

How repetitive is a Brazilian consumer's consumption basket in a supermarket? How equal or different might this basket be?

By Igor
Corrêa
Pinto

Supermarkets

Supermarkets play a major role in modern society. Most people, from the richest to the poorest, make use of supermarkets. Studies show that the average British citizen will spend about two years of his/her life, which corresponds to three percent of the time spent awake, behind the doors of a supermarket (Cable and Wireless Research, 1999 quoted in Seth and Randal, 2001).

Furthermore, supermarkets have achieved amazing economic growth and thus have become extremely powerful within the marketplace (Aggarwal et al, 2000).

Nowadays, supermarkets not only provide shoppers with food and grocery, but also offer an enormous range of services, from financial services to dry cleaning (SuperHiper, 2000).

The variety of services offered by them is of crucial importance in the marketplace, for the consumer has less time to see to his/her needs, and is much more sophisticated and literate than ever before. Recent surveys in Europe have shown that nearly half of Europeans think they never have time to get things done (The Henley Centre, *Frontiers: Planning for Consumer Change in Europe*, 1999 quoted in Southern and Johnson, 1999).

Consumers are also currently much better off in their commercial relation with private companies. Nowadays, consumers have endless sources of information and knowledge because of the development of the Internet. Sometimes, consumers know more about the product that they are interested in than the company's sales staff.

On the other hand, own-label products have been rapidly gaining ground in the market, especially in the commodity category, such as frozen food, cold drinks, bread, cleaning products, etc. As an example of the power of supermarkets, own-label items accounted for over 55 percent of the British retail sector's total sales in 1998 (Market Assessment International, 2000).

Indeed, increasingly higher levels of concentration of the retail market by the large supermarket chains in most of the OECD countries (i.e. Organization for Economic Cooperation and Development), as well as in the developing countries have been recorded. For example, in the United Kingdom, the largest five supermarket chains hold a 74 percent-market share of their industry (Key Note, 2001), whereas in Brazil the same figure is considerably lower, but still significant. In Brazil the top five supermarket chains control over 40 percent of the country's supermarket industry (ABRAS, 2001).

The Research

After an initial literature review (Southern and Johnson, 1999), (ABRAS, 2001), and (Key Note, 2001), meetings with Mr. David Simons, my research supervisor at the Cardiff Business School, helped identify a potential area of consumer value as the main topic of this research.

The main research question identified during this process was:

- How repetitive is a Brazilian consumer's consumption basket in a supermarket? How equal or different might this basket be?

Answers to the question above will help us analyze how much a person's mind is made up concerning the brands he/she wants to buy when going to the supermarket.

This analysis will be crucial to predict the success of other models of grocery retail in the future, especially for the Brazilian market.

In order to provide a research basis for such analysis, a convenience sample of thirty Brazilian households was initially established.

The reasons why we chose Brazil to be the source of this sample are the following:

- Firstly, Brazil is a key market within the world grocery industry. The Institute of Grocery Distribution (IGD) has recently rated Brazil as one of the three key global battleground markets—alongside with Poland and Thailand—that will help to determine the global success of supermarket companies (Aggarwal et al, 2000). The Brazilian supermarket industry's total sales have been growing an average of 13.3 percent per annum from 1996 up to 2000. The industry's total turnover in 2000 was approximately 67.6 billion Brazilian *Reais*, which was the equivalent of 26.6 billion American Dollars (ACNielsen quoted in ABRAS, 2001).
- Secondly, because it was in Brazil I had the opportunity to gather the best conditions to organize the research, since the sample was at a great extent formed by people I already knew and were eager to collaborate, and this provided the framework for the convenience sample. Moreover, I also have a certain experience in the Brazilian supermarket industry.

In order to provide a solid basis for the research, upon which answers to the main question and the sub-questions will be built, we chose a reliable research method. This method consists of analyzing supermarket receipts, which corresponded to the purchases made by the elements of the sample. The receipts contained all the information needed to answer the research questions. Information such as date, time, and place of purchase, as well as the amount paid and the items bought with their respective barcodes were used. This latter piece of information was needed to build up the answers to the main research question.

To make this feasible, the Brazilian sample was asked to keep their supermarkets receipts during the months of May and June 2001. Only supermarket receipts were used in the research. Receipts from other rival channels, such as drugstores, convenience stores, butchers, bakeries, etc. were not included in the research.

Initially, forty-two households were contacted via telephone, e-mail, and mail. I personally contacted the people in these households asking them to take part in the research.

The objective of the research was not explained to these people in order to avoid the classical statistical response error, which is frequently associated with situations in which the elements observed try to influence the research results in a biased way (Silver, 1999).

Furthermore, it was made clear to them the importance of not changing their consumption habits during the period of the research. However, this fact does not invalidate any error that may have occurred, especially due to the Hawthorne effect on some of the households researched (Buchanan and Huczynski, 2001).

I previously knew most of the members of the households selected for the sample. They all spontaneously agreed to participate in the research, mainly driven by the will to help me. To maintain a good level of motivation a Hi-Fi Micro-System was offered as a prize at the end of the study. The prize would be given to one of the members of the sample, to be determined randomly by lottery, at the end of the research, in order to express my gratitude toward their contribution in collecting, keeping, and sending me their receipts.

Of forty-two households, thirty-six participated in the research, yielding an approximate 86 percent response rate.

However, six of these thirty-six household observations had to be discarded from the research due to some major problems, which would have biased the research results if these households were to be used in the study. These six households presented problems such as not having collected all or most of the receipts and also having sent the researcher unreadable supermarket receipts.

Therefore, the final number of thirty observations analyzed in the research was exactly the same as the minimum number of observations normally required, according to the

“Central Limit Theorem,” in order to use statistical large sample concepts and techniques (Silver, 1999).

The process of inserting the information contained in the receipts into an electronic database for consolidated analysis required an enormous amount of work. The researcher had to count on the help of two external assistants, a paid assistant, and a volunteer. This phase lasted almost three weeks.

To illustrate the effort the researcher and his two assistants dedicated to this stage of the research, a total of 669 supermarket receipts were analyzed, containing 12,481 data points and 5,431 products.

Conclusions

The research findings for the main research question showed that the Brazilian households from our convenience sample had a quite strong repetitive purchasing behavior when going shopping in supermarkets.

Our researched households showed an average repetitive purchasing of items of 50.3 percent when going shopping in supermarkets. This figure means that for every hundred items a consumer bought in supermarkets, these same items represented approximately only fifty different items.

Furthermore, our research findings also demonstrated that the more a consumer spends in supermarket purchases, the more repetitive his/her purchasing behavior tends to become, *ceteris paribus*.

Following relevant literature, the research findings, and an alternative grocery model, specifically applicable to the Brazilian grocery industry, is then proposed.

The alternative grocery model would target the direct sales of the regular repetitive items a consumer usually buys in supermarkets, the items that he/she knows he/she is going to purchase even before going to a supermarket outlet.

However, the complete development of the model was not the objective of this dissertation, but the task of future research in which I would be eager to participate.

The issues concerning the supermarket industry in a worldwide basis, especially the rise of supermarket chains and of the sophisticated consumer, and the development of the Internet, along with the research findings, provided the reason why this alternative grocery model was proposed.

The alternative grocery model would not replace supermarket operations, but it would be a rival and a potential threat to them.

I truly believe there is a potential market for the suggested model. We have seen that although there are not enough research findings that might provide conclusive evidence that society is better off—or not—served by large supermarket chains, the entire grocery supply chain—manufacturers, wholesalers, etc.—proves to be unhappy with this power concentration supermarkets have achieved in today’s society (Piercy, 1997 and 1999) and (Kotler and Armstrong, 2001).

Moreover, consumers—especially the ones with the higher education and income levels—are starting to shop online (Key Note, 2001). This is part of the “consumer sophistication” trend consumers are going through (Piercy, 1997 and 1999).

Consumers are also thinking that they never have time to get things done, and are now giving more value to their scarce non-working time than they have ever done before (Southern and Johnson, 1999).

Furthermore, the research findings have shown that Brazilian households have a strong repetitive purchasing behavior in supermarkets, and that the greater the household supermarket spending, the stronger the repetitive purchasing behavior.

Moreover, I believe that if similar research were carried out in other countries, the repetitive supermarket purchasing behavior would not be very different to the one observed in this study.

I believe that all the evidence outlined above strongly support the model proposed. However, my idea—just as any other that challenges the current industry order—will probably be subject to much criticism until more detailed evidence is available.

Some people will probably say that similar models have already been tested and failed to a large extent, particularly in the United States (Marketing Week, 2001).

Others might say that a model such as the one proposed, which seeks to manage a household’s regular grocery consumption, is a piece of science fiction and is, for that reason, bound to fail.

I would simply respond to these people by saying that the stand-alone grocery companies’ failures observed, especially in the United States, do not automatically apply to other cases, such as the Brazilian one. I believe that the Brazilian scenario is ready for this model, with its critical Internet mass and consumers with strong repetitive behavior. Moreover, we also have learned much from the initial stand-alone failures in the United States, and thus should not make the same mistakes these initial players did in that country.

In conclusion, if the traditional grocery model dominated by the large supermarket chains the world knows and makes use of today were to be presented to the grocers of the 1850s, these grocers would probably have laughed at it and said it was also a piece of science fiction.

About this article

This paper is drawn from Igor Corrêa Pinto's dissertation, submitted as partial fulfillment of the requirements for the MBA degree at Cardiff Business School.