

---

# A Study of Impact of Sales Promotions on Brand Switching and Stock Piling Behavior of Consumers for Electronics & Apparels Industry

*Prerna Garg\**, *Amardeep Kaur\*\**

## **Abstract**

*Sales is the only function that brings revenue to a firm. Sales Promotions is a frequently used tool by companies to bring an immediate increase in sales revenues. This tool has been a subject of various marketing studies. Most of these focus on learning its short term and long term effects on the consumer behavior. This study is also a step in the same direction. The paper aims at analyzing the effectiveness of this action and is focused on marketing strategy to influence the consumer behavior and its impact on their Brand Switching and Stock Piling Behavior with special reference to Apparels and Electronics industry. The underlying objective is to study the sales response of the consumer to the temporary price reduction. Primary data were collected using a self-designed standardized questionnaire. Data were analyzed using statistical tools of correlation coefficient as well as regression methods to test hypotheses with levels of significance. The key findings of the research on sales promotion are that Brand Switching is low for apparels and high for electronics while the Stock Piling Behavior was observed to be strong for apparels and negligibly low for electronics.*

**Key words:** *Sales Promotions, marketing strategy, Brand Switching , Stock Piling*

## **Introduction**

Sales Promotions forms a significant part of marketing budgets of companies dealing in Consumer goods. Electronics and Apparels industry regularly use sales promotions to have direct impact on the purchase behavior and stimulate sales in the retail arena. Monetary Sales Promotions like Discounts, bonus pack deals, refunds or rebates and coupons are frequently introduced in both industries to boost sales especially in festive seasons and lean period. Studying the utility of proactive strategy and its impact on consumer behavior is the main subject of this research. This research attempts to assess the short term influence on the consumer behavior and develop a heuristic concept on how it affects Brand Loyalty of customers'

Brand Switching behavior and whether or not it induces their stock piling behavior.

The Consumer durables market in India was estimated to be around US\$ 5 billion in 2007-08 and is expected to grow around 14 % annually. The Consumer durables market is divided into two segments –

**\*Ms. Prerna Garg**  
*Assistant Professor,  
Gitarattan International Business School,*

**\*\*Ms. Amardeep Kaur**  
*Assistant Professor,  
Gitarattan International Business School,  
Madhvan Chowk, Sector-14 Rohini, N.D.-85*

---

consumer electronics, also known as brown goods (television, digital camera, audio-video systems, computers, electronic accessories, etc) and consumer appliances or white goods (air conditioners, refrigerators, microwave ovens, other household appliances, etc). The industry is represented by major international and local players such as LG, Samsung, BPL, Hitachi, Videocon, Voltas, Blue Star, MIRC Electronics, Titan and Whirlpool.

The Indian Apparel Industry has an overwhelming presence in the daily life of people. The Apparel and Textile industry is India's second largest industry after IT Industry. At present, it is amongst the fastest growing industry segment and is also the second largest foreign exchange earner for the country. The apparel industry accounts for 26% of all Indian exports. The Industry is traditionally controlled by players like Madura Fashions, Arvind Mills, Aditya Birla Group, Raymond Apparels and ITC Wills. However, with the liberation of FDI policy, foreign players are entering Indian markets too.

Apparels and Electronics industry are similar in terms of consumer behavior in the sense that both are price sensitive industries. Thus, hypothetically, price incentives must induce the customer to purchase more and reduce repurchase cycles. Under such circumstances Brand Loyalist may also be tempted to switch their regular brand and substitute it with a brand running on sales promotions.

However, the two industries viz. Apparels and Electronics differ in the sense that the former are Non-durables or soft goods and the latter is a collection of durable items or hard goods. Thus, the consumer involvement during the pre-purchase stage is different in these two product categories. Thus, the effect of sales promotion must also differ for the two cases. This research endeavors to test these concepts on the basis of empirical analysis and draw a comparative conclusion of short and long term effects of price manipulation for sales promotion in the two selected industries.

## Literature Review

The sales promotion technique is an important tool in creating loyalty because sales promotion does not only bring the product to the perception of the buyer but

provides incentives to encourage purchase. The impact of sales promotion on the consumer behavior reveals mixed results. For example, Lau, Chang, Moon and Liu (2006) study showed that sales promotion was an important factor to differentiate hardcore loyal consumers from brand switchers and that the sales promotion was the most important factor to attract brand switchers. However, a gap that is yet to be fully explored is the comparison of the effects of promotion on the loyal consumer and the non-loyal consumers (switchers).

Effects of sales promotion on the consumer behavior have been widely studied in literature (Nagar, 2009). Sales promotion has effects on various aspects of consumer's purchase decisions such as brand choice, purchase time, quantity and brand switching (Nijs, Dekimpe, Steenkamps and Hanssens, 2001) and consumers' sensitivity to the price (Bridges, Briesch and Yim, 2006).

Many studies have focused on the effects of sales promotion on brand switching, purchase quantity and stockpiling and have documented that the promotion makes consumers switch brands and purchase earlier or more. The consumer's consumption decision has long been ignored and it remains unclear how promotion affects consumption (Blattberg et al. 1995). Conventional choice models cannot be used to address this issue because many of these models assume constant consumption rates over time (usually defined as the total purchases over the entire sample periods divided by the number of time periods). While this assumption can be appropriate for some product categories such as detergent and diapers, it might not hold for many other product categories, such as packaged tuna, candy, orange juice or yogurt. For these categories, promotion can actually stimulate consumption in addition to causing brand switching and stockpiling. Thus, for product categories with a varying consumption rate, it is critical to recognize the responsiveness of consumption to the promotional activity in order to measure the effectiveness of the promotion on sales more precisely.

Researchers studying the brand choice decision-for example, Guadagni and Little (1983) and Gupta (1988)- have found promotions to be associated with brand switching. Montgomery (1971), Schneider and Currim

---

(1990), and Webster (1965) found that the promotion-prone households were associated with the lower level of brand loyalty.

So, this research aims at undertaking the impact of Sales promotion on 2 essential variables i.e. Brand switching & Stock Piling in relation to the consumer purchase behavior towards apparel & electronics.

### **Brand switching**

Gupta (1988) in his study, to decompose promotional responses, found that the main response to a promotional policy was brand switching accounting for 84% of the change in the volume sold. Brand switching in this context refers to the situation that a consumer buys the promoted brand whereas he/she would usually buy a different brand. The study interpreted that if a brand gains 100 units during a promotion and 74% of the sales elasticity is attributed to brand switching; other brands in the category are estimated to lose 74 units. Other studies have found similar results (i.e. Chiang, 1991; Bell et al., 1999). However, a more recent study by van VanHeerde et al. (2003) re-evaluated the dataset of Gupta (1988) with a different measure. They transformed the elasticity into unit sales and found that only 33% of the volume change during a promotion was due to brand switching. Nonetheless, brand switching is a major driver behind the sales increase during a promotion, meaning that under promotion, users of other brands start buying the promoted brand. Assuming that brand switchers return to their main brand as soon as the promotion finishes, brand switching could not cause the post-promotion dip, as sales would simply return to their average level.

### **Stockpiling**

Next, a promotion can also induce stockpiling, meaning that consumers will purchase more than their usual quantity (Neslin, 2002). This effect is also known as promotion induced stockpiling. The positive or negative effect on the manufacturer depends on what

consumers would do after the promotion (Ailawadi et. al., 2007). One result from stockpiling could be that consumers purchase less in the future at the regular price. Chan et. al. (2008) showed that the response to a promotion of brand-loyal consumers consists mainly of stockpiling for future consumption. This could be a point of concern because the loyal consumers of the promoted brand are stocking at the discount price whereas they would have bought the product at the regular price as well. Thus, it might be possible that the overall gain of the promotion is negative. Chan et. al. also found that brand switchers do not stockpile at all and hence, brand switchers would increase sales during the period of promotion. Loyal consumers, however, would purchase more than their average purchase quantity and with this they would delay their next purchase moment.

### **Objective of the Study**

- 1) To gain an analytical insight of how the consumer purchases behavior is affected by sales promotions used as a sales booster strategy by marketers.
- 2) To study the impact of sales promotions on Brand Switching, stock piling and the customer loyalty etc.
- 3) To draw comparative deductions of the effect of promotional strategies on the Consumer Purchase Behavior in the Electronics & Apparels sector

### **Research Methodology**

The focus of the study is limited to the study of the consumer behavior in terms of Brand Switching and stock piling behavior as affected by the sales promotions. The study is focused on the electronics and apparels sector. The population under study comprises of customers residing in Delhi/NCR. A Sample of 100 respondents was drawn from the population for data collection and analysis to generalize results for the entire population.

<b>Research Framework</b>	
<b>Research Design</b>	Empirical Research Design
<b>Sampling Unit</b>	Customers residing in Delhi/NCR
<b>Sample Size</b>	100
<b>Sampling Technique</b>	Convenience
<b>Project Approach</b>	Survey method
<b>Instrument Used</b>	Self designed Standardized questionnaire comprising of 26 items. Validity tested by independent judgment of experts. Reliability Statistics tested via Cronbach's alpha ( $\alpha=0.968$ )
<b>Statistical Tool Used</b>	Correlation and Regression

**Table 1 : Research Methodology Framework**

### Variables under Study

A sales promotion is taken as the independent variable and Brand Switching Behavior and Stock Piling Behavior are dependent variables. The intervening variables like consumers' mood, in-store factors, situation and circumstances, and others' opinions are held constant.

H1: Sales Promotion does not have significant impact on Brand Switching Behavior for Electronics.

H2: Sales Promotion does not have significant impact on Brand Switching Behavior for Apparels.

H3: Sales Promotion does not have significant impact on Stockpiling Behavior for Electronics.

H4: Sales Promotion does not have significant impact on Stockpiling Behavior for Apparels.

### Hypothesis of Study

#### Demographic Profile of Respondents

Demographic Variable		Frequency of Respondents	Percentage of Respondents
Gender	Male	60	60%
	Female	40	40%
Age	21-30 years	86	86%
	31-40 years	11	11%
	41-50years	3	3%

<b>Location</b>	North	28	28%
	West	32	32%
	East	22	22%
	South	18	18%
<b>Occupation</b>	Service	11	11%
	Business	15	15%
	Student	60	60%
	Others	14	14%

**Table No. 2 –Representing Demographic Profile of Respondents**

### Data Analysis and Results

H01: Sales Promotion has significant impact on Brand Switching Behavior for Electronics.

#### 1. Relationship between Sales Promotion and Brand Switching Behavior

H02: Sales Promotion has significant impact on Brand Switching Behavior for Apparels.

### Model Summary

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin Watson
					R Square Change	F Change	df 1	df 2	Sig. Change	
Electronics	.695	.483	.478	3.286	.483	91.737	1	98	.000	2.091
Apparels	.062	.004	-.006	2.776	.004	.382	1	98	.538	1.960

**Table No 3 Representing Regression Analysis between Sales Promotion and Brand Switching Behavior**

Table 3 represents a strong correlation ( $r = 0.695$ ) between the variables under study for electronic products, However, the relationship of association is weak for apparels where the value of correlation variable is merely 0.062.

Sales Promotion has a high impact of around 48% on Brand Switching Behavior of Customers. Thus the sales promotion of electronic products make customers switch from their usual or loyal brands to competitor's offering available on promotional offers. For apparels on the other hand, Sales promotions do not seem to impact Brand Switching Behavior of customers. Customers remain rather more loyal to their existing Brands and there exists a low tendency to switch to competitor. The value of  $r^2$  being only 0.004, it can be safely assumed that in the case of apparels - Sales Promotions do not have any significant impact on Brand Switching Behavior of customers.

Now since p value obtained for H01 is less than 5%, the null hypothesis is rejected and the alternate hypothesis is accepted. And it is verified that Sales Promotion do have a significant impact on Brand Switching Behavior for Electronics.

However, null H02 is accepted since the p value is more than 5%. Thus, sales Promotion has a significant impact on Brand Switching Behavior for Apparels.

## 2. Relationship between Sales Promotion and Stockpiling Behavior

H03: Sales Promotion has significant impact on Stockpiling Behavior for Electronics.

H04: Sales Promotion has significant impact on Stockpiling Behavior for Apparels.

### Model Summary

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin Watson
					R Square Change	F Change	df 1	df 2	Sig. Change	
Electronics	.324	.105	.096	2.116	.105	11.48	1	98	.001	2.075
Apparels	.671	.450	.445	2.776	.450	80.235	1	98	0.00	1.943

Table No-4 Representing Regression Analysis between Sales Promotion and Stock Piling Behavior

---

Stock Piling behavior of consumers is highly correlated with promotional strategies employed in Apparels industry as depicted by Table 4. The two variables are positively correlated, the value of correlation coefficient being 0.671. Also the value of R square for the two variables is 0.450.

A diversion in behavior of variables is observed in electronics sector where the variables are weekly correlated with each other and the impact of sales promotion on stock piling behavior of customers is extremely low. The value of Correlation coefficient here is 0.324 and that of R Square is only 0.105. It can be established that Sales Promotion does not impact enough the volume of purchase in Electronic products. Sales Promotion thus is not particularly effective in pushing electronics purchases among consumers and thus consumers don't tend to pile up stock for future use.

The p value obtained for H03 is less than 5% level of significant the Hypothesis is thus accepted. It is hence established that Sales Promotion does not have a significant impact on Stockpiling Behavior for Electronics.

H04 is also disproved since the p value (= 0.000) obtained from regression table is less than (0.05). Thus Sales Promotions do have a significant impact on Stockpiling Behavior for Apparels.

### Findings / Results of the Study

1. Sales Promotion is certainly an effective short-term strategy for increasing sales volume. However, this tool provide varying results in different sectors. Electronics being durables have a longer shelf life. Customer involvement level is generally high since these are comparatively higher in customer investment value. It has a positive effect on Brand switching.
2. The research explored that sales promotion have a significant impact on Brand Switching for electronic products while the impact is negligible for apparels. In electronics, the products are high on functional utility. Consumers do not mind switching their usual brand if they are offered better prices/ offers with same or similar functional value. On the other hand, consumer tends to be more quality and Brand conscious for apparels and hence reluctant to switch Brands.
3. Sales promotions are employed to induce impulsive buying among consumers. Consumers are tempted to stock products for future use during promotional period. Therefore, in the case of apparels sales, promotions have a significant impact on stock Piling. Consumers being price sensitive and high on Brand Consciousness chose to purchase more during promotional cycles and stock for future purposes. However, this relationship does not hold true for all kind of apparels especially fad products and other seasonal or cyclical products.
4. In case of Electronics, the impact of Sales Promotion on Stock Piling is comparatively less significant owing to the fact that electronics invite higher investments from consumers. This generally makes the consumers reluctant to purchase products ahead of time. However certain small electronic items like headphones, Bluetooth devices, pen drives, memory cards, CDs etc may be a subject of stock piling by consumers.
5. Technological advances and frequent launch of new products also make consumers unenthusiastic to stock electronic items.
6. Sales promotions can be used as an effective strategy by marketers in electronics industry to tempt competitor's customers and make them undergo trial purchase since the Brand Switching behavior of customers is widely impacted by sales promotions. However, this strategy cannot be employed to generate shorter purchase cycles by inducing stock piling.
7. Immediate sales and shorter purchase cycles can be achieved by marketers in apparels sector since consumers follow a low involvement purchase behavior. However, this strategy cannot be used effectively for making Competitors' loyal customers to switch brands.



---

## Recommendations

1. Temporary Price reductions may prove useful to acquire new customers. However, in the long term the cost- benefit ratio of marketers may not remain profitable. Hence, sales promotions should be employed by marketers for short intervals over long time cycles.
2. In the electronics industry where Brand Switching is higher and customers aren't shy to choose a different brand for reduced price, marketers should always try to stay in the league of promotional strategies followed by competitors and to prevent customer erosion. They should initiate some special loyalty schemes for existing customers.
3. Apparel marketers can certainly affect purchase patterns of customers. The results of the study prove price reductions as an effective tool of increasing stock piling and there is a negligible effect on Brand Switching. However, excessive sales promotions may erode Brand Equity. Marketers need to use this strategy in a precautionous manner to strike a balance between its immediate and long term effects.

## Scope for Futher Study

The present research is limited to the study of purchasing patterns of customers in terms of Brand Switching Behavior and Stock Piling Behavior as affected by the sales promotion. The study focused on the electronics and apparels sector only. Geographically, the study is confined to Delhi/NCR.

Further research can be introduced in other sectors and results can be measured for various other variables of sales promotion affecting purchase patterns. Research can also be done spanning a wider geographical area and results can be bifurcated in smaller strata for each demographic group.

## References

- Alvarez, B. A., and Casielles, R. V. (2005). Consumer evaluation of sales promotion: the effect on brand choice. *European Journal of Marketing*, 39.
- Blattberg, R., Briesch, R., Fox, E., 1995. How promotions works. *Marketing Science*.
- Bridges, Eileen, Richard Briesch and Chi Kin (Bennett) Yim (2006), "Effects of Prior Usage and Promotion on Consumer Promotional Response," *Journal of Retailing*.
- Dodson, Joe A., Alice M- Tyboul, and Brian Stemthal (1978), "Impact of Deals and Deal Retraction on Brand Switching," *Journal of Marketing Research*.
- Gupta, S. (1988), "Impact of Sales Promotions on When, What, and How Much to Buy," *Journal of Marketing Research*.
- Mela, Carl F., KamelJedidi, and Douglas Bowman (1998), "The Long-Term Impact of Promotions on Consumer Stockpiling Behavior," *Journal of Marketing Research*.
- Meyer, Robert J. and JooAssunqo (1990), "The Optimality of Consumer Stockpiling Strategies," *Marketing Science*.
- Nijs, V., Dekimpe, M.G.,Steenkamp, J.E.B.M., &Hanssens, D.M. (2001). The category-demand effects of price promotions. *Marketing Science*, 20(1).
- Pauwels, K., Hanssens, D. M., &Siddarth, S. (2002). The Long Term Effects of Price Promotions on Category Incidence, Brand Choice and Purchase Quantity; *Journal of Marketing*.
- Quester, P. and Lim, A. L. (2003). Product involvement/ brand loyalty: Is there a link? *Journal of Product & Brand Management*.
- Srini S., Srinivasan, S. S., and Anderson, R. E. (2000). Concepts and strategy guidelines for designing value enhancing sales promotions; *Journal of Product & Brand Management*.
- Van Heerde, Harald J., Sachin Gupta, and Dick R. Wittink (2003), "Is 75% of the Sales Promotion Bump Due to Brand Switching? No, Only 33% Is," *Journal of Marketing Research*.