Full Length Research Paper

Assortment planning: Strategic perception of retail owners and managers in Brazil

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The goal of the Assortment Planning (AP) is to specify an assortment that maximizes sales and profits which counterbalance the offer of products based on the decisions made about sales; it also increases the probability for consumers to find their own favorite product without increase in storage costs or risk of stock out. This work aims to investigate the strategic perception of retail owners and managers about assortment. Specifically, this study will analyze the impact of assortment, clients' fidelity, level of service and profits on the vision of the retailer. It is an exploratory investigation of retailers' perception about assortment management. The results of this research allow one to interfere with the inadequate knowledge of the interviewees about the theme, mainly the smaller stores. Generally, it was verified that the owners and managers evaluated assortment planning as a primordial strategic tool and considered important a system of information. Although recognizing the strategic importance of AP in the control of unproductive variety, the consumer of retail goods, mainly the small retailer uses the intuitive judgment related to the use of analytic methodology.

Key words: Management by category; assortment planning; strategic perception.

INTRODUCTION

A significant number of innovations in the 90s were developed by retailers. Among them are management by category (MC), using a set of techniques to offer the supplier solutions of purchasing that meet the needs of the clients at each point of sale, defining assortment and organizing as well as grouping the products based on the consumers (Santos and Gimenez, 1999; Holmström et al., 2002; Czapski, 2012).

An analysis of the tactic strategies of the MC used by the industry focuses on investing in sales point (Czapski, 2012). The decisions around assortment (prices, promotions, and other variables of marketing) are processed in a holistic way, so the manufacturer has to consider the profits of the category as a whole and not only the brands (Mcdonald and Wilson, 2011).

Different from the management by brands, this new concept transfers the power of the fabricant to the retailer because of the concentration of the retail sector and the detention of information on the comportment of the consumer (Santos and Gimenez, 1999). The MC also

maximizes the profits of the retail space and profit margin (Basuroy et al., 2001; Holmström et al., 2002) due to the coordinated and/or cooperative character of the prize according to the competitive character of the management by brands.

Among the practices of the MC, the assortment planning (AP) is one of the most used, because it allows, for example, the elimination of articles of low profits that occupy the physic space that could be used for the exposition of other products. Generally, the AP helps to make decisions about the limitation of space in the gondolas, about the investment for storage, about the quantity of launchings and about the progressive number of categories (Cadeaux, 1997; Santos and Gimenez, 1999; Arkader and Ferreira, 2004). On the consumers' perspective, the preference is for extensive assortment due to the needs for more options and attraction generated by various assortments (Boyd and Bahn, 2009). However, the costs associated with the disposing of big assortments are expensive and the retailers, knowing that costs do not want to be responsible for these expenses (Oppewal and Koelemeijer, 2005).

The new present scenario has favored and evoked the need of adoption of retailers, suppliers and manufacturers, a new reality on which collaborated and integrated decisions can benefit all involved in the chain (Attaran and Attaran, 2007). This way, the decisions about the AP become a strategy essential for achieving balance in the control of unproductive variety. In assortment management, mainly small retail unit, considers intuitive judgment to the detriment of the use of analytic method (Fisher and Vaidyanathan, 2013). Establishing and achieving an ideal AP is considered an art (i.e. intuition) and not science (i.e. analytic models); so the retailer loses the opportunity of using a strategic tool important for the maximization of profits and level of services with low investment in information system (Fisher et al., 2000; Fisher and Vaidyanathan, 2013).

Innovation in assortment of products represents a crucial aspect in the MC, since location and price determine the preference and fidelity of the consumers (Broniarczyk and Hoyer, 2006). The literature on the size and variability of assortment and its influence on consumers' perception, purchasing conduct and consequently the volume of sales and profits of retailers has contradictory results. Most of the researches on the subject were made in Brazil and did not consider the cultural and social intrinsic characteristics of the country. Also, besides the importance of the subject, only a few studies evaluated the perception of the retailer (owners and managers) about AP, the analytic tools used and the strategies necessary for achieving the balance in assortment, depth, and level of service.

With these, the current work aims to investigate the strategic perception of the owners and managers of retail food about AP. Specifically, the study analyzes the effect of assortment, clients' fidelity, level of service and profits on retailers' vision. It intends to show the knowledge of the retail professionals of AP and to contribute to the decision-making process in space limitation on the gondolas, storage investment, quantity of launchings and the progressive increase of the number of categories.

Thus, this paper aims to provide a statistically valid tool for assessing the knowledge of retail professionals of this subject, contributing to the management of inventories.

With this purpose, the work is divided into four sections beyond the introduction part and the definition of the research problem. The next section is the theoretical and empirical aspects; and also the subsections that expose the concepts of the MC as the AP. The third section contains the methodological procedures. The fourth section contains the presentation and analysis of the results followed by section five which has the final considerations and suggestions for future researches.

MANAGEMENT BY CATEGORY

As an initiative of management and innovation of the retailer, the MC seeks to increase development in a certain category of products through the adoption of strategies more coordinated for purchase, promotions, assortment, and marketing (Basuroy et al., 2001). This management tool is a strategic unit of business and establishes for each unit goals of profits clearly defined (Meldrum and Mcdonald, 2007).

The MC emerges from the concept of Efficient Customer Response (ECR) on which the volume of sales is replaced with profits (Arkader and Ferreira, 2004; Mcdonald and Wilson, 2011). On this model, the suppliers, distributors, and retailers share information and work together, which brings more efficiency to the chain as a whole, better attendance to consumers, reduction of costs and total storage (Santos and Gimenez, 1999). The innovation of the MC emerged in middle of the 9os as contrast to the traditional management that centered on brands (Meldrum and Mcdonald, 2007), on which the price of the products were defined and imposed on the retailers independently by the diverse manufacturers. Contrarily, the MC recognizes the interdependence of the products on the same category. This new model focuses on the holistic result of the category to the detriment of the result of the individual brands. That is why it demands that the manager of the category defines the prices of all brands belonging to the category together, what allows a global increase of prices in a category and the optimization of the profits of the retailers (Basuroy et al., 2001).

Different from the traditional practices of the management by brands, the MC stops the manufacturer to direct the decision-making process around the assortment offered (Holmström et al., 2002). For this reason, some researches consider this new model as a symbol of the evolution of retailers, which migrate from passive
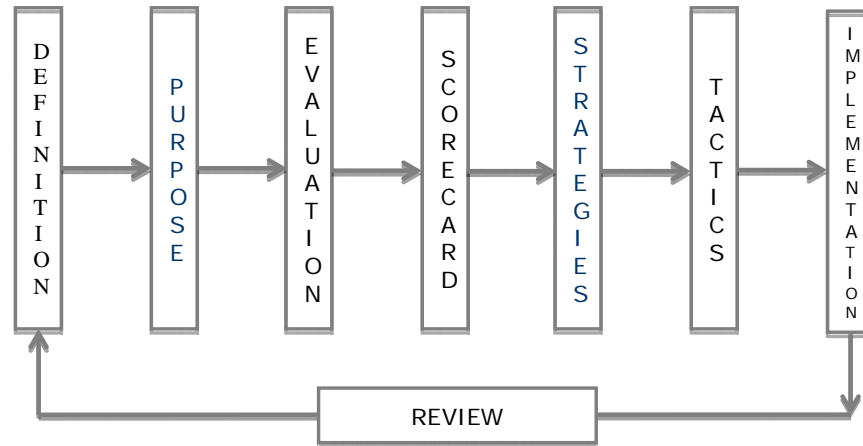
Figure 1. Eight steps necessary for the correct implementation of the MCO. Source: Adapted from Basuroy et al. (2001).

distributors to active members of the supply chain (Mcdonald and Wilson, 2011). For suppliers/manufac-turers, this new model generates a big challenge; it provides convincing arguments so the retailers highlight their brands and, in the meantime, adapt, refine, or make changes to the strategies and management tactics, benefitting the category as a whole (Johnson, 1999).

In practical terms, the MC involves *front-end* activities for increased demand as well as activities of *back-office* for the development of the management of supplies of the logistic coordination (Dhar et al., 2001). For the implementation of the MC, the retail activities must pass through strategic changes, tactics and operations as shown in Figure 1. On the first step, it is determined what products will build the category, subcategory and the main segmentation. The second step (the purpose) considers the consumer, distributor, supplier and the market and analyzes each category; while the third step (evaluation) reunites and analyzes the historic data and important information for the category management. The fourth step (scorecard) establishes measures of perfor-mance to evaluate the execution of the program and the assertiveness of the strategies (step five), of the tactics (step six) and of the plan of implementation (step seven). The last step involves the continuous monitoring of results obtained and the possible need of modification of the initial plan (Basuroy et al., 2001).

It is important to highlight that the detailed process in Figure 1 must be applied to each category individually, since the impact of the variables associated with the management by category (price, promotion, assortment, etc.) varies significantly according to the role exercised by the category in the retailers' integral book (Dhar et al., 2001). Usually, in the implementation of the process, different strategies can be used for different categories. The criterion of choice considers as a final goal the increase of profits and sales and the coordination of wide range of variables of marketing. From these factors, the AP and the balance of the assortment in a specific category are fully important for the retailers. These matters are given in details as follows.

Assortment planning

AP, in the literature, is really explored based on the retailers' point of view (Broniarczy et al., 1998; Grewal et al., 1999; Iyengar and Lepper, 2000; Boatwright and Nunes, 2001; Rajaram, 2001; Agrawal and Smith, 2003; Oppewal and Koelemeijer, 2005; Campo and Gijsbrechts, 2005; Kök et al., 2006; Yucel et al., 2009; Mantrala et al., 2009; Parente, 2010; Bauer et al., 2012; Cadeaux and Dubelaar, 2012; Agrawal and Smith, 2013; Fisher and Vaidyanathan, 2013). That happens, probably, because the exposition of products and the moment of decision of purchase of the final consumer happen in the retail environment.

Assortment is defined as a number of SKUs (Stock Keeping Units) offered in a unique category of products (Broniarczyk and Hoyer, 2006). Usually, they are charac-terized by two components: (i) width, which refers to the number of different brands offered by the retailers and (ii) the depth, which refers to the average number of SKUs offered by brand in a determined category (Dhar et al., 2001). Besides these two main components, other varia-bles that integrate the MC are symmetry, organization strategy, level of organization, disposal, compatibility of structures (Broniarczyk and Hoyer, 2006) and market-share (Dhar et al., 2001).

All these components and variables have direct influence on the perception of the client in relation to the offered assortment; therefore, they impact significantly the volume of sales, gross margins and the profits of the retailers and other members of the chain (Kök et al.,

Table 1. Impact of the retailer in front of the unavailability of the product wanted by the consumer.

Answerofthecostumer	Retailer	Manufacturer
Changeof retailer	Represents the most problematical answer to the retailer	It is not impacted
Advance of purchase	Indirectly, because of cash-flow and storage	Indirectly, because of cash-flow and fluctuation of demand
Substitution – Same brand	Eventually, in case of Exchange for an alternative with lower value or margin	Eventually, in case of Exchange for an alternative with lower value or margin
Substitution – Different brand	Eventually, in case of Exchange for an alternative with lower value or margin	Represents the most problematical answer to the manufacturer
Desistence	Direct Loss	Direct Loss

Source: Adjusted from Gruen et al. (2002).

2006; Mantrala et al., 2009). Despite the fact that the assortment is defined as quality of SKUs offered, the perception of the consumers about assortment frequently distinguishes the objective reality. This way, the perception of the consumer can be affected: (i) by the number of SKUs offered (ii) by the heuristic of the space available for the products category and (iii) by the availability of the favorite products for the clients (Broniarczyk et al., 1998). This way, a reduction of assortment may present some null or positive results in the perception of the consumer if the distribution of distinctive attributes of SKUs is constant or distinct to become more apparent (Hoch et al., 1999; Van et al., 2002; Morita, 2010).

The goal of the AP is to specify an assortment that maximizes the sales and profits, which counterbalance the offer of product based on the decisions of purchase of the consumer (Saure and Zeevi, 2009) that increases the probability for the consumers to find their favorite products without the increase of storage costs or risk of stock out (Broniarczyk and Hoyer, 2006; Sloot et al., 2006; Morita, 2010). In this context, we can say that the goal of the AP is to achieve a balance between the good assortment besides the limitations in the purchasing budget, the physical space of the shelf, and the storage (Salles, 2010). A great assortment invariable involves the trade-off between the benefits to include certain product in the assortment and the costs of that inclusion (Cachón et al., 2005; Yücel et al., 2009).

The strategy to keep, increase or reduce the assortment depends and can oscillate according to many variables associated to the profile of the consumer, of the product and/or of the category. A wide set of benefits coming from the point of balance for a better AP can be glimpsed in the literature. The AP is seen as a tool for managing the space in the shelf for the SKUs with a high volume of sales (Food Marketing Institute, 1993; Drèze et al., 1994), as well as for the reduction of costs, through the elimination of items of low prices and low participation (Borle et al., 2005). These factors influence directly the reduction of costs of storage, but can increase the

probability of unavailability of the product wanted by the consumer (Broniarczyk and Hoyer, 2006). In that case, the consumer can change the retailer, substitute the SKUs by a product of the same brand, delay the purchase or give up (Zinn and Liu, 2001; Gruen et al., 2002). Due to the unavailability of the product wanted by the consumer, the retailer loses sales with consequent oscillation of the cash-slow, storage and demand (Gruen et al., 2002; Yücel et al., 2009). The manufacturer, in turn, has the product substituted by the competitor or by the direct loss by the purchase desistence. All the members of the channel are impacted by this process, as shown in Table 1.

The negative effect of a bad management of AP is often justified by the fact that clients do not find their favorite product, due to the removal of SKUs of assortment offered (Broniarczyk et al., 1998; Broniarczyk and Hoyer, 2006; Sloot et al., 2006). The removal of the favorite product tends to show a more significant effect in short term, since after a certain period of time the consumer should opt to change the retailer in order to buy the favorite product or to buy a substitute product.

It is important to highlight that big assortments can attract consumers initially, but the difficulty when making a decision among many SKUs becomes demotivating, generating regrets and desistence of purchase (Broniarczyk et al., 1998; Botti and Iyengar, 2004; Gourville and Soman, 2005; Sloot et al., 2006). Big assortments have an oppressive effect on the consumers, whose preferences are not well defined; the big assortments increase the probability of finding the product with the combination of attributes that they judge ideal (Chernev, 2003).

Defining the variety and appropriate quantity of products, relating the needs of the client and the operational costs are a complex task and determinant of the competitiveness of retailers. Consequently, they pose a challenge for the retailer to generate the ideal AP that maximizes the total profits of business. From the pessimistic perspective of reduction of assortment, if the reduction of SKUs does not impact the volume of sales

Table 2. Corresponding characterization.

1	Number of employees of the company: ( ) until19 ( ) 20 to 99 ( ) 100 to 499 ( ) More of 500
2	Type of organization: ( ) Hypermarket ( ) Supermarket ( ) Grocery Store ( ) Bakery ( ) Convenience Store
3	Position in the Company: ( ) Owner ( ) Manager ( ) Head of sector ( ) Others
4	Gender: ( ) Male ( ) Female
5	Age: ( ) 20 or less ( ) 21 to 25 ( ) 26 to 30 ( ) 31 to 35 ( ) 36 to 40 ( ) 41 or more
6	Level of education: ( ) Elementary School ( )High School ( ) Superior ( ) post graduated
7	Currently, what kind of information do you use to keep yourself updated ( ) Books ( ) Newspapers and Magazines ( ) Internet ( ) Digital Medias ( ) Others _____

Source: The authors.

(neither positively, nor negatively), the general result is positive for the retailer, because of the reduction of logic costs in the purchase, *setup*, storage, among others. In that case, the final result shows the increase of profits.

The limited spaces available in the gondolas and shelves, as well as the annual increase of products and increased investment necessary for storage imply the adoption of strategy necessary for the selection of spaces for the exposition and storage of SKUs (Morita, 2010; Salles, 2010). The conflicts between the retailers and industries give space for the practice of tax payment, funds, agreements, and benefits, called slotting fees (Kök et al., 2006). Due to the transfer of the power of industry to the retailer, the practice of slotting fees represents a strategy for the fabricant to influence the retailer to have the products distributed, exposed, or stored at the sales point. This value is paid by the industry, and it can be funded with money or as subsidy, discounts in the orders or bonus of products (Wilkie et al., 2002). However, the conflicts between retailer and supplier can generate greater volume of sales, greater profitability and reduction of time of supplying to every member of the chain. The more the industry learns about the needs and preferences of the final consumers, the more they will be able to preview in a precise and accurate way the demand of the market. The retailer, in turn, is the only link of the chain that dominates the information of the consumers' behave, their desires, needs, and preferences (Attaran and Attaran, 2007; Bertaglia, 2009). An adequate infrastructure for the exchange of information can contribute to the reduction of the lasting effect of chicote (Lee et al., 1997), the reduction of storage (Campos et al.,2002), and in order to achieve economic and strategic advantages (Kim, 1999; Attaran and Atitaram, 2007).

METODOLOGY

The current research is an exploratory investigation (Mattar, 1996) of the perception of retailers about assortment management. As a survey, the research sought the direct knowledge by interrogating directly retailers and managers about AP in retail food. The information was obtained through bibliographic and questionnaires. The data were regrouped in tables allowing the use of relations and other statistic procedures. The collected data were analyzed with the help of the statistic Software SPSS.

Development of the scale

We tried to evaluate the perspective of retailers and managers about diverse questions through an adaptation of the Likert scale, varying from 1 to 10, equivalent to the level of importance that the interviewee attributed to the subject in question: 1= totally disagree (TD); 5= neither agree nor disagree (ND); 10= agree; 10= totally agree (TA). The initial questionnaire had 27 questions that evaluated the relation among assortment, client fidelity, level of service and profits of the retailer, as shown in Tables 2 and 3.

The information obtained by the application of the questionnaire allowed interference on the limitation of space on the gondolas, storage investment, the system of information for assortment planning and effective assortment management. The questionnaire was applied to 135 commercial retail establishments, including hypermarkets, supermarkets, grocery stores, bakery, and convenience store in the main cities of States of Parana and Santa Catarina (Brazil) between March and May of 2013. From these establishments, only 27 did not accept to participate in the research due to lack of time to answer the questionnaire or the confidentially of the information. The total answers were 108 at sales points.

After the questionnaire was applied, factorial exploratory analysis was made on the questions except question 12. Since there were no initial interferences on the possible dimensions of this questionnaire, it was used the method of the main components and the rotation of Varimax. The initial KMO, with all the variables presented on the initial questionnaire was 0.627, and 7 dimensions were found for this scale. Question 9 with communality of 0.580 was spread among the dimensions. Therefore, we chose to withdraw and rotate the data again.

On the second round, the new KMO was 0.621, with 7 dimensions. The seventh dimension, containing the variable of question 4, was with just one indicator. This way, we decided to withdraw the question and rotate the data again.

The third round had KMO of 0.636 and 6 dimensions. Since question 17 was spread in many dimensions, it was withdrawn. The exploratory factorial analysis was rotated one more time, and this new round had KMO of 0.653 with 5 dimensions. On this round, the variable of question 15 was spread and it was withdrawn. The fifth round was made and had KMO of 0.649 with 5 dimensions. None of the questions was spread among the dimensions and all of the communities are superior with 0.5. The first dimension was counted on the variables 1,2,5,6, and 20; the second with questions 3, 7, 8, and 19; the third, 13, and 16; the fourth, 10, and 14; the fifth, 11 and 18. After the analysis of the content of the questions, we chose to keep all the variables. Now the Cronbach's Alpha was calculated

Table 3. Initial questionnaire.

1	Do you consider yourself an updated professional about the matters related to the assortment planning in the retail?
2	Does the company evaluate if the client found the brand/product he was seeking?
3	Are the products of low turnover substituted on the gondola?
4	Who defines the assortment of products, is it the supplier?
5	Does the company receive investment/support of the supplier to expose the assortment?
6	Does the volume of sales increase if there is a greater assortment?
7	Does the space reduce if there is a greater assortment?
8	Do the costs reduce if there is a greater assortment?
9	Does the probability of the consumer feeling confused and abandoned increase if there is a greater assortment?
10	Does the satisfaction of the client increase if there is a greater assortment?
11	If there is a reduction of assortment, will there be modification in the volume of sells?
12	If the consumer doesn't find the brand/product of choice, he (　) substitutes for the same brand　(　) substitutes for another brand　(　) delay the purchase　(　)abandons the store
13	Does the time of search reduce and the visibility of the production crease if there is a greater assortment?
14	Is there more space on the gondola for the allocation of high sale/cycle if there is lower assortment?
15	For the implementation of a computerized management system for the analysis of assortment is it necessary high investment?
16	Is the implementation of a computerized management system for analysis of assortment going to contribute significantly to the financial development of the company?
17	Do my decisions impact directly in the assortment offered by the company?
18	Do my decisions about assortment more difficult for food products that offer more variability for the client?
19	Do the products assortment offered to the client impact on the level of service and on the profits of the company?
20	Does the company have a system of information to manage the purchase of the supplier?

Source: The authors.

to obtain the dimensions. The Alpha for the first dimension was 0.802; the value does not increase in case of a withdrawn question. This way, we keep all the questions. On the second dimension, the Alpha calculated was 0.768; just like the first dimension, it also does not increase if there is a withdrawn question. The third, fourth, and fifth dimensions have only two questions, and because of that, we adopted a pattern to keep them, in case of high Alpha. On the third dimension, the Alpha was 0.989 (dimension kept with the two questions); on the fourth, 0.604 and on the fifth, 0.496. The fourth dimension, despite its low Alpha, was kept due to the content, but the fifth, due to the low Alpha, was excluded. Based on this, the final questionnaire is expressed in Table 4. Table 4 shows that the variables of the first and second order, questions 1, 2, 5, 6, and 20 refer to the assortment variable. Questions 3, 7, 8, and 19 refer to the number of items and physical space available for the assortment planning based on the fidelity of the client. Questions 13 to 16 refer to the level of service. Finally, questions 10 and 14 refer to the perception of the visibility and the exposition of the assortment planning based on the profits of the retailer. The next section presents the results and discussion of this research.

DISCUSSION AND ANALYSIS OF RESULTS

This work analyzed the relation among assortment, fidelity of the client, level of service, and profitability of the owners and managers of retail food. The general goal of this research was to contribute to the decision-making process o of the limitation of spaces on the gondolas, storage investment, the quantity of launchings, as well as the progressive increase in the number of categories.

Questionnaire was directed to the owners and managers of the main retail establishments in Southern Brazil. The answers allowed an analysis of the profile of the interviewees and a better comprehension of the perception of the professionals in areas related to AP as well as the knowledge of the actions related to the decision-making process.

Profile of the retail professionals

For the profile analysis of the participants, we tried to identify the professionals directly connected to the products market in the category of consumer goods, with experience in their areas. Table 5 shows the result of the research based on the profile of the ones involved in the research field. About the level of education, more than 60% graduated from college; about the function more than 40% are direct managers around 36 and 40 years old (38%); the majority are males (81.5%). For the retail establishment analyzed, the research explored mainly the supermarket in the category with the maximum of 10 checkouts (39.8).

Perception related to assortment planning

Tables 4 and 6 show statistically the answers of the

Table 4. Final questionnaire.

First order variable	Second order variable	Question No	Question
Analysis of the perception of the owners and professionals of the retail related to the assortment planning of food products	Assortment	1	Do you consider a well-informed professional due to the subjects related to the assortment planning on the retail?
		2	Does the company evaluate if the client found the brand/product he was looking for?
		5	Does the company receive investment/support from the supplier for the exhibition of the assortment?
		6	Does the volume of sales increase with a greater assortment?
		20	Does the company have an information system to manage the purchase from the supplier?
	Fidelity	3	Are the products with low cycle substituted on the gondola?
		7	Does the space for each product get bigger with a greater assortment?
		8	Are the costs of products in storage higher with a higher assortment?
		19	Does the product assortment offered to the client impact on the level of service and income of the company?
	Level of service	13	Is the visibility of the product higher with a lower assortment?
		16	Is the implementation of a computerized system of management for the analysis of assortment going to contribute significantly for the financial development of the company?
	Profits	10	Is the probability of a consumer confused and ready to give up about the purchase if there is a greater assortment?
		14	If there is a lower assortment and better visibility of the product with a lower assortment?

Source: The Authors.

Table 5. Result of the research: profile and characteristic of the interviewees and retailers.

Variable	%	Caracteristic	Variable	%	Caracteristic
Level of Education	60.2	Superior	Function	32.2	Head ofthe sector
	4.6	Post-Graduated		41.7	Managers
	35.2	High School		21.3	Owners
Gender	81.5	Male		4.8	Other functions
	18.5	Female			
Age	4.0	21 to 25	Retail	30.6	Hypermaket
	17.,2	31 a 35		39.8	Supermarkeets
	9.3	26 to 30		5.6	Convenience Store
	38.0	36 to 40		7.4	Grocery Stores
	31.5	Older than 41		16.6	Bakery
Means of Information	48.0	Internet	No of employees	25.9	100 to 499
	36,2	News paper and magazines		38.0	20 to 99
	12,0	Eletronic Media		10.2	0to 19
	3,8	Other means		25.9	Above 500

Source: Result of the research.

interviewees about the theme of the research. Related to question 1 (Who do you consider a well-informed professional in terms of the subjects related to assortment planning on the retail?), the average answer was 6.57, which shows that not all the interviewees considered themselves experts on the theme. Answers that showed

Table 6. Average answers to the questions in Table 4.

Analisis	Assortment					Fidelity			Level of Service		Profitability	
Question	1	2	5	6	20	3	7	8	19	13	16	10	14
Average	6.57	6.42	5.05	6.76	6.93	8.01	8.16	8.23	8.2	9.01	8.18	7.27	7.92

Source: Result of the Research.

less knowledge about the AP were found at the grocery store, bakery and convenience stores. For question 2 (Does the company evaluate if the client found the brand/product he is looking for?), the average of the answers was 6.42.

This result has greater impact for the hypermarkets and supermarkets adding up, together, 70.4% of the sample of the retail. For the other stores, this criterion was rarely evaluated due to the lack of analytic tools necessary. On question 5 (Does the company receive investment/ support from the supplier for the exhibition of the assortment?) the average answer was 5.05, which is highly affected by the answers of the hypermarkets and supermarkets that traditionally require more participation of the suppliers in the costs of the store through slotting fees. The average answer for question 6 (Does the volume of sales increase with a greater assortment?) was 6.76. The results show a perception that the assortments cannot be too broad, but necessarily need adequate profile of the client at the point of sales. Question 20 (Does the company have a system of information to manage the purchase from the supplier) had an average of 6.93. This result, one more time, was highly affected by the answers of the hypermarkets and the super-markets that have specific programs for the management of purchases and sales. In minor proportions, the answers of the grocery stores and the bakeries also contributed to the average, since these points of sale have been focusing on the management by variety for a better control of storage and sales.

For the variable of fidelity, all the questions had average above 8. For this variable, based on the research, it was found that the items of low cycle are substituted during the time. The bigger the space for the assortment, the smallest the space destined for the exhibition of each SKU. Similar answers among the retail stores were also obtained for the relation of assortment and costs of storage, as well as for the assortment, the level of service, and the income of the companies.

For the variable level of services, question 13 had average answer of 9.01. We can suggest that the lower assortment exposed in bigger spaces reduces the time of search since it increases the visibility of the product. A good management of market must involve simultaneously the knowledge that the retailers have of their stores and about the public behavior; and at the same time, the knowledge of the producer, with updated information about the products, demand, share, distribution, and

preferences of the consumers. Question 16, also for the variable of the level of service, obtained average answer of 8.18. The answers showed a perception that the implementation of computerized management system for the analysis of the assortment would contribute for the financial development of the company to satisfy the client. This development will have as a base a better control of MC, by gaining of margin for the group of products. For the profits variable, the average answers were 7.27 and 7.92. The answers showed a perception that the greater the assortment, the greater is the client's satisfaction, as well as the lower the assortment, the bigger the space for the exhibition of each SKU. The perception of the interviewees helps the study of Broniarczyk and Hoyer (2006) on which big volumes of SKUs bring profitability and benefits for the retailer. Greater assortments increase the probability of the consumer to find the ideal SKU, as well as offer flexibility for the consumers wanting variety.

Finally, it is important to highlight the perception of the retailer regarding question 12 (If the consumer does not find the brand/product of choice he substitutes for the same brand, does he substitute for another brand, delay the purchase, or abandon the store?) shows that 63% of the clients substituted the brand, 31.5% would abandon the purchase, and 5.5% would delay the purchase, in case of not finding the wanted product. This result is in line with the research of Zinn and Liu (2001), Gruen et al. (2002) and Sloot et al. (2005).The result of this question shows that the costs of great assortments do not compensate the high level of service, since the majority of the clients substitute the brand, not at the sales point. This result directs AP as a bigger management worry for the retail producer. In practice, the results can help inventory management in companies that operate in this sector.

Final considerations and suggestion for future researches

This research evaluated the perception of the owners and managers of retail establishments regarding assortment planning of food products in the Market of South Brazil. The goal of the study was to investigate the level of knowledge and application of the theme to the daily work of the retailers, evaluate the relation among assortment, fidelity of the client, level of service and profitability of the

retailers.

The results of this research allow making interferences on the wrong knowledge of the interviewees about the theme, mainly for smaller stores. Generally, it was found that the professionals and managers evaluated the assortment planning as an important strategic tool and consider important the presence of a system of information. Despite recognizing the strategic importance of AP on the control of the unproductive variety, the retail of consumer goods, mainly the small retail, use for intuitive judgment the use of the analytic methodology.

Summarizing, the results show the need of a management model more strategic, focused on the consumer and seeking sustainable results in a long term. Despite this, the retailers recognize the importance of substituting the low cycle products and how much the assortments influence shelf space, the costs of storage, the level of service offered to the client, and the income of sales point. The interviewees recognize the need to achieve a balance among satisfied clients, ideal availability of products and brands, as well as a better relation among assortment, fidelity, level of service, and profitability. The owners and managers of retail establishments consider the consumers' intent to change the brand, but not when they do not find the wanted product, as demonstrated in the perception of the inter-viewees. AP is a strategic tool more important for the suppliers than the retailers. Finally, it is important to highlight the limitations of this field of study. This methodology allowed adequate reflection of the theme, but with a limited sample and the data are exclusively from the point of view of the interviewees. Although it presents limitations, this methodology has easy application and allows the collection of data easily. We suggest for future research, the investigation of the same subject but from the consumers point of view, as well as other segments of market and with the use of new analytic tools. Also, one can apply the questionnaire proposed here to other countries. This will enable comparisons of results and cross-culture studies, which aid in the advancement of knowledge on the subject, and can also help companies that operate in several countries in this sector.

Conflict of Interests

The authors have not declared any conflict of interests.

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