

**DO STORE BRANDS  
INFLUENCE ACCEPTANCE OF NEW PRODUCTS?**

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### **Abstract**

This paper analyzes the factors influencing consumer acceptance of new products by focusing on the analysis of new store brand products launched by the retailer under distributor brand name.

The aim of the research is to better understand whether store brands represent any barrier to consumer acceptance of new products and whether households buying store brands behave differently towards new product acceptance than those that are not store brand buyers.

We have found a positive effect of store brands on consumer acceptance of new products, and in terms of consumer behavior we have also found a positive effect of households loyal to store brands on consumer acceptance of new products.

**Keywords:** *Innovation, new product, store brand, consumer acceptance, loyalty*

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## **Introduction**

Innovation strategies based on launching new products are frequently adopted by consumer packaged goods companies (CPG) to deliver new value to consumers and also to fight store brands as these have been continuously eroding manufacturer's market share in the last few years (Kumar & Steenkamp, 2007). However, academic research on the effectiveness of this innovation strategy to fight store brands is scarce.

In fact Top Fortune CPG companies in Food, Beverages, Personal Care and House Care have declared in their annual reports their commitment to innovation and R&D to launch new products <sup>1</sup>. Thus, the introduction of new products has become one of the most important strategic practices for CPG companies to compete in the market place. However few are successful (Goldenberg, Lehmann, & Mazursky, 2001).

Store brands are continuously reaching share from manufacturer brands. One factor that explains this situation is the improvement on the consumer perception of store brands (Ipsos Mori, 2006) leading to a change on the consumer behavior towards traditional manufacturer brands.

Globally, store brands have already achieved 20% share and between 25 and 50 % share in most of the European markets (M+M Planet Retail, 2004 ; Nielsen Research, 2005; PLMA, 2006). Then, we consider that improve our understanding on factors influencing consumer acceptance of new products, specially in the context of store brands, will be of great relevance for the academic community and for the industry.

Consumer acceptance of new products has been studied from multiple perspectives. Recent empirical findings (Gielens & Steenkamp, 2007) indicate that first year consumer acceptance of new products doesn't significantly differ across 40 different categories and across four European countries. This paper studies the factors which influence consumer acceptance of new products by focusing on the analysis of new store brand products launched by retailers, as we consider this analysis will contribute to a better understanding of current market dynamics.

## **Theoretical Background and Hypotheses**

The success of an innovation strategy could be measured from the consumer's point of view through the consumer acceptance of the new products launched. Concerning the measuring of consumer acceptance, the first six months or first year after the product has been launched seems to be a critical period of time (AC Nielsen, 2001).

However, the measurement and meaning of product acceptance have adopted different perspectives in the literature. Thus, some studies have focused on the first purchase ignoring subsequent purchases and thus limiting insights (Chandrashekar & Sinha, 1995), while

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<sup>1</sup> See Procter & Gamble, Kimberly Clark, Colgate, Pepsico, Coca Cola, Kraft Foods, General Mills, Kellogg's ConAgra Foods annual reports.

others have focused on analyzing the purchase level and purchase trend (Gielens & Steenkamp, 2007).

This study has adopted this last approach because it allows a better understanding of the influence of different factors in the different consumer stages of the new products adoption process.

To develop our hypothesis we have considered factors traditionally used by the literature on consumer acceptance of new products such as: consumer demographics, product characteristics and competitive environment. However, to the best of our knowledge, we are the first to also add some new factors related to store brands.

Regarding consumer demographic variables that affect new product acceptance, the literature asserts a positive effect of younger targets, more affluent and more expert households as more prone to buy new products (Assael, 1970; Helsen, Jedidi, & DeSarbo, 1993; Jan-Benedict E, 2002; Rogers, 2003; Seetharaman & Chintagunta, 1998).

Variables of product characteristics such as brand reputation, brand power measured as market share and brand advertising investment, among others, have a positive influence in consumer acceptance (Choi, 1998; Gielens & Steenkamp, 2007). However the innovation degree of the product has a negative effect on consumer acceptance as the consumer risk perception and aversion to buy increase (Gatignon & Xuereb, 1997; Rogers, 2003; Wilson & Lypczynski, 2001). Concerning market dynamics market concentration tends to have a negative influence (Wilson & Lypczynski, 2001).

A priori, no insights exists on the impact of new store brands on consumer acceptance as the previous literature has not analyzed this .

Various studies (González Mieres, Díaz Martín, & Trespalacios Gutiérrez, 2006; Richardson & Jain, 1996) have shown that the perceived risk associated with buying a store brand product is significantly higher than that of buying a manufacturer brand alternative. As new products usually mean higher uncertainty and risk (Rogers, 2003) a store brand could have a negative impact on consumer acceptance of new products. On the other hand, if consumers are familiarized with store brands there exists a higher probability of store brand purchase (Alan, Jain, & Richardson, 1995). Thus, the familiarity with the store brand ,linked to the positive increase in consumer perception of the quality of store brands along with the price advantage provided by store brands, could offset the former argument. Therefore, this reasoning also supports the fact that innovation coming from store brands will have a positive effect on consumer acceptance of new products.

Regarding households behavior, for households with more purchase experience of store brands (loyal or frequent store brand buyers), to buy new products will mean an effort and lower utility than for the rest of households because store brands buyers will have to trade off current pricing utilities of the store brands they buy for new product proposals usually premium. Thus, the proposed hypothesis is that “loyal” and “frequent” store brand buyers will have a negative effect on consumer acceptance of new products.

## Method

### 3.1 Sample Description and Measures

We have used scanner panel data on household purchases in three product categories: powder detergent, cereals and juice drinks. The panel data has been supplied by ACNielsen Spain. This data set consists of a representative sample of households across Spain, rather than households in specific cities. Household purchase activities have been recorded from January 2006 to December 2006 on a daily basis.

We have tracked 2,891 households, accounting for 137.252 purchases in the year. We have defined a new product as a product sold in 2006 (not sold in 2005, that is not a promotional one). 60 new products were launched during 2006, 34% were store brands that accounted for 39% of the total amount of new product purchase occasions. In our empirical study we have only included 48 new products, those with enough number of observations, at least more than 6 months after the launch.

In total 246 households bought new products in these categories during 2006 in 3,669 purchase occasions. 39% of these households were “loyal” to store brands (defined as buying store brands in more than 50% of their purchase occasions) and 20% were defined as “frequent” store brand buyers (buy store brands between 20% and 50% of the household purchase occasions), while 17,5% bought a store brand less than 20% but at least once during their purchase occasions throughout the year .

According to this classification the level of penetration of new products depending on whether the new product belongs to a manufacturer brand or to a store brand is quite different. While 74% of new store brand products were bought by loyal store brand households, only 21% of new manufacturer brand products were bought by these households.

As previously mentioned we have used two metrics of acceptance of new products at the individual household level: the first year level of purchases and the first year trend of purchases. Socio-demographics, product and category variables, as well as purchasing behavior variables have been included as explanatory variables of these two metrics.

As socio-demographics we have included the household age. The age has been measured with three dummy variables indicating households below 35 years old, between 35 and 45, and above 45. The social class also is measured with three dummy variables indicating households belonging to Upper class, Medium class or Low. Size is a count variable ranging from 1 to 5 that represents the size of the household, where value 5 identifies households with five or more members. We have identified households loyal to store brand with a dummy that indicates whether it is loyal (*SBloyal*) and we have also included a dummy variable that identifies frequent store brand buyers (*SBfreq*).

The variables of product characteristics include: brand reputation (*rep*), this variable is measured as rating from 1 to 3 of market experts (Choi, 1998); brand share (*share*), brand advertising investment (*advbrand*), measured as share of the category advertising investment in euros; innovation degree (*innodegree*) measured as rating from 1 to 5 of market experts (Henard & Szymanski, 2001). Concerning market dynamics we have considered market

concentration (*concen*) measured as top three brand share in each category (Wilson & Lypczynski, 2001).

### 3.2. Method

In order to assess the impact of the explanatory variables on consumer first year new product acceptance we have specified a multi level Poisson regression model (Gielens & Steenkamp, 2007) in which variables have been aggregated in three levels in what can be called a hierarchical model (Raudenbush & Bryk, 2002).

The first level will show individual (household) purchase patterns of new products bought as a function of time (trimester). The second level represents the variation on purchase level and trend level among households as a function of household characteristics, and the third level captures the variation of these parameters as a function of the new product characteristics and market dynamics.

By substituting the variables explained before in each level we will obtain the total equation.

$$\lambda_{tij} = \Pi_{0ij} + \Pi_{1ij} \text{Time}_{tij} \text{ where } t=\text{trim, } i=\text{households, } j=\text{products, } \lambda_{tij} = \log(\text{purchases}_{tij})$$

$$\Pi_{0ij} = \beta_{00j} + \beta_{01j} \text{size} + \beta_{02j} \text{age}_1 + \beta_{03j} \text{class}_1 + \beta_{04j} \text{age}_2 + \beta_{05j} \text{class}_2 + \beta_{06j} \text{SBloyal} + \beta_{07j} \text{SBfreq} + \varepsilon_{0ij}$$

$$\Pi_{1ij} = \beta_{10j} + \beta_{11j} \text{size} + \beta_{12j} \text{age}_1 + \beta_{13j} \text{class}_1 + \beta_{14j} \text{age}_2 + \beta_{15j} \text{class}_2 + \beta_{16j} \text{SBloyal} + \beta_{17j} \text{SBfreq}$$

$$\beta_{00j} = \gamma_{000} + \gamma_{001} \text{innodegree} + \gamma_{002} \text{rep} + \gamma_{003} \text{share} + \gamma_{004} \text{concen} + \gamma_{005} \text{advbrand} + \text{SB} + u_{00i}$$

$$\beta_{10j} = \gamma_{100} + \gamma_{101} \text{innodegree} + \gamma_{102} \text{rep} + \gamma_{103} \text{share} + \gamma_{104} \text{concen} + \gamma_{105} \text{advbrand} + \text{SB}$$

## Results

First, we have estimated the unconditional (dependent only on time) model to compute the model fit and to know the % of variance explained by our variables in each level in the proposed model as we have introduced them one by one.

With all the variables included and after checking for multi-collinearity the model fits and the results are reported in table 1 below.

Table 1. Estimation results

	Purchase level	Purchase Trend	Hypothesized effect	Results
<b><i>Product/category variables</i></b>				
Market Share	3,5631 ***	4,1804***	+	<b>Accepted</b>
Innovation degree	-0,3341***	-0,1978**	-	<b>Accepted</b>
Concentration	-1,2634**	-1,4802***	-	<b>Accepted</b>
Store brand (SB)	0,3618*	0,3560**	+	<b>Accepted(+)</b>
Brand Advertising investment	-0,2213	-0,2905	+	<b>Not validated</b>
Brand Reputation	0,0632	-0,0169	+	<b>Not validated</b>
<b><i>Household variables</i></b>				
Loyal to SB	0,4246**	0,4260***	-	<b>Rejected</b>
Frequent buyer of SB	-0,3417**	-0,2363	-	<b>Accepted(p)</b>
Age	-0,7470***	-0,5722***	-	<b>Accepted</b>
Class	0,3398*	0,2896*	+	<b>Accepted *</b>
Size	-0,0150	-0,0368	+	<b>Not validated</b>

\* p value < 0,1    \*\* p value < 0,05    \*\*\* p value < 0,01    (p) partially validated

We can see that previous hypothesis (related with age, class, share, innovation degree and market concentration) analyzed in previous researches (Gielens & Steenkamp, 2007) have been validated in this broader context including store brands. Moreover, new insights have appeared. We find the positive effect that store brands have on consumer acceptance of new products specially in the purchase trend, to be very meaningful.

Interestingly, our hypothesis concerning the influence of households store brand experience on consumer acceptance of new products shows mixed results. Households loyal to store brands show a positive effect on consumer acceptance of new product, rejecting our initial hypothesis. However, frequent store brand households show a negative effect in the purchase level leading to accept our initial hypothesis in this level.

### **Discussion and Limitations**

The purpose of this paper is to increase our understanding of the factors that affect consumer acceptance of new products and we have focused on how store brands influence it. We have investigated and tested our hypothesis in 246 Spanish households and 48 new product launches where around half of them are store brands.

In general we have found acceptance of our hypothesis and also we have also found an interesting perspective to better understand store brand and innovation dynamics.

The innovation strategy of launching new products has been a traditional way for manufacturers to compete or differentiate from store brands. However, in recent years and in many countries, retailers have also been adopting a strategy of innovation through new products as a way of differentiation versus their competitors and to add value to their customers .

Our results are not very optimistic about the effect that current manufacturer innovation strategy is delivering on the fight with store brands. In fact in the analyzed categories new store brand products have a positive effect in consumer acceptance. One explanation to these results could be the high store brand market share on the three categories studied. The three categories have a total store brand share between 30% and 55% which makes consumer quite familiar and confident with store brands and less risk averse to try new store brand products as we hypothesized. The finding shows that not only the purchase level but also the trend of purchases of new store brand products has a positive effect on consumer acceptance. This result suggests a quality improvement of store brand and a significant level of household satisfaction with store brand purchases.

This idea is also supported by the fact that households loyal to store brands have a positive effect on consumer acceptance of new products probably because half of the new product launches in the considered markets are store brands.

The findings have led to some interesting interpretations and implications. The innovation strategy to fight store brands seems to be inefficient at least in the categories where store brands are already dominant. Where they have achieved consumer familiarity, and have the ability to copy the new manufacturer products in less than six months or one year, period that seems critical to engage consumer acceptance. This also suggests that launching new products may not be a way of differentiation for manufacturer brands anymore.

This situation is not easy to sort out, as delivering new products with a high innovation degree poses some risks for the consumer decision process leading to negatively influence consumer acceptance. This has led us to think that the current strategy of innovation launching of new products in CPG needs to be reconsidered by manufacturers.

Interestingly, strong brands with high share seem to be a positive factor influencing consumer acceptance of new products. This result endorse the strategic shift of leading companies like Unilever and Procter & Gamble which bet on mega brands to more efficiently compete in the market place.

This study is not exempt from limitations which leaves avenues for future research. The study has been developed in only one country. Thus, in order to generalize the results, a broader study that considers more countries and contexts will be of interest. Though recent research on consumer acceptance has not found any differences regarding factors influencing some European countries, we could deduce that the findings could be extrapolated to countries with similar levels of store brand penetration. However we expect different results in countries where consumer perception and share of store brands are different.

Future research could also further refine the measurement of some constructs and increase the power of analysis by using monthly data and extending the period of observations. In addition our framework could further be enriched by using a broader number of categories that would allow new explanatory variables to analyze category differences.



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