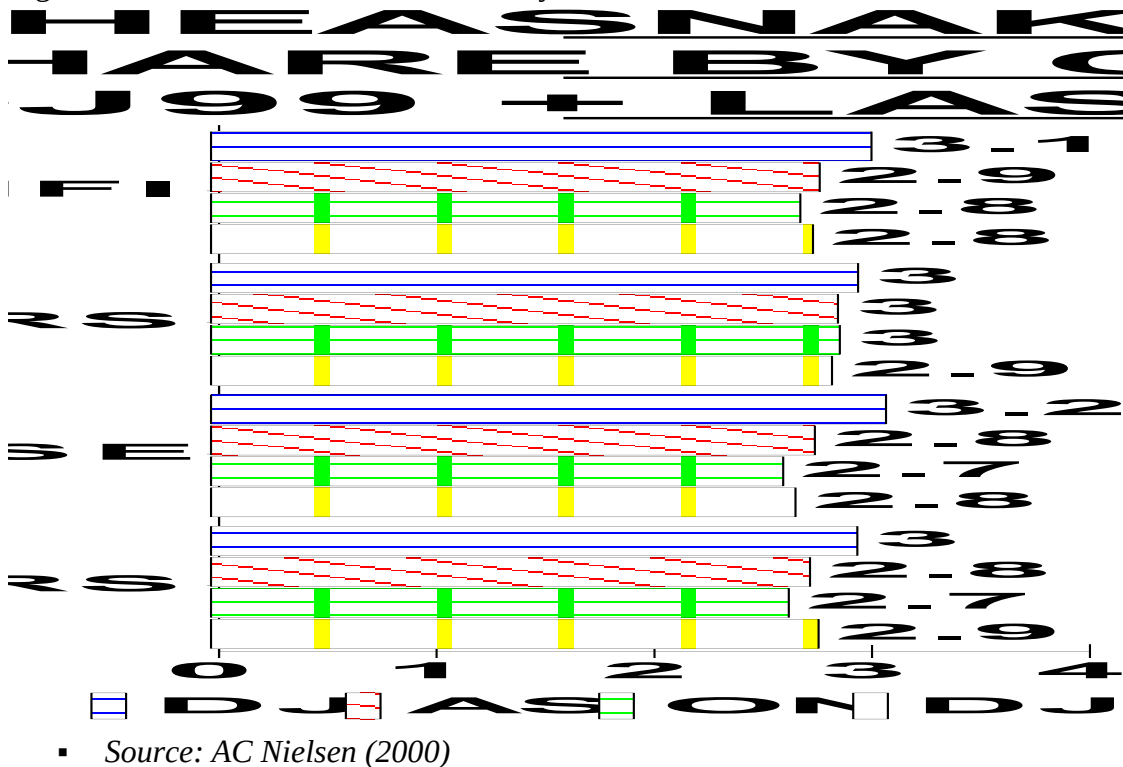


Figure 4-10: Willards Cheasnaks share by channel



4.2 Analysis by region :

We start the analysis by region with an overview of the volume evolution in q4 99 vs q4 98 in Table 4-3. PC25g enjoyed double digit volume gains in 4 out of 5 regions. Strong volume gains on NN22g correspond with these gains. PC25g declines as a % of the mix given the size of the NN22g gains. NN22g and PC25g are 70% of the volume across the regions. The overall growth of PC25g is contrasted with Table 4-4 which shows the count of CSD behaviour by account across the region. This contingency table is statistically significant. Analysed by regional dimensions PC25g is shown to be cannibalized in 40% of accounts. Natal and the Western Cape are the most pronounced. PC25g is subordinate in the majority of accounts (52%). The central region shows the highest subordination. The sample is then filtered for accounts in which NN22g was dominant (about 60% of the accounts). Volume evolution for the accounts in which NN22g was dominant shows PC25g achieving some strong growth as per Table 4-5. In Table 4-6 the same patterns as before are observed with significant cannibalization and subordination by account. The overview will now be broken down by channel.

4.2.1 Region by Channel - SIRS:

SIRS represent 25% of the accounts in the sample. At this point it should be noted that these are consolidated accounts. Eg 100 corner cafes would be consolidated to one account for the purposes of reporting. The detail is not accessible. It can be estimated that there are approximately 15000 SIRS outlets that were serviced during this time. The PC growth is very strong despite losing 5pp in mix as per Table 4-7.

The contingency Table 4-8 for SIRS is statistically significant. Analysed by regional dimensions PC25g is shown to be cannibalized in 43% of accounts. Natal is the most pronounced. PC25g is subordinate in the majority of accounts (49%). The central region shows the highest subordination but correspondingly less cannibalization. Filtering for NN22g dominance (50% of the accounts) shows increased subordination (Table 4-10) but even stronger PC25g growth (Table 4-9). PC 25g declines as 10pp of the mix.

4.2.2 Region by Channel: Key Retail

Volume evolution in Key Retail shows strong PC25g growth (Table 4-11) and even a 1pp gain in mix. Key Retail accounts represent approx 25% of the accounts. This corresponds with the contingency Table 4-12 which shows pv25g dominance in more than 10% of accounts. It is immediately evident that the Natal region showed very different behaviour to the other regions.

Natal has significantly higher cannibalization and almost no dominance. Subordination is more evenly spread but still pronounced. Filtering for NN22g dominance increases subordination (Table 4-14) but shows similar PC25g growth (Table 4-13) to non dominant accounts with PC25g losing 1pp.

4.2.3 Region by channel: Wholesale

Filtering for the wholesale channel (about 13% of accounts) shows genuine PC25g decline which is led by two regions: the Western and East Cape (Table 4-15). Natal follows closely. Measuring behaviour by account shows Natal and the Western Cape

exhibiting the most cannibalization (Table 4-16). Strong NN22g growth in Central and Northern is matched by strong PC growth. Filtering for NN22g dominance yields a contingency table that is not statistically significant. The volume evolution for NN22g dominant accounts (about 40% of wholesale accounts) shows strong PC25g growth but mix decline by 10pp (Table 4-17).

4.2.4 Region by Channel: Forecourts, Catering and Convenience.

Strong PC25g growth is shown in Table 4-18 while losing 3pp of the mix while Table 4-19 shows subordination to be the most frequent CSD behaviour.

4.3 By Channel.

The volume evolution by channel in Table 4-20 shows PC25g growing strongly in all channels except wholesale and losing 4pp of mix. Wholesale & SIRS show strong cannibalization amongst their accounts in Table 4-21. Filtering for NN22g dominance (60% of accounts) shows strong PC25g growth in Table 4-22 while losing 7pp of mix. Wholesale and SIRS provide this growth. Filtering for NN22g dominance in Table 4-23 shows similar cannibalization % for PC25g.

4.3.1 By channel region: Western Cape

The volume evolution in Table 4-24 for the Western Cape (about 25% of accounts) shows how wholesale and SIRS sacrifice PC growth and pp of mix. Absolute growth is also impacted. The dominance of the wholesale sector in the Western Cape causes the

overall region to lose PC25g growth and it declines by 6pp of the mix. Table 4-25 shows the pronounced frequency of cannibalization amongst wholesale accounts.

Filtering for NN22g dominance in Table 4-26 (55% of Western Cape accounts) shows strong PC25g growth while losing 15pp of mix. Table 4-27 shows how the percent of cannibalized accounts declines when filtering for NN22g dominant accounts.

4.3.2 Channel by region: Natal

Natal (25% of accounts) shows moderate PC25g growth in Table 4-28 with Key Retail and Wholesale in low single digits. C&G and SIRS show strong PC25g growth.

Cannibalization by account in Table 4-29 shows that Key Retail is much higher than observed for Key Retail thus far. Filtering for NN22g dominance (60% of Natal accounts) shows strong PC25g growth with 5pp mix decline (Table 4-30). Similar cannibalization by account is shown in Table 4-31 with a slight increase in subordination.

4.3.3 Channel by region: East Cape

The East Cape (20% of accounts) shows strong PC25g growth in Table 4-32 and hold their mix pp. PC25g loses volume and share in wholesale which shows low NN22g growth and consequently declines in total. SIRS show strong PC25g growth.

Cannibalization by account is stronger for SIRS than wholesale as shown Table 4-23. Filtering for NN22g dominance (50% of East Cape accounts) generates a contingency table that is not statistically significant. For these accounts PC25g growth is strong but declining by 3pp of mix as shown in Table 4-34.

4.3.4 Region by channel: Gauteng, Cape Town and Durban

Analysis of the major centres shows variation in behaviour.

4.3.4.1 Durban

Volume evolution in Table 4-35 shows very low PC growth while losing 6pp of mix.

This is driven by the wholesale channel. Table 4-36 shows that cannibalization is high for wholesale accounts combined with absolute PC25g loss.

4.3.4.2 Gauteng

PC25g growth is strong across channels but weakest in SIRS as shown in Table 4-37.

Overall 3pp of PC25g mix is lost. SIRS show strong NN22g growth and represent a sizeable portion of the business. Table 4-38 shows that 45% of SIRS accounts had PC25g cannibalization and 50% had subordination while losing 7pp of mix. Because of the higher subordination in wholesale PC25g shows growth. . Key Retail is noteworthy for the high level of dominance (21% of accounts) and the high PC25g growth (38%). PC25g and NN22g have a low pp mix for key retail.

4.3.4.3 Cape Town

Cape Town volumes dominate the Western Cape and hence similar trends are observed by channel in Table 4-39. In Table 4-40 Key Retail is noteworthy for the high level of dominance (23% of accounts) and the high PC25g growth (41%). These results are very similar to the Gauteng analysis with a low NN22g and PC25g pp mix.

4.4 Service Method influence:

A clear difference emerges for PC25g volume growth in Table 4-41. Presell shows volume loss and mix loss. Van Sales shows strong growth for PC25g with 4pp mix loss. Cannibalization is pronounced for all service methods in Table 4-42. Filtering for NN22g dominance in Table 4-43 shows strong PC growth while losing 7pp of mix. The associated contingency table is not statistically significant.

4.4.1 Service Method by region: Central region

Filtering for the Central region shows strong PC growth in Table 4-44 for normal van sales while losing 7pp of mix. Table 4-45 shows frequent subordination.

4.4.2 Service Method by region: Western Cape

Presell and Agents show strong volume loss and mix loss in Table 4-46. Cannibalization of accounts is less pronounced in Table 4-47. The wholesale channel is serviced by presell. Normal van sales show PC25g growth and lose 3pp mix. The presell performance drives the outcome for the region.

4.4.3 Service Method by region: Natal

In Table 4-48 Presell shows low PC25g growth. The Normal service method seems to servicing a disproportionately high % of the business. The associated contingency table is not statistically significant. Filtering the service method by the various channels reveals the following trends.

4.4.3.1 Service Method by region: Natal Key Retail

Table 4-49 shows half of Key Retail are serviced by Large format van sales which show moderate PC25g growth. Normal van sales servicing key retail lost PC25g volume.

4.4.3.2 Service Method by region: Natal wholesale

Table 4-50 shows that the vast majority of the wholesale accounts are serviced by normal dts routes

4.4.4 Service Method by region: gauteng

In Table 4-51 Normal van sales shows below average PC25g growth and loses 7pp of mix. This is moderated by presell which managed to grow PC25g and improve it in the mix by 1pp. The associated contingency table is not significant.

4.5 Region by Service Method

4.5.1 Normal

Volume growth is strong for PC25g across most regions for normal van sales except for Natal as shown in Table 4-52. Table 4-53 shows Account cannibalization is pronounced for Natal and Western Cape.

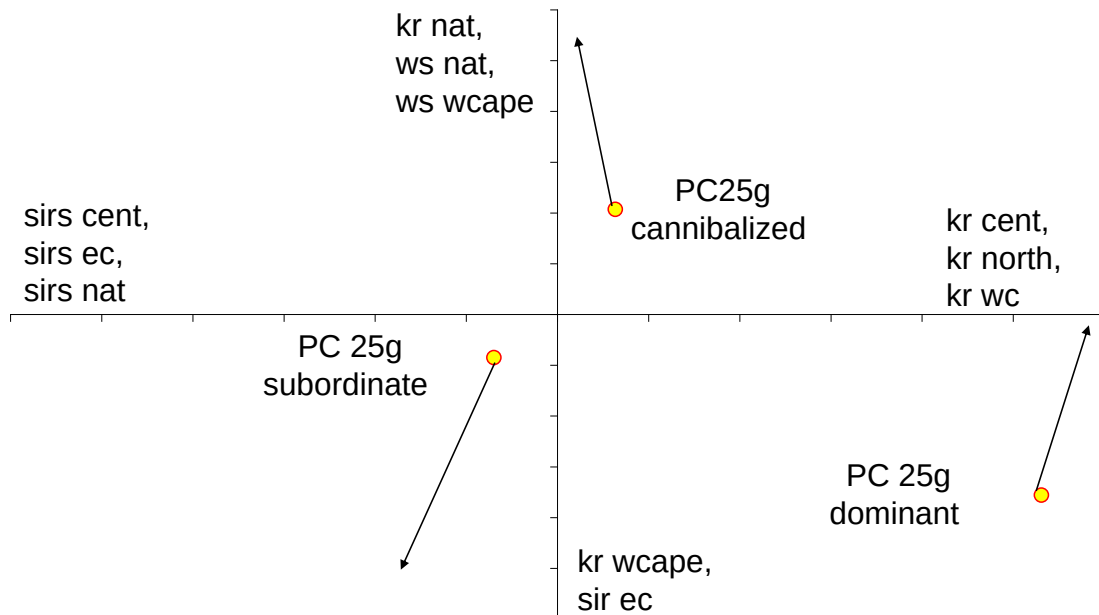
4.6 Correspondence Analysis plots

This section will show the correspondence between segments of the Simba sales structure and the CSD behaviour. The axes are labelled with the segments and the behaviours are

plotted in segment space e.g. in Figure 4-11 ‘kr nat’ refers to key retail Natal, ‘ws nat’ refers to wholesale Natal etc. Arrows are shown illustrating how the coordinates of the behaviours are driven by the axes.

4.6.1 Region and channel influence on Cannibalization

Figure 4-11: PC25g CSD behaviour association with region and channel

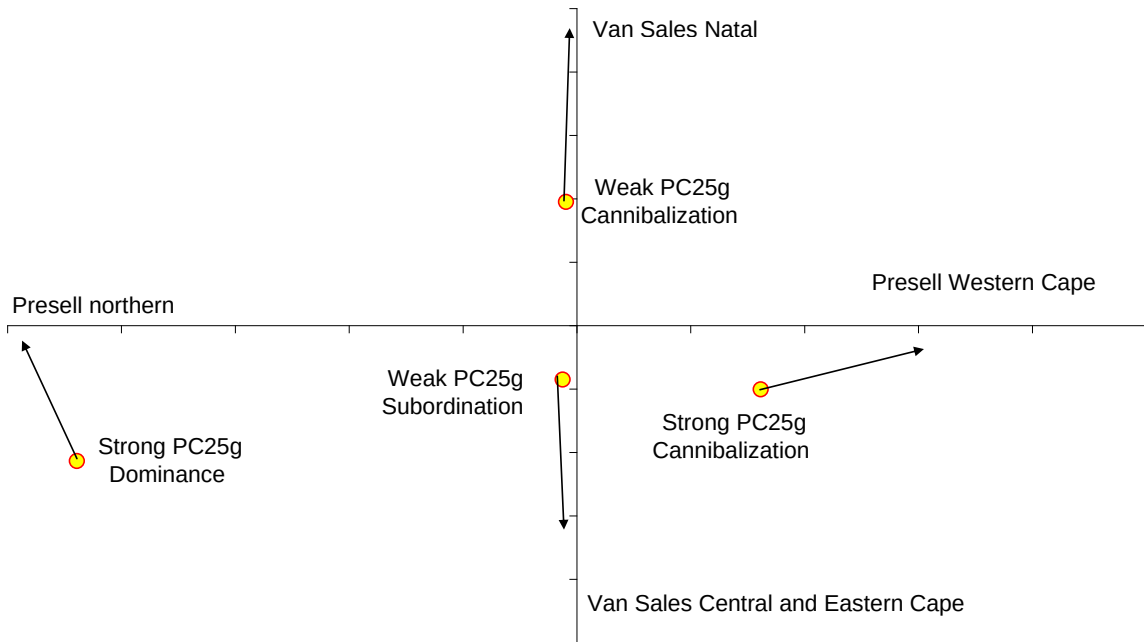


The trends observed in the earlier data are confirmed by the CA plot in Figure 4-11.

Cannibalization is associated strongly with Key retail and wholesale in Natal, as well as wholesale in the Western Cape. SIRS and Western Cape key retail show the subordination of PC25g while PC25g is dominant in Key retail.

4.6.2 Region and service method influence

Figure 4-12: Strength of PC25g CSD behaviour and it's association with region and service method

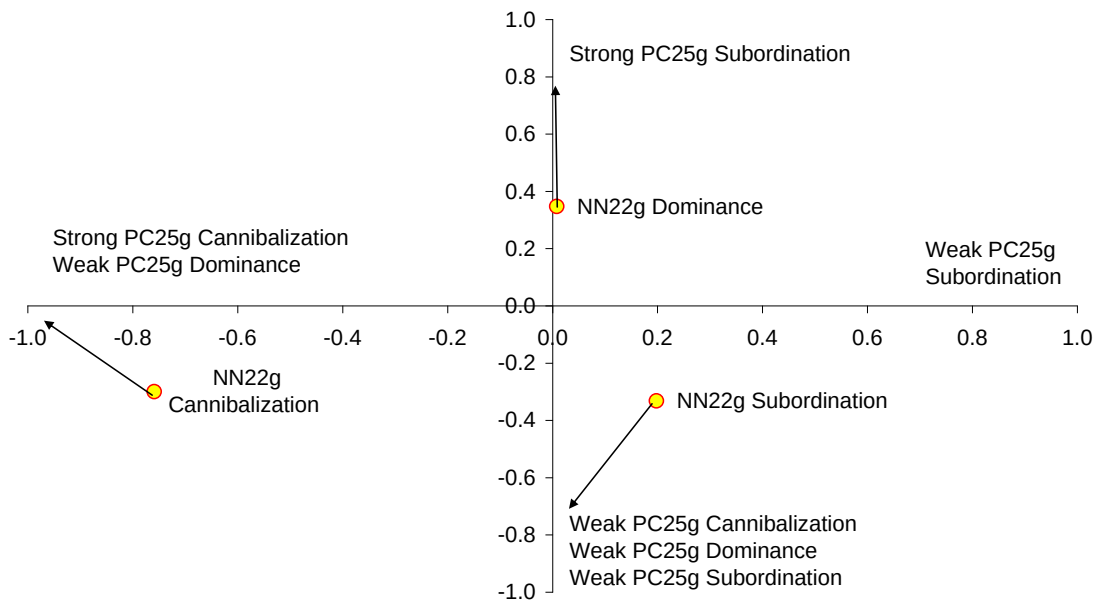


Strong subordination is not clearly associated with any region or service method in Figure 4-12. Weak subordination is associated with van sales in the central and East Cape regions. Strong PC25g dominance is associated mainly with northern region presell. Strong PC25g cannibalization is associated with Western Cape presell. Below average PC25g cannibalization is associated with van sales Natal.

4.6.3 NN22g vs PC25g according to CSD categories.

In this section the correspondence between NN22g CSD behaviour and PC25g CSD behaviour is shown by plotting NN22g CSD behaviour in PC25g CSD behaviour space.

Figure 4-13: NN22g CSD behaviour association with Strength of PC25g CSD behaviour



In Figure 4-13 the dominance of NN22g is seen to be closely associated with strong subordination of PC25g. NN22g subordination is strongly associated weak subordination and weak cannibalization. NN22g cannibalization is strongly associated with strong PC25g cannibalization.

4.7 Distribution Strategy Analysis

NN22g was not distributed in all accounts. The preceding analysis was filtered for accounts that did have NN22g in 1999. Analysing the presence of NN22g across all accounts it is clear that there are differences by region as shown in Table 4-54. For comparison the CSD behaviour associated with that segment in Figure 4-11 is tabulated as well. Where the CSD behaviour is not shown in the CA plots the aggregate CSD behaviour observed in section 4.2 is shown.

5 DISCUSSION:

In this section the results will be discussed and linked to the themes of the literature review. Comparing the results with the literature gives rise to certain questions and initial observations. As a preamble to the full discussion these will now be highlighted.

5.1 Relevant Literature Themes

Simba is an organization steeped in 50 years of history with a strong market share and a core family of well established products (See section 4.1 on page 26). This makes it a candidate for marketing inertia (Bonoma ,1982). The company owned a large fleet of vehicles and a directly employed sales force appropriate to the importance of point of sales management for impulse products.(Quelch & Cannon-Boventure ,1982). It had product managers who were tasked with brand growth but who had little direct control over the execution of their strategies due to the large separately managed sales force (Clewett & Stasch ,1982). That the product managers displayed the market sensing capability (Cravens et al ,2000) required to respond with an appropriate product is evidenced by the explosive volume growths achieved for NN22g (Table 4-3). This explosive growth indicates the latent acceptance by the market of such an offering (Dean ,1982). This observation gives rise to questions. Was the existing sales force and organization capable of an efficient, integrated and logically consistent market response (Shapiro ,1985)? Was there a rethinking of the service method (Stern & Sturdivant ,1987)? Was there a systematic coordination between sales and marketing (Henry ,1982)? Was there the uninformed decentralized decision making that characterizes

distribution systems (Herron ,1982) and does this explain the extreme regional variations in the execution of NN22g distribution as shown in Table 4-54? Was the sales cannibalization experienced in the Western Cape Wholesale segment (Table 4-15) not also indicative of the cannibalization of existing processes and asset bases that accompanies innovation (Chandy & Tellis ,1998)? Could that catastrophic cannibalization have been avoided by an application of the concepts of the revenue maximising versus time minimizing sales force (Coughlan & Sen ,1989)?

The line of questioning above is loaded in that it does not highlight the key variable of price, found to be the key marketing mix variable for frequently purchased packaged consumer goods (Winer ,1986). Simba's traditional small bag offering has an RSP per kg of between R60 to R80 rand. NN22g was offered at an RSP of R22 per kg. The existence of this price differential between Simba potato chips and Niknaks, both established brands from the same company (see shares at the time of the study in Figure 4-5 and Figure 4-7 corresponds with conditions found to drive cannibalization (Meredith & Maki ,2001). The cannibalization response by the wholesale channel versus the SIRS is in line with the observation that independents are slower to react to pricing opportunities than large centrally driven organizations (Frank & Massy ,1965).

The discussion of the results will now seek to contrast the influence of price versus the influence of sales execution in the cannibalization of PC25g. At this stage it is helpful to repeat the three dimensions of analysis used to list the results. These will be reused during the discussion. They are region, channel and service method e.g. a segment of

analysis may be the Western Cape Wholesalers that are serviced by presellers. The definitions from the method section are reiterated here.

Table 5-1: Dimensions of Sales Activities

Region	Central	Northern Cape, Northwest, OFS and Southern Gauteng
	East Cape	From PE to Beaufort West to East London
	Natal	KZN
	North	Northern province, Mpumalanga and Northern Gauteng
	Western Cape	Peninsula & Boland
Channel	Key Retail	PNP, Shoprite Checkers and Spar
	SIRS	Small independent retailers
	Other Accounts	Non food retailers
	C&G	Convenience and gas stations
	Wholesale	Organised (makro, metro) and independent wholesalers
Service Method	Agent	3 rd parties providing sales and logistics services
	Presell	Rep supported by a merchandising and delivery team
	normal	Van sales calling on C&G and SIRS
	small	Van sales calling on smallest SIRS
	large	Van sales calling on smaller key retail stores

The service method is how orders are taken and product delivered. Van Sales works as follows: The salesmen loads his truck according to his assessment of the stock required for the days deliveries. He then sets out with the truck on a predetermined list of calls. At each call he determines the stock required to replenish the outlet and delivers the stock from his vehicle instantaneously. During the course of the day he runs down his stock levels and may not be able to replenish a customer with the correct products unless he returns to the depot to reload. At the end of the day he returns to the depot and replenishes his stock for the next day. The presell method has the preseller visit the outlets, determine the order and pass the order onto the distribution team who deliver it at a later date.

5.2 Analysis Market data for the y/e q4 1999:

The two data sources used to assess the likelihood of influences on PC25g volumes are AC Nielsen and BMI. AC Nielsen offer channel and geographic information whereas BMI analyse manufacturer output by pack size and volume on a national basis. BMI give a true indication of market size but with no insight into channel and geography.

Wholesale channels are not read by Nielsen. This represents a blind spot in the share analysis. This is traditionally justified by assuming that wholesale feeds the C&G and SIRS stores in addition to the direct distribution undertaken by manufacturers. C&G stores are referred to by Nielsen as 'Impulse' and SIRS are referred to as 'Grocers'. The term "Key Retail" corresponds with "Majors". The discussion will use the channel terms defined in Table 5-1 whereas the Nielsen terms will be shown in the charts.

Given the low contribution PC25g makes to Key Retail (Table 4-20) PC share in Key Retail is driven by large bags. PC25g volume is strong contributor to the product mix in wholesale, C&G and SIRS (Table 4-20). Any changes in PC market share in these channels could indicate cannibalization sources extraneous to Simba. Given the absence of wholesale share data the most important aspect of the AC Nielsen data are changes in PC share in C&G and SIRS.

In keeping with the focus on PC25g, manufacturers known to have a PC25g offering must be focussed on when using the BMI data. A feature of the market analysis by BMI is the multitude of snack manufacturers (77) and how the number grew over the preceding 3 years by 22. The majority of these entrants were playing in the extruded

market. The typical pack size would be a large 2kg extruded pack. BMI data from 1998 to 1999 in Table 4-2 shows 3 players gaining share of 4.5pp. The three players are Baker Street, Champ Snacks and IQ foods. At that time Baker Streets two main products were Jumping Jack Popcorn and Royces Potato chips. Popcorn products generally do not compete with PC 25g and are generally sold in large bags. Royces Potato chips would be available in large and small bag servings. Nielsen data in Figure 4-4 indicates that in the time period studied Royces declined 1.1pp so the source of growth was most likely the Popcorn. At the time Champ Snacks and IQ foods had no PC capability. The other competitive PC offering at the time was Willards product. Willards Lites was a flat cut PC similar to Lays. Lites gained 2.5pp in Key Retail (Figure 4-8). To evaluate Lites as a source of small bag PC cannibalization it is necessary to look at Nielsen shares by channel for Willards in Figure 4-3. Willards share gain in C&G and SIRS was slight. Lites had less impact on SIRS being both low share (<1pp) and low growth (<0.5pp) (Figure 4-8). Willards Crinkles gained share in key retail but lost share in C&G and SIRS (Figure 4-9). Thus Lites and other branded PC can be discounted as a source of PC25g cannibalization.

The main alleged culprit of PC 25g cannibalization was the NikNak brand through its 22g pack size. According to AC Nielsen NikNaks was static in market share (Figure 4-7). It declined in key retail (-3pp) and grew in SIRS (+2.5pp). Its competitive product Willards 'Cheasnaks' held share in all channels (Figure 4-10) implying that the NN volume changes were derived from another source. This is consistent with subordination behaviour.

5.3 Distribution Strategy

The analysis of the distribution of NN22g indicates a clear regional difference across most channels (Table 4-54). Specifically the Central and Northern regions have the lowest distribution of NN22g.. The highest distribution in the central and northern region comes in the SIRS and wholesale channels but these are 30 percentage points lower than the rest of the country. Key Retail and Convenience, Forecourts and Catering channels also had significantly lower distribution of NN22g in the Central and Northern regions. There seems to be no clear link between a higher distribution of NN22g and cannibalization. This confirms the influence of sales force behaviour in the Western Cape and Natal. The most worrying aspect of this data is the absence of a clear channel strategy and how choices about distribution seem to be made on the ground as opposed to being part of a holistic marketing strategy (Henry, 1982; Herron, 1982).

5.4 Cannibalization Analysis by region :

The Western Cape as a region exhibits the cannibalization that drives the single digit PC growth of the company as a whole (Table 4-3). Similarly Natal shows retarded PC growth relative to other regions. The relatively higher number of accounts in which outright cannibalization occurred in the Western Cape and Natal underpins the regional results (Table 4-4). The reason that the Western Cape shows a more severe cannibalization of PC25g is that the analysis of CSD behaviour by account is not weighted by volume. The implication is that heavy cannibalization of PC25g occurred in a few specific large accounts in the Western Cape, pointing to the wholesale or Key retail

channel whereas as there was light cannibalization in numerous low volume Natal accounts. Given that the combined volume of NN22g and PC25g is close to seventy percent for the country it could be argued that the source of PC25g cannibalization is the NN22g. Filtering the accounts for those in which NN22g was dominant one finds above average PC25g growth in all regions (Table 4-5). The CSD behaviour for this filtered set of accounts is not significantly different (Table 4-6).

5.4.1 Region by Channel - SIRS:

This section discusses the varying performance of small independent retailers (SIRS) across the regions. According to the Nielsen figures this channel exhibited the strongest NN22g growth (Figure 4-7). This is backed up the by Simba sales figures (Table 4-20). The Western Cape again exhibits cannibalization of PC25g (Table 4-7) and is clearly out of step with the rest of the country. The Natal region doesn't show the slow PC growth that the overview showed in Table 4-3 indicating that this channel was not the source of retarded PC growth for Natal. It is noteworthy that on aggregate the NN22g and PC25g coexisted well in this channel in most regions. The link between Van Sales Service and PC25g decline is not supported by these figures, given that SIRS are exclusively serviced by Van Sales. Filtering for NN22g dominance shows healthy PC growth in all regions especially the Western Cape (Table 4-9). This is again contrary to what is popularly believed.

5.4.2 Region by Channel: Key Retail

This section discusses the varying performance of Key Retail stores (Pick n Pay, Shoprite checkers and Spar) across the regions. The region that stands out here is Natal. Its low PC growth and loss of mix show aggregate subordination while other regions exhibit aggregate dominance for PC25g (Table 4-11). This channel is then the source of the retarded PC growth observed for Natal as a whole. The CSD behaviour by account illustrates the higher cannibalization encountered in Natal Key Retail and the absence of dominance (Table 4-12). The strongest explanation for this is the unusual service method for key retail in Natal i.e. mostly Van Sales (Table 4-48). Filtering for NN22g dominance doesn't have much effect on PC25g growth (Table 4-13) or the CSD behaviour (Table 4-14). The correspondence between NN22g volume growth and PC25g volume growth is revealed for this channel as well.

5.4.3 Region by channel: Wholesale

This section discusses the varying performance of organised (Makro, Trade Centre, Metro) and independent wholesalers (various cash and carries) across the regions. The Western Cape exhibits a staggering 37% decline in PC25g for this channel and a low single digit increase in NN22g volume (Table 4-15). The CSD behaviour (Table 4-16) shows how many wholesalers sacrificed PC25g purchases for NN22g in Natal and the Western Cape. The market segment that NN22g played in was price competitive and offered lower margins for wholesalers but a far quicker turnover of working capital. Those smaller wholesalers with restricted working capital would necessarily invest in

faster moving stock. This sensitivity to stock turns is noted in the literature (Frank & Massy, 1965 ; Friend & Walker, 2001). Filtering for NN22g dominance shows that those wholesalers who benefited most from the NN22g volume also delivered strong PC growth especially in the Western Cape. This points to the Western Cape decline being driven by a specific set of wholesalers who chose to stock PC25g at the expense of NN22g. This begs the question of the influence of the Simba sales force. Given that there was no product specific component to their compensation they had no incentive to control product mix (Henry ,1982). They also had a sales quota commission system. If the NN22g order was large enough there was no incentive for the Simba sales force to ensure the PC25g sales as achieving quota guaranteed a commission payout but overachieving quota might mean that the trader might not have sold the stock next month and be unable to take new stock. A trader who increased his NN22g order when he realized how fast it was moving might need some convincing to maintain his PC25g order. Yet this PC25g decline is not consistent across all regions pointing to inherently different behaviour amongst the Simba sales force. Here the revenue maximising versus time minimizing behaviour comes into play (Coughlan & Sen ,1989). The commercial imperatives of a central region wholesaler are no different from that of the Western Cape wholesalers. There is a greater likelihood that the sales force cultures in Simba are not homogenous. It is likely then that they would respond differently to the same stimuli (Coughlan & Sen ,1989) and that cannibalization of PC25g by NN22g would result.

5.4.4 Region by Channel: Forecourts, Catering and Convenience.

This section discusses the varying performance of forecourts (engeni etc) , Catering (office canteens) and Convenience stores (7/11, Friendly Grocer) across the regions. These channels show a healthy response to the introduction of NN22g across all regions similar to that of the SIRS (Table 4-18). The service method was the same i.e. Van Sales. This points to the fact that the NN22g and PC25g did meet a clear segmentation need in these channels. The size of the price gap could be a driver of cannibalization but similar product attributes are a requirement (Meredith & Maki ,2001). The bag size impression and packaging of PC25g is very different from that of NN22g. The products are very different. NN22g is an extruded maize product with only a cheese flavour and PC25g is a world class potato chip with a variety of high quality flavours. The sales force did not encounter resistance when increasing orders of both products presumably because both products were moving well. The Western Cape region shows healthy growth of PC25g and doesn't exhibit higher cannibalization than other regions (Table 4-19).

Before going on to analyse results by channel it is worth noting the disparity of the regional cannibalization results. These undercut the price as a driver of cannibalization as this was uniform throughout the country. The economic imperatives for the channels remain the same across all regions as do the relative sophistication of their stock management systems. The only variable is the Simba sales force. There was no information system that provided a uniform basis for decision making in the sales force (Herron ,1982). Hence it was left to individuals on the ground. This decentralized

decision making was not visible from the boardroom and the results of it were only visible in aggregate. The data used for this study existed at the time of the event but was only analysed some years after the event. This indicates the crudeness of management decision making at that time. A systematic approach could not begin to be followed (Henry, 1982).

5.5 By Channel.

In this section the channels are reviewed by region. This highlights how in one region behaviour varies by channel e.g. wholesale will show different cannibalization versus SIRS.

Changing the dimension of analysis to channel highlights the 40% contribution to volume from wholesale and the 38% contribution from SIRS. The overview by channel shows how the wholesale channel is out of step with the rest of the channels. Combine this with the preceding regional overview and the importance of the Western Cape wholesale PC25g failure is evident. SIRS and wholesalers show very different volume changes (Table 4-20 and Table 4-21). This is anomalous as Wholesalers reach consumers via the SIRS except in the case of direct distribution. Strong PC cannibalization is associated with Western Cape Presell alone (Figure 4-12). SIRS achieved a high PC25g growth (Table 4-20) pointing to the larger SIRS accounts, which serve the same market as the C&G stores, mimicking the latter's PC25g strength. Furthermore the CA plots, which weighted the CSD behaviour by volume, show that SIRS are associated with PC25g subordination, not cannibalization (Figure 4-11). This indicates that the small SIRS

accounts that make up the consolidated accounts did not experience cannibalization. Filtering for NN22g dominance reveals the now familiar healthy coexistence of the two offerings across the channels (Table 4-22 and Table 4-23).

5.5.1 By channel region: Western Cape

In the Western Cape we see the re emphasis of the above points. Given that SIRS and Wholesale reach the same end market it is strange that they display different PC volume changes (Table 4-24 and Table 4-25). The SIRS sales force comprises 40 van sales routes whereas as wholesale was made up of 4 presellers . This small number of individuals led by one leader controlled a far larger slice of business and their decision making allied with their compensation system allied with the working capital focus of wholesalers drove this cannibalization behaviour. Although there was cannibalization in the SIRS channel it was not as pronounced. This is due to the diverse number of stores and salesmen servicing them, with a multilevel management structure. Trade margins in SIRS are relatively higher and so slower stock turns are tolerated. Furthermore the salesmen might have one or two customers who would tolerate large NN22g orders at the expense of PC25g and the consequent margin sacrifice but the vast majority depend on a variety of trusted fast movers that have historically been in demand. Deviation from this historical allocation of working capital represents too much of a risk (Friend. & Walker ,2001). So even if the will to neglect PC25g was present and their commission system enabled it, which it did, the store owners would not support it. Those wholesalers and

SIRS that do the best out of NN22g also did the best on PC25g (Table 4-26 and Table 4-27).

5.5.2 Channel by region: Natal

This segment repeats the observation of the key retail PC25g cannibalization amongst accounts in Natal and the low PC25g growth in key retail (Table 4-28 and Table 4-29). SIRS show the strong coexistence of NN22g and PC25g. Wholesale shows slow PC25g growth but not aggregate cannibalization. The thinking on SIRS developed above is supported by the Natal data. The irony of the Natal analysis by channel is the shared low PC25g growth for key retail and wholesale. The service method for 80% of wholesale and key retail volumes in Natal was Van Sales (Table 4-48 and Table 4-50). The predominant service method for these channels in the rest of the country was presell. Given that Van Sales have not thus far been associated with cannibalization it is surprising that they would be associated with it in Natal. The impact of van sales service to wholesalers and key retail is discussed later on page 57.

5.5.3 Channel by region: East Cape

The SIRS channel delivers a strong PC25g growth along with strong NN22g growth, in line with previous observations of this phenomenon (Table 4-32). Wholesale behaves as per the Western Cape albeit with less pronounced PC25g cannibalization (Table 4-33). Given that the East Cape is relatively poorer than Natal it is surprising to see that the high

priced pc25g still grows more quickly than Natal. A similar comment can be made for the Western Cape which is relatively wealthier (Table 4-1).

5.5.4 Region by channel: Gauteng, Cape Town and Durban

It can be expected that the major centres would have similar channel contributions to the volumes as well as similar income profiles. Variations in PC25g volume changes can then be attributed to the sales forces servicing the major centres. The retarded key retail growth in PC25g is observed again in Durban (Table 4-35). Contrast this with Gauteng (Table 4-37) and Cape Town (Table 4-39) where PC25g enjoys strong growth. Contrast the strong wholesale growth in Gauteng for PC25g with the cannibalization occurring in Natal and the Western Cape. An explanation for the wholesale phenomena has already been proffered but it is not clear why the different regions behave differently in the same channels. The next section resolves this by discussing the remaining variation present in Simba's execution of sales.

5.6 Service Method influence:

Van sales routes of normal size show growth of PC25g and NN22g (Table 4-41). Presell shows cannibalization. This national picture changes when the service method is broken down by region.

5.6.1 Service Method by region: Central region

Central presell does not conform to the national trend of PC25g cannibalization for presell (Table 4-44). It services key retail and wholesale, neither of which showed cannibalization, so this was expected. It is clear that the Central region presellers encountered no resistance to PC sales and did not watch their quotas but sold as much as they could. This is behaviour typical of maximizers.

5.6.2 Service Method by region: Western Cape

This maximization behaviour is not exhibited in the Western Cape with presellers allowing a massive decline in PC25g (Table 4-46). Normal van sales show healthy growth for PC25g and NN22g. Bearing in mind that presellers serviced both key retail and wholesale channels and that we have seen the Western Cape key retail showing healthy growth for PC25g it becomes clear that the presellers servicing wholesale accounts were responsible for this decline.

5.6.3 Service Method by region: Natal

Normal van sales account for a disproportionately high part of the volume mix (Table 4-48). Given that the trade structure in Natal is not very different from the rest of the country this points to significantly different application of the service method by channel. Key Retail is traditionally serviced by presell. Natal key retail is 80% serviced by van sales. Normal van sales are servicing 47% of the volume and lost PC volume (Table 4-49). This drives the sluggish PC growth in Natal key retail. A similar pattern is

observed for wholesale with normal van sales routes servicing wholesalers as opposed to the use of presell. The sluggish PC growth associated with this service method drives the wholesale PC performance (Table 4-50).

Wholesale and Retail channels are generally serviced by presellers because of the relatively larger orders and greater variety required by these large customers. A van sales route carries a model stock from which it services customers according to orders that are determined at delivery. These smaller stores have homogenous stock requirements and order sizes – facilitating a milk run of deliveries of homogenous orders and drop sizes and a centrally driven planogram (Quelch & Cannon-Boventure ,1982). This planogram has a limited variety due to the smaller drop sizes but it is sufficient to provide an efficient turnover of working capital in this small store. When a van sales route delivers stock to a larger store he runs the risk of stock outs for smaller customers and he needs to take a calculated guess on the fastest movers to ensure he has sufficient stock of them. Carrying lots of NN22g was a sure way to make target in retail and wholesale customers. PC25g with its multiple flavours and brands represented a more complex decision when ordering inventory for his van. Key Retailers and wholesalers were focussed on stock turns as mentioned before and NN22g was a sure seller. The Natal region was thus unique from others in that limited stock space in the vans was available to service Key retail and wholesale with PC25g. Key Retail planograms would have borne the brunt of the poor stock range available on the vans leading to sub optimal product mix at the point of sale and sluggish growth. The clear segmentation of service method to channel that existed in other regions safe guarded them from this constraint. Furthermore the lack of a

product mix component to the compensation of the sales force serving the wholesale channel enabled the same kind of behaviour as observed amongst the presellers in the Western Cape that were servicing wholesale. The reason that the van sales in the Western Cape did not behave the same as the Natal sales force was that they were kept focussed on convenience, forecourts and SIRS, while being kept away from key retail and wholesale.

5.7 Correspondence Analysis plots

Given the high number of dimensions that can be used to split the Simba volume changes it makes sense to reduce the variation in CSD behaviour to CA plots to highlight the key trends. The association between SIRS and PC25g growth but decline of mix is confirmed (Figure 4-11), as is the dominance of PC25g of Key retail. The three problem segments of Key Retail Natal and Wholesale Natal and Wholesale West cape are strongly associated with cannibalization of PC25g. When splitting the CSD behaviour for its strength the Natal van sales is strongly associated with weak cannibalization and the Western Cape presell is strongly associated with strong cannibalization (Figure 4-12). The reasons for this cannibalization have been set out above but it still surprising to see how clear and crisp the association is. This clear segmentation of the cannibalization behaviour and its link to the compensation structure, service method and channel dynamics illustrate a clear potential response from the organization. Finally analysing the strength of CSD behaviour of NN22g versus PC25g indicates conclusively the association of strong NN22g growth with strong PC25g growth (Figure 4-13). PC25g cannibalization is associated strongly with NN22g cannibalization.

6 CONCLUSIONS

6.1 Summary

The research questions will be used to structure the summary of the findings.

Research Question 1: Was PC25g cannibalized and what is the role of NN22g in the cannibalization?

As per section 5.7 on page 59 and section 4.6.3 on page 41 it can be seen that PC25g cannibalization is not associated with NN22g dominance. PC cannibalization did occur at account level and in aggregate for certain segments within the Simba business.

Research Question 2: Do particular channels, regions and service methods show statistically significant behavior in respect of cannibalization as defined above?

Cannibalization did occur on van sales routes that were servicing key retail and wholesale stores in Natal indicating poor route segmentation (section 4.4.3 on page 38 and section 5.6.3 on page 57). Western Cape presellers servicing wholesale were strong proponents of cannibalization (section 4.3.1 on page 35 and section 5.5.1 on page 54). These regional service method segments were strongly associated with cannibalization (Figure 4-12 section 4.6.2 on page 41 and section 5.7 on page 59).

That the market segmentation that underlay the introduction of the value based NN22g was sound cannot be debated given the consistently positive results in most market segments. Strategy is choosing what not to do (Porter ,1996). At first glance it appears that Simba chose to depart from its strongest field of play, i.e. high margin branded packaged snacks, and chose to play in the unprofitable value segment. But strategy is about selecting business that plays to your strengths and utilizes a set of activities that you can perform better than anyone else (Porter ,1996). Given its large direct sales force and the different market segments served by PC25g and NN22g Simba was well placed to extract the additional distribution margin opportunity represented by NN22g. The poor results achieved in practise relate to the fact that Simba's complete set of activities were not coordinated (Porter ,1996). The compensation system (Western Cape Presell), route segmentation (Natal Van sales) and management information systems failed the marketing plan. These variables deviated from requirements in critical ways.

Research Question 3: Does the distribution of NN22g illustrate any particular channel, service method or regional strategy?

No clear national channel strategy is evident given the variances in distribution of NN22g by region and channel. All service methods had access to NN22g so there was no attempt match the market segmentation with route segmentation. The dominant impression is that of decentralized decision making driven by the personal compensation of the sales force.

Research Question 4: Does the strategy reflected by the distribution concur with suggested approach derived from the literature?

No. The separation between the product manager and the field sales resources is in evidence (Clewett & Stasch ,1982). Whatever finesse was in the marketing plan was not executed by the sales force speaking to the lack of a distribution policy informed by the marketing plan (Shapiro, 1985; Stern & Sturdivant, 1987, Henry, 1982). The fact that the mutual growth of PC25g and NN22g in SIRS and convenience derived from the van sales service method even though their compensation was not segmented (Coughlan & Sen ,1989) speaks rather to the accuracy of the segmentation thinking in the marketing plan than to the execution at the point of sale.

6.2 Recommendations

When the extension of an existing product is linked to a gross margin sacrifice the compensation structures should reflect this. Not all sales forces need this kind of intervention but the risk of having time minimizers in your sales force is too high. Especial attention should be paid to those sales people who have a high span of control i.e. a few large strategic accounts serviced by a handful of individuals.

Van Sales produced the desired segmented response of strong NN22g growth combined with healthy PC25g growth when applied to the SIRS and forecourts, convenience and catering channels. Misapplication of the Van sales service method to larger outlets leads

to cannibalization of PC25g. Route segmentation is a critical prerequisite for the implementation of a segmented marketing plan.

Simba's segmentation of the snack market was valid but this needs to be supported by the segmentation of service methods and compensation structures in order to produce the desired profit response.

The remaining problem in Simba's segmentation strategy is its ability to avoid price competition on the NN22g offering. Should competitive offerings become available in wholesale then Simba's van sales would be hard pressed to retain the distribution margin they can currently exact.

6.3 Suggestions for future research.

The marketing of NN22g after 1999 and up to the present was not included in this research. As Simba took steps to re-emphasize the profitable offerings in the past few years the NN22g volumes declined. This "climb down" would present an interesting view of how a company extricates itself from poor product mix and how effective of these steps are. The data is already catalogued in the Simba sales data warehouse and the existing methodology can be applied to analyse it.

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APPENDIX

Table 4-1: LSM split by province

Province	LSM 1-4	LSM 5	LSM 6	LSM 7	LSM 8	LSM 9	LSM 10
GAUTENG	27%	19%	20%	8%	8%	9%	10%
W CAPE	13%	13%	23%	16%	15%	11%	11%
N CAPE	48%	17%	14%	6%	6%	6%	3%
FREE STATE	61%	12%	10%	4%	4%	4%	4%
KZN	63%	9%	9%	5%	5%	4%	4%
E CAPE	73%	9%	8%	3%	3%	2%	2%
N WEST	70%	19%	20%	8%	3%	2%	2%
MPL	66%	11%	10%	4%	3%	4%	3%
N PROV	84%	8%	4%	1%	1%	1%	1%

▪ *Source: AC Nielsen – Based on AMPS 2001*

Table 4-2: BMI market share data '97 to '99

TOTAL SNACK
SHARES

Company	Year		
	1997	1998	1999
Simba	24.3%	23.9%	22.5%
Armato	8.3%	8.0%	7.3%
Willards	10.5%	8.2%	6.6%
Dowmont	4.5%	6.2%	5.5%
Redo's	7.3%	5.9%	5.4%
Baker Street	2.3%	2.8%	4.9%
Champ Foods	3.4%	3.6%	4.8%
Frimax	3.2%	4.8%	4.7%
Kulu Naks	3.9%	4.5%	4.1%
IQ Foods	2.0%	2.7%	3.8%
Pop Snax	2.0%	2.0%	2.0%
Ever Prosperous	0.0%	1.5%	1.4%
Poco Foods	2.0%	1.8%	1.3%
73 other manufacturers	26.3%	24.1%	25.6%

▪ *Source: BMI (2000)*

Table 4-3: Aggregate Volume changes by region

channel					% of mix						
	99 vol share	q4 growth 99 v 98			q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Central	24%	49%	178%	28%	23%	30%	43%	26%	20%	-4%	69%
East Cape	14%	23%	44%	21%	45%	17%	53%	17%	8%	0%	69%
Natal	28%	40%	120%	11%	34%	22%	53%	17%	19%	-4%	70%
North	9%	36%	117%	20%	24%	26%	38%	23%	14%	-3%	61%
W Cape	24%	6%	21%	-18%	52%	25%	60%	19%	8%	-6%	80%
total	100%	29%	74%	8%	38%	24%	51%	20%	13%	-4%	71%

Table 4-4: Account CSD behaviour by Region

Filters				
Channel	(All)	Significance level 0.05%		
service method	(All)			
NN22g volume cat	(All)			
Region	cannibalized	dominant	subordinate	sample size
Central	34%	8%	58%	509
East Cape	35%	11%	55%	504
Natal	46%	7%	47%	746
North	36%	12%	52%	385
W Cape	42%	6%	51%	757
Average	40%	8%	52%	2,901

Table 4-5: Aggregate volume changes by region filtered for NN22g dominance

Channel					% of mix						
	99 vol share	q4 growth 99 v 98			q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Central	30%	82%	477%	36%	15%	31%	46%	23%	32%	-8%	70%
East Cape	9%	85%	414%	55%	17%	20%	46%	17%	30%	-3%	63%
Natal	32%	89%	446%	44%	18%	21%	52%	16%	34%	-5%	68%
North	10%	79%	479%	46%	13%	22%	41%	18%	28%	-4%	59%
W Cape	20%	166%	509%	45%	28%	32%	65%	18%	36%	-15%	82%
total	100%	97%	469%	42%	18%	26%	51%	19%	33%	-7%	70%

Table 4-6: Account CSD behaviour by region filtered for NN22g dominance

Filters				
Channel	(All)	Significance level 0.05%		
service method	(All)			
NN22g category	dominant			
Region	cannibalized	dominant	subordinate	sample size
Central	30%	7%	63%	314
East Cape	30%	10%	60%	240
Natal	43%	5%	52%	465
North	33%	11%	55%	260
W Cape	39%	3%	58%	421
Average	36%	6%	57%	1,700

Table 4-7: Aggregate volume changes by region for SIRS channel

					% of mix						
channel	99 vol share	q4 growth 99 v 98			q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Central	39%	61%	215%	29%	24%	33%	48%	26%	23%	-7%	74%
East Cape	19%	40%	64%	34%	51%	18%	59%	17%	8%	-1%	76%
Natal	21%	75%	260%	31%	25%	25%	52%	19%	27%	-6%	71%
North	8%	38%	100%	13%	32%	28%	46%	23%	14%	-5%	69%
W Cape	13%	-4%	15%	-8%	44%	28%	54%	27%	9%	-1%	81%
total	100%	45%	117%	21%	34%	27%	52%	23%	17%	-5%	74%

Table 4-8: Account CSD behaviour by region for SIRS channel

Filters				
Channel	SIRS	Significance level 1.00%		
service method	(All)			
NN22g category	(All)			
Region	cannibalized	dominant	subordinate	sample size
Central	33%	2%	65%	144
East Cape	44%	12%	44%	138
Natal	44%	8%	48%	209
North	43%	11%	46%	80
W Cape	51%	6%	43%	137
Total	43%	7%	49%	708

Table 4-9: Aggregate volume changes by region for SIRS channel with NN22g dominance

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		total	NN22g	PC25g	q4 98		q4 99		NN22g	PC25g	NN22g & PC25g % vol
Central	42%	94%	447%	34%	17%	36%	49%	25%	32%	-11%	74%
East Cape	10%	129%	364%	62%	27%	26%	54%	18%	28%	-8%	73%
Natal	31%	104%	425%	41%	20%	26%	53%	18%	32%	-8%	71%
North	8%	97%	341%	41%	18%	31%	41%	23%	23%	-9%	64%
W Cape	9%	136%	418%	77%	24%	40%	54%	30%	29%	-10%	84%
total	100%	103%	419%	42%	20%	32%	51%	23%	31%	-10%	73%

Table 4-10: Account CSD behaviour by region for SIRS channel with NN22g dominance

Filters		Significance level		
channel	SIRS			
service method	(All)			
NN22g category	dominant			
region	cannibalized	dominant	subordinate	sample size
Central	24%	0%	76%	75
East Cape	43%	6%	51%	49
Natal	40%	4%	56%	126
North	43%	9%	48%	54
W Cape	45%	7%	48%	69
average	38%	5%	57%	373

Table 4-11: Aggregate Volume changes by region for Key Retail Channel

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		total	NN22g	PC25g	q4 98		q4 99		NN22g	PC25g	NN22g & PC25g % vol
Central	22%	3%	25%	39%	12%	7%	15%	10%	3%	2%	24%
East Cape	15%	17%	131%	33%	11%	10%	22%	11%	11%	1%	34%
Natal	27%	31%	229%	5%	13%	11%	33%	9%	20%	-2%	42%
North	18%	14%	86%	29%	12%	7%	20%	8%	8%	1%	28%
W Cape	18%	16%	49%	29%	14%	11%	18%	12%	4%	1%	30%
total	100%	16%	106%	24%	13%	9%	23%	10%	10%	1%	32%

Table 4-12: Account CSD behaviour by region for Key Retail Channel

Filters						
channel	Key Retail				Significance level	
service method	(All)				0.05%	
NN22g category	(All)					
region	cannibalized	dominant	subordinate	sample size		
Central	31%	18%	51%	168		
East Cape	25%	11%	65%	102		
Natal	49%	1%	50%	175		
North	32%	18%	50%	131		
W Cape	30%	17%	52%	138		
average	35%	13%	53%	714		

Table 4-13: Aggregate Volume changes by region for key retail channel filtered for NN22g dominance

					% of mix						
channel	99 vol share	q4 growth 99 v 98			q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Central	23%	20%	526%	46%	4%	9%	19%	10%	15%	2%	29%
East Cape	14%	41%	534%	45%	6%	12%	27%	13%	21%	0%	39%
Natal	34%	50%	498%	9%	9%	12%	37%	9%	28%	-3%	46%
North	20%	36%	1059%	37%	3%	9%	24%	9%	21%	0%	33%
W Cape	9%	49%	340%	8%	13%	20%	39%	14%	25%	-5%	53%
total	100%	38%	531%	26%	6%	11%	29%	10%	23%	-1%	39%

Table 4-14: Account CSD behaviour by region for Key Retail channel filtered for NN22g Dominance

Filters						
channel	Key Retail				Significance level	
service method	(All)				0.05%	
NN22g category	dominant					
region	cannibalized	dominant	subordinate	sample size		
Central	27%	18%	55%	102		
East Cape	19%	9%	72%	64		
Natal	46%	2%	52%	119		
North	21%	18%	62%	91		
W Cape	45%	5%	50%	44		
average	32%	10%	58%	420		

Table 4-15: Aggregate Volume changes by region for the wholesale channel

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		q4 98			q4 99		q4 98		q4 99		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Central	16%	52%	147%	26%	29%	37%	47%	31%	18%	-6%	78%
East Cape	9%	-2%	3%	-5%	53%	18%	56%	17%	3%	-1%	73%
Natal	37%	30%	75%	2%	43%	23%	58%	18%	15%	-5%	77%
North	7%	49%	122%	21%	28%	41%	42%	33%	14%	-8%	76%
W Cape	31%	-3%	8%	-37%	64%	25%	72%	16%	7%	-9%	88%
total	100%	18%	41%	-7%	50%	26%	59%	21%	10%	-5%	80%

Table 4-16: Account CSD behaviour by region for wholesale Channel

Filters		Significance level		
channel	Wholesale			
service method	(All)			
NN22g category	(All)			
region	cannibalized	dominant	subordinate	sample size
Central	40%	2%	58%	62
East Cape	38%	17%	46%	72
Natal	56%	9%	36%	135
North	39%	8%	53%	49
W Cape	60%	4%	37%	84
average	49%	8%	43%	402

Table 4-17: Aggregate volume changes by region for wholesale channel filtered for NN22g

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		q4 98			q4 99		q4 98		q4 99		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Central	23%	117%	524%	47%	20%	36%	56%	24%	37%	-11%	81%
East Cape	4%	86%	477%	36%	18%	17%	57%	12%	39%	-4%	69%
Natal	34%	110%	436%	72%	23%	19%	58%	16%	35%	-3%	74%
North	7%	143%	425%	72%	29%	29%	62%	21%	34%	-9%	83%
W Cape	33%	333%	579%	59%	50%	30%	79%	11%	28%	-19%	90%
total	100%	156%	504%	59%	27%	26%	65%	16%	37%	-10%	81%

Table 4-18: Aggregate volume changes by region for Forecourts, Catering and Convenience

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g & PC25g % vol
Central	6%	33%	355%	10%	9%	31%	29%	25%	21%	-5%	55%
East Cape	14%	44%	80%	44%	42%	20%	52%	20%	10%	0%	72%
Natal	21%	26%	185%	34%	21%	19%	48%	20%	27%	1%	67%
North	7%	71%	308%	36%	18%	30%	43%	24%	25%	-6%	67%
W Cape	51%	55%	117%	25%	42%	28%	59%	22%	17%	-5%	81%
total	100%	46%	132%	28%	33%	25%	52%	22%	19%	-3%	74%

Table 4-19: Account CSD behaviour by region for Forecourts, Catering and Convenience

Filters		Significance level		
channel	C&G			
service method	(All)			
NN22g category	(All)			
region	cannibalized	dominant	subordinate	sample size
Central	36%	6%	58%	105
East Cape	28%	7%	65%	161
Natal	36%	11%	53%	195
North	34%	9%	57%	89
W Cape	37%	3%	60%	353
total	35%	6%	59%	903

Table 4-20: Aggregate volume changes by channel

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g & PC25g % vol
Key Retail	12%	16%	106%	24%	13%	9%	23%	10%	10%	1%	32%
Other Accounts	1%	16%	182%	18%	12%	24%	31%	24%	18%	1%	55%
C&G	9%	46%	132%	28%	33%	25%	52%	22%	19%	-3%	74%
Wholesale	40%	18%	41%	-7%	50%	26%	59%	21%	10%	-5%	80%
SIRS	38%	45%	117%	21%	34%	27%	52%	23%	17%	-5%	74%
total	100%	29%	74%	8%	38%	24%	51%	20%	13%	-4%	71%

Table 4-21: Account CSD behaviour by Channel

Filters				
channel	(All)			
service method	(All)			
NN22g volume cat	(All)			
		Significance level		
		0.05%		
channel	cannibalized	dominant	subordinate	sample size
Key Retail	35%	13%	53%	714
Other Accounts	49%	7%	44%	174
C&G	35%	6%	59%	903
Wholesale	49%	8%	43%	402
SIRS	43%	7%	49%	708
average	40%	8%	52%	2,901

Table 4-22: Aggregate volume changes by channel filtered for NN22g dominance

channel	99 vol share	q4 growth 99 v 98			% of mix						
					q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	15%	38%	531%	26%	6%	11%	29%	10%	23%	-1%	39%
Other Accounts	1%	28%	490%	18%	8%	24%	36%	22%	28%	-2%	57%
C&G	10%	77%	540%	27%	14%	30%	49%	21%	36%	-8%	71%
Wholesale	30%	156%	504%	59%	27%	26%	65%	16%	37%	-10%	81%
SIRS	44%	103%	419%	42%	20%	32%	51%	23%	31%	-10%	73%
total	100%	97%	469%	42%	18%	26%	51%	19%	33%	-7%	70%

Table 4-23: Account CSD behaviour by Channel filtered for NN22g dominance

Filters				
channel	(All)			
service method	(All)			
NN22g volume cat	dominant			
		Significance level		
		0.05%		
channel	cannibalized	dominant	subordinate	sample size
Key Retail	32%	10%	58%	420
Other Accounts	51%	5%	43%	111
C&G	33%	5%	62%	620
Wholesale	45%	6%	49%	176
SIRS	38%	5%	57%	373
average	36%	6%	57%	1,700

Table 4-24: Aggregate Volume change by channel for Western Cape

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		total	NN22g	PC25g	q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
					NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	9%	16%	49%	29%	14%	11%	18%	12%	4%	1%	30%
Other Accounts	1%	6%	59%	21%	17%	22%	26%	25%	9%	3%	51%
C&G	18%	55%	117%	25%	42%	28%	59%	22%	17%	-5%	81%
Wholesale	52%	-3%	8%	-37%	64%	25%	72%	16%	7%	-9%	88%
SIRS	20%	-4%	15%	-8%	44%	28%	54%	27%	9%	-1%	81%
total	100%	6%	21%	-18%	52%	25%	60%	19%	8%	-6%	80%

Table 4-25: Account CSD by channel for Western Cape

Filters		Significance level		
channel	(All)			
service method	W Cape			
NN22g volume cat	(All)			
channel	cannibalized	dominant	subordinate	sample size
Key Retail	30%	17%	52%	138
Other Accounts	56%	9%	36%	45
C&G	37%	3%	60%	353
Wholesale	60%	4%	37%	84
SIRS	51%	6%	43%	137
total	42%	6%	51%	757

Table 4-26: Aggregate Volume change by channel for Western Cape filtered for NN22g dominance

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		total	NN22g	PC25g	q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
					NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	7%	49%	340%	8%	13%	20%	39%	14%	25%	-5%	53%
Other Accounts	1%	4%	347%	-6%	9%	21%	37%	19%	29%	-2%	57%
C&G	23%	89%	465%	18%	18%	34%	54%	21%	36%	-13%	76%
Wholesale	49%	333%	579%	59%	50%	30%	79%	11%	28%	-19%	90%
SIRS	20%	136%	418%	77%	24%	40%	54%	30%	29%	-10%	84%
total	100%	166%	509%	45%	28%	32%	65%	18%	36%	-15%	82%

Table 4-27: Account CSD behaviour by channel in Western Cape filtered NN22g dominance

Filters		Significance level		
channel	(All)			
service method	W Cape			
NN22g volume cat	dominant			
channel	cannibalized	dominant	subordinate	sample size
Key Retail	45%	5%	50%	44
Other Accounts	63%	5%	32%	19
C&G	34%	2%	64%	264
Wholesale	52%	0%	48%	25
SIRS	45%	7%	48%	69
average	39%	3%	58%	421

Table 4-28: Aggregate volume changes by channel for Natal

					% of mix						
	99 vol share	q4 growth 99 v 98			q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
channel		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	12%	31%	229%	5%	13%	11%	33%	9%	20%	-2%	42%
Other Accounts	1%	8%	148%	-4%	17%	21%	39%	19%	22%	-2%	57%
C&G	6%	26%	185%	34%	21%	19%	48%	20%	27%	1%	67%
Wholesale	52%	30%	75%	2%	43%	23%	58%	18%	15%	-5%	77%
SIRS	28%	75%	260%	31%	25%	25%	52%	19%	27%	-6%	71%
total	100%	40%	120%	11%	34%	22%	53%	17%	19%	-4%	70%

Table 4-29: Account CSD behaviour by channel for Natal

Filters		Significance level		
channel	(All)			
service method	Natal			
NN22g volume cat	(All)			
channel	cannibalized	dominant	subordinate	sample size
Key Retail	49%	1%	50%	175
Other Accounts	59%	3%	38%	32
C&G	36%	11%	53%	195
Wholesale	56%	9%	36%	135
SIRS	44%	8%	48%	209
average	46%	7%	47%	746

Table 4-30: Aggregate Volume change by channel for Natal filtered for NN22g dominance

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		q4 98			q4 99				NN22g & PC25g % vol		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	16%	50%	498%	9%	9%	12%	37%	9%	28%	-3%	46%
Other Accounts	1%	18%	304%	-11%	14%	24%	47%	18%	33%	-6%	65%
C&G	8%	54%	592%	40%	11%	22%	50%	20%	39%	-2%	70%
Wholesale	32%	110%	436%	72%	23%	19%	58%	16%	35%	-3%	74%
SIRS	43%	104%	425%	41%	20%	26%	53%	18%	32%	-8%	71%
total	100%	89%	446%	44%	18%	21%	52%	16%	34%	-5%	68%

Table 4-31: Account CSD behaviour by channel in Natal filtered for NN22g dominance

Filters					
channel	(All)				
service method	Natal	Significance level			
NN22g volume cat	dominant	5.00%			
channel	cannibalized	dominant	subordinate	sample size	
Key Retail	46%	2%	52%	119	
Other Accounts	62%	0%	38%	21	
C&G	33%	8%	58%	132	
Wholesale	55%	6%	39%	67	
SIRS	40%	4%	56%	126	
average	43%	5%	52%	465	

Table 4-32: Aggregate Volume change by channel for East Cape

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		q4 98			q4 99				NN22g & PC25g % vol		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	13%	17%	131%	33%	11%	10%	22%	11%	11%	1%	34%
Other Accounts	1%	-4%	216%	21%	11%	14%	36%	18%	25%	4%	55%
C&G	9%	44%	80%	44%	42%	20%	52%	20%	10%	0%	72%
Wholesale	26%	-2%	3%	-5%	53%	18%	56%	17%	3%	-1%	73%
SIRS	51%	40%	64%	34%	51%	18%	59%	17%	8%	-1%	76%
total	100%	23%	44%	21%	45%	17%	53%	17%	8%	0%	69%

Table 4-33: Account CSD behaviour by channel for East Cape

Filters				
channel	(All)	Significance level		
service method	East Cape			
NN22g volume cat	(All)	0.50%		
channel	cannibalized	dominant	subordinate	sample size
Key Retail	25%	11%	65%	102
Other Accounts	52%	10%	39%	31
C&G	28%	7%	65%	161
Wholesale	38%	17%	46%	72
SIRS	44%	12%	44%	138
average	35%	11%	55%	504

Table 4-34: Aggregate volume change by channel for East Cape

					% of mix						
channel	99 vol share	q4 growth 99 v 98			q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	25%	41%	534%	45%	6%	12%	27%	13%	21%	0%	39%
Other Accounts	3%	4%	453%	32%	7%	15%	38%	18%	31%	4%	56%
C&G	11%	100%	502%	65%	15%	27%	46%	22%	30%	-5%	67%
Wholesale	13%	86%	477%	36%	18%	17%	57%	12%	39%	-4%	69%
SIRS	48%	129%	364%	62%	27%	26%	54%	18%	28%	-8%	73%
total	100%	85%	414%	55%	17%	20%	46%	17%	30%	-3%	63%

Table 4-35: Aggregate volume changes by channel for Durban

					% of mix						
channel	99 vol share	q4 growth 99 v 98			q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	9%	40%	287%	5%	12%	11%	34%	8%	21%	-3%	42%
Other Accounts	0%	-23%	75%	-26%	15%	19%	34%	18%	19%	-1%	52%
C&G	6%	36%	384%	34%	13%	20%	47%	20%	34%	0%	67%
Wholesale	51%	15%	49%	-15%	48%	24%	62%	18%	14%	-6%	80%
SIRS	34%	97%	364%	36%	22%	27%	53%	19%	30%	-8%	71%
total	100%	38%	110%	2%	36%	23%	55%	17%	19%	-6%	73%

Table 4-36: Account CSD behaviour by channel for Durban

Filters				
channel	(All)	Significance level 5.00%		
service method	(All)			
NN22g volume cat	(All)			
channel	cannibalized	dominant	subordinate	sample size
Key Retail	51%	1%	47%	68
Other Accounts	86%	0%	14%	7
C&G	36%	9%	55%	122
Wholesale	64%	4%	32%	47
SIRS	43%	7%	50%	90
average	46%	6%	48%	334

Table 4-37: Aggregate volume changes by channel for Gauteng

					% of mix						
channel	99 vol share	q4 growth 99 v 98			q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	14%	-3%	-28%	38%	15%	6%	11%	8%	-4%	2%	19%
Other Accounts	1%	31%	363%	16%	7%	37%	25%	33%	18%	-4%	57%
C&G	1%	31%	430%	22%	5%	33%	21%	31%	16%	-2%	52%
Wholesale	42%	49%	135%	25%	30%	38%	47%	32%	17%	-6%	78%
SIRS	42%	45%	171%	12%	27%	29%	51%	22%	24%	-7%	73%
total	100%	37%	133%	20%	25%	28%	43%	24%	18%	-3%	68%

Table 4-38: Account CSD behaviour by channel for Gauteng

Filters				
channel	(All)	Significance level 0.10%		
service method	(All)			
NN22g volume cat	(All)			
channel	cannibalized	dominant	subordinate	sample size
Key Retail	35%	21%	44%	137
Other Accounts	41%	0%	59%	17
C&G	27%	5%	67%	55
Wholesale	38%	2%	60%	53
SIRS	45%	5%	50%	78
average	37%	11%	52%	340

Table 4-39: Aggregate Volume changes by channel for Cape Town

channel	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		total	NN22g	PC25g	q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
					NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Key Retail	8%	18%	37%	41%	13%	9%	15%	11%	2%	2%	26%
Other Accounts	1%	8%	60%	24%	16%	23%	24%	26%	8%	4%	51%
C&G	17%	59%	123%	19%	44%	27%	61%	20%	18%	-7%	82%
Wholesale	53%	-2%	9%	-38%	65%	25%	73%	15%	8%	-9%	88%
SIRS	21%	-5%	13%	-8%	45%	28%	53%	27%	9%	-1%	81%
total	100%	6%	21%	-20%	54%	25%	62%	19%	8%	-6%	80%

Table 4-40: Account CSD behaviour by channel for Cape Town

Filters					
channel	(All)				
service method	W Cape				
NN22g volume cat	(All)				
channel	cannibalized	dominant	subordinate	sample size	
Key Retail	24%	23%	54%	102	
Other Accounts	55%	9%	36%	33	
C&G	37%	3%	60%	307	
Wholesale	59%	5%	36%	61	
SIRS	48%	5%	48%	103	
average	40%	7%	53%	606	

Table 4-41: Aggregate volume changes by service method

Service method	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		total	NN22g	PC25g	q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
					NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Agent	3%	-20%	-4%	-37%	42%	25%	50%	20%	8%	-5%	70%
Presell	25%	9%	21%	-11%	48%	24%	53%	20%	5%	-4%	73%
normal	62%	46%	123%	22%	34%	25%	52%	21%	18%	-4%	73%
small	2%	38%	127%	51%	26%	23%	42%	25%	17%	2%	67%
large	9%	14%	65%	4%	27%	19%	39%	18%	12%	-2%	57%
total	100%	29%	74%	8%	38%	24%	51%	20%	13%	-4%	71%

Table 4-42: Account CSD behaviour by service method

Filters				
channel	(All)	Significance level 0.05%		
region	(All)			
NN22g volume cat	(All)			
service method	cannibalized	dominant	subordinate	Sample size
Agent	52%	4%	44%	95
Presell	35%	18%	47%	259
normal	39%	7%	53%	2,061
small	47%	15%	38%	93
large	40%	6%	54%	393
average	40%	8%	52%	2,901

Table 4-43: Aggregate volume changes by service method filtered for NN22g dominance

Service method	99 vol share	q4 growth 99 v 98			% of mix						
					q4 98		q4 99		Mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Agent	2%	85%	542%	17%	12%	31%	42%	20%	30%	-11%	62%
Presell	17%	148%	510%	50%	25%	26%	61%	16%	36%	-10%	76%
normal	71%	96%	453%	45%	18%	27%	50%	20%	33%	-7%	71%
small	2%	70%	381%	60%	18%	23%	51%	22%	33%	-1%	72%
large	9%	48%	530%	10%	9%	17%	40%	13%	31%	-4%	53%
total	100%	97%	469%	42%	18%	26%	51%	19%	33%	-7%	70%

Table 4-44: Aggregate volume changes by service method for Central region

Service method	99 vol share	q4 growth 99 v 98			% of mix						
					q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Agent	2%	8%	67%	-11%	11%	23%	17%	19%	6%	-4%	36%
Presell	26%	20%	52%	27%	24%	29%	30%	30%	6%	2%	61%
normal	66%	66%	246%	28%	24%	31%	50%	24%	26%	-7%	74%
small	2%	100%	203%	94%	33%	25%	50%	25%	17%	-1%	75%
large	3%	28%	240%	29%	12%	19%	32%	19%	20%	0%	51%
total	100%	49%	178%	28%	23%	30%	43%	26%	20%	-4%	69%

Table 4-45: Account CSD behaviour by service method for central region

Filters				
channel	(All)			
region	Central			
NN22g volume cat	(All)			
service method	cannibalized	Dominant	subordinate	sample size
Agent	47%	0%	53%	17
Presell	34%	16%	50%	107
normal	33%	5%	61%	297
small	44%	15%	41%	27
large	31%	7%	62%	61
average	34%	8%	58%	509

Table 4-46: Aggregate volume changes by service method for Western Cape

					% of mix						
Service Method	99 vol share	q4 growth 99 v 98			q4 98		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Agent	9%	-34%	-20%	-48%	46%	26%	56%	20%	10%	-5%	76%
Presell	57%	2%	12%	-34%	62%	23%	68%	15%	6%	-8%	83%
normal	25%	41%	102%	25%	35%	30%	51%	27%	15%	-3%	77%
small	0%	21%	35%	27%	22%	30%	24%	31%	3%	2%	56%
large	8%	17%	58%	12%	32%	28%	44%	27%	11%	-1%	71%
total	100%	6%	21%	-18%	52%	25%	60%	19%	8%	-6%	80%

Table 4-47: Account CSD behaviour by Service Method for Western Cape

Filters				
channel	(All)			
service method	(All)			
NN22g volume cat	(All)			
service method	Cannibalized	dominant	subordinate	sample size
Agent	63%	3%	34%	64
Presell	30%	25%	45%	92
normal	43%	4%	53%	441
small	50%	13%	38%	8
large	38%	3%	59%	152
average	42%	6%	51%	757

Table 4-48: Aggregate Volume changes by service method for Natal

Service Method	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		q4 98			q4 99		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Presell	4%	40%	169%	2%	22%	27%	42%	19%	20%	-7%	62%
normal	83%	42%	114%	13%	36%	23%	55%	18%	19%	-5%	73%
small	1%	18%	213%	21%	17%	21%	46%	21%	29%	1%	68%
large	12%	27%	162%	0%	20%	17%	42%	13%	22%	-4%	55%
Grand Total	100%	40%	120%	11%	34%	22%	53%	17%	19%	-4%	70%

Table 4-49: Aggregate Volume changes by service method for Natal Key Retail

Service Method	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		q4 98			q4 99		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Presell	11%	63%	411%	-4%	13%	10%	40%	6%	27%	-4%	47%
normal	47%	24%	191%	-1%	14%	11%	34%	9%	19%	-2%	43%
small	1%	32%	611%	-20%	9%	19%	49%	12%	40%	-8%	61%
large	41%	33%	239%	13%	12%	12%	31%	10%	19%	-2%	41%
Grand Total	100%	31%	229%	5%	13%	11%	33%	9%	20%	-2%	42%

Table 4-50: Aggregate volume changes by Service method for Natal Wholesale

Service Method	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
		q4 98			q4 99		q4 99		mix change (pp)		NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Presell	5%	30%	118%	2%	26%	33%	43%	26%	17%	-7%	69%
normal	82%	30%	68%	2%	47%	23%	61%	18%	14%	-5%	79%
small	0%	-54%	-57%	-56%	48%	19%	45%	18%	-3%	-1%	64%
large	13%	31%	150%	-1%	26%	20%	50%	15%	24%	-5%	65%
Grand Total	100%	30%	75%	2%	43%	23%	58%	18%	15%	-5%	77%

Table 4-51: Aggregate volume changes by service method for gauteng

Service Method	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
					q4 98		q4 99				NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Agent	0%	-44%	222%	-37%	0%	50%	2%	56%	2%	6%	58%
Presell	42%	21%	51%	26%	26%	29%	32%	30%	6%	1%	62%
normal	50%	54%	209%	11%	27%	27%	54%	19%	27%	-7%	73%
small	5%	56%	185%	64%	21%	27%	39%	28%	18%	1%	68%
large	2%	17%	162%	3%	12%	25%	28%	22%	15%	-3%	49%
total	100%	37%	133%	20%	25%	28%	43%	24%	18%	-3%	68%

Table 4-52: Aggregate volume changes by region for normal service method

Service Method	99 vol share	q4 growth 99 v 98			% of mix				mix change (pp)		
					q4 98		q4 99				NN22g & PC25g % vol
		total	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	NN22g	PC25g	
Central	26%	66%	246%	28%	24%	31%	50%	24%	26%	-7%	74%
East Cape	17%	35%	62%	31%	46%	17%	55%	16%	9%	0%	72%
Natal	38%	42%	114%	13%	36%	23%	55%	18%	19%	-5%	73%
North	8%	46%	141%	25%	25%	26%	41%	22%	16%	-4%	63%
W Cape	10%	41%	102%	25%	35%	30%	51%	27%	15%	-3%	77%
total	100%	46%	123%	22%	34%	25%	52%	21%	18%	-4%	73%

Table 4-53: Account CSD behaviour by region for normal service method

Filters					
Channel	(All)	Significance level 0.05%			
service method	normal				
NN22g volume cat	(All)				
service method	cannibalized	dominant	subordinate	sample size	
Central	33%	5%	61%	297	
East Cape	35%	10%	55%	425	
Natal	44%	7%	49%	616	
North	35%	11%	54%	282	
W Cape	43%	4%	53%	441	
average	39%	7%	53%	2,061	

Table 4-54: Distribution of NN22g

channel1	region	1999 nn22g presence		PC25g CSD behaviour
		no	yes	
C&G	Central	87.73%	12.27%	Subordinate
C&G	Northern	72.40%	27.60%	Subordinate
C&G	KZN	55.63%	44.37%	Subordinate
C&G	EC	14.29%	85.71%	Subordinate
C&G	WC	5.69%	94.31%	Subordinate
SIRS	Central	44.49%	55.51%	Subordinate
SIRS	Northern	65.31%	34.69%	Subordinate
SIRS	KZN	32.58%	67.42%	Subordinate
SIRS	EC	14.57%	85.43%	Subordinate
SIRS	WC	18.11%	81.89%	Cannibalization
KR	Central	70.18%	29.82%	Dominant
KR	Northern	66.23%	33.77%	Dominant
KR	KZN	27.87%	72.13%	Cannibalized
KR	EC	5.75%	94.25%	Dominant
KR	WC	19.86%	80.14%	Dominant & Subordinate
WS	Central	55.88%	44.12%	Subordinate
WS	Northern	40.00%	60.00%	Subordinate
WS	KZN	4.58%	95.42%	Cannibalized
WS	EC	5.63%	94.37%	Cannibalized
WS	WC	8.82%	91.18%	Cannibalized