



Design and Formulation of Shopper Solution Engineering Model to Increase Purchase Decisions at the Point of Purchase, in ETKA Chain Stores: A Case Study of Shahid Chamran Branch in Tehran

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Abstract

Marketers have focused on this question that “how can increase purchase decision at the point of purchase and convert shoppers to buyers”. The answer is “by shopper solution engineering”. In other words, retailers and manufacturers should rigorously understand shopper trade-offs and propose an innovative solution to reduce shopper cost and increase shopper benefit. These trade-offs are store inputs and outputs. This approach converts passive trip to delightful shopping experience. Brand new solutions and their metrics, which have been used in the retail world by pioneer stores, were introduced in this study. After precise field research, current situation of the main branch of ETKA chain stores (Shahid Chamran) in the key metrics was tested. The suggested shopper solutions incorporated layered merchandising, serpentine path design, bundling, shopper choice reduction and multi-sensory retailing. Additionally, the proposed metrics were Shopper Purchase Decision Made In-Store (SPDMIS), Double Conversion, Satisfaction rate and Net Promoter Score (NPS). The research method was exploratory-evaluation. Furthermore, observation and interview were the collecting data instruments for measurement of the metrics. 250 shoppers were measured as sample in each metrics. This study found that 75.3 % of current Shopper decisions in ETKA store in three primary categories are made in the store. It reveals that what goes on inside the store, including how the store is designed and what selection is offered and where, has a tremendous impact on sales.

Keywords: Shopper marketing, shopper solution engineering, layered merchandising, serpentine path design, SPDMIS, double conversion, NPS.

Introduction

The marketing world is in the midst of unprecedented changes that shatter the core of the entire traditional, “proven” marketing model¹. According to Moore’s Law, processing capacity will double every two years¹. This law can easily be applied to marketing and its change and innovation description. One of these capacities in the marketing world is shopper marketing. Today, marketers have found that shopper behavior is not always predictable by consumer behavior; because mind and motivation of shopper are so different from mind and motivation of consumers, watching or reading an advertisement. It is also so difficult to reach people using traditional means. Media audiences have been fragmented and unsolicited advertising intrusions annoy consumers². But all consumers will arrive at the point of purchase eventually. Marketers have focused on this question that which factors affect shopper purchase choice and convert them to buyers. There are a multitude of types and varieties of people as well as a multitude of types and varieties of products. The question is how to match the people with the products³. In the retailing environment it’s not possible to do an exact one-to-one match so retailers should create different shopping experiences for distinctive clusters of

shoppers. In other words the goal of each store is to organize the shopper and product chaos and then introduce the proper group of products to each shopper segment³. In-store shopper behavior is the critical factor in this chaos solving. Evolutionary of shopper marketing led to new approach called shopper solution engineering. Shoppers often purchase combination of different products from different categories, so retailers and manufacturers need to define concepts which aggregate related products from different categories as a solution for shoppers^{4,5}. This approach could convert shopper purchase trip from a passive trip to a delightful experience and finally convert shoppers to buyers. In this situation, retailers play a critical role in that purchase decision occurs in POP and POP is the part of retailer environment.

This research responds to this initial question that “How to increase purchase decision at the POP in ETKA chain stores?”

The questions that will be responded in this research consist in: i. Which solution in the retailing world has been designed to increase purchase decisions, satisfaction and loyalty and create a lasting retailer-shopper relationship at the POP? ii. Which metrics have been proposed to measure the selected solutions

and retailer performance? iii. How do shoppers decide in ETKA store? Do all decisions lead to purchase decision? Are all decisions planned in advance? iv. How is the current status of ETKA store in the confirmed metrics?

Fundamental concept of marketing is not realized completely and effectively in Iran, so it is not surprising that shopper marketing is unknown as an evolutionary branch of marketing.

There is a multitude of hurdles which obscure shopper insight. It is clear that shopper marketing managers have to overcome these hurdles to deploy shopper marketing. These hurdles consist in: i. Lack of shopper research and shopper insight, ii. Lack of marketing metrics to measure in-store activities, iii. It not easy to deploy retailer as a medium. It is sometimes so difficult to find a win-win-win solution for shoppers-retailers-manufacturers.

Hence, this research can be a start point for shopper research and shopper insight and changing the retailing metrics. ETKA chain stores branches, hypermarkets, supermarkets,... can deploy the proposed solutions and metrics, provided that they noticed to differences of various stores and prioritize their in-store shopper behavior.

Literature Review: Shopper Marketing and Solution Engineering: Different definitions have offered for shopper marketing. Shanker (2011) referred to shopper marketing as: "the planning and execution of all marketing activities that influence a shopper along, and beyond, the entire path to-purchase, from the point at which the motivation to shop first emerges through to purchase, consumption, repurchase, and recommendation"⁶.

Deloitte and Touch referred to shopper marketing as "All marketing stimuli developed based on a deep understanding of shopper behavior designed to build brand equity, engage the shopper and lead him/her to purchase"⁷.

But, Jon Kramer considered it a flawed definition because it disregarded the vital role of retailers. The retailer's most critical objective is to provide shoppers with solutions and drive sales by category, not by brand^{4,5}.

Shopper Trade-offs: Shoppers are not just expending time; they are also expending money and angst as they move through the retail store. Money, time, and angst are the inputs that shoppers invest in shopping. Purchases and satisfaction are the outputs that shoppers gain in store. An effective retailer tries to minimize the inputs to generate higher outputs³.

Angst: Shopper's angst is a psychic, emotional deficit that can be assailed by anything from a long checkout line to an out-of-stock item. While angst is clearly affected by time and money, there are two major drivers of angst, "Choice angst and

navigational angst"; both of them are related to the matter of choice³.

Schwartz (2004) has referred to choice angst as "the paradox of choice". More shopping choice is desirable up to a point, but once it exceeds the threshold it becomes cumbersome and actually curtails purchase⁸.

Dr. Schwartz noted: "A large array of options may discourage consumers because it forces an increase in the effort that goes into making a decision. So consumers decide not to decide, and don't buy the product"⁸.

There is another driver of angst that is almost always accompanied with this shopper question: "Where is the ...?" This is navigational angst. There is no question that navigation can create significant frustration, whether it is navigating the shelf visually or finding one's way around the store. There are at least three ways to reduce navigational angst, as follows: i. Retailers should design the store and lay out the merchandise in a logical and intuitive way. ii. Retailers have to provide shoppers with signage or other navigational aids. iii. Retailers need to eliminate or reduce shopping path options³.

Time: Herb Sorensen considered time "the proper metric of the process of shopping"³. After many studies, He has achieved a basic principle: The faster retailers close sales, the less shopper time wasted in store, the more sales retailers will make³.

He has introduced a new metric: "trip efficiency" which is measured in Sec/\$ unit.

This metric answers this question that "How long does it take shoppers in the store to spend a dollar"

Sorensen found that the efficiency of the shopping trip is directly tied to overall store sales³. In other words, the faster shoppers spend (more efficient trip), the higher total store sales. Given this data, it makes sense to get shoppers buying as quickly as possible and build momentum. But in practice, retailers force the shopper to walk through the entire store to find a quart of milk³.

Shopper Solutions: Some new and innovative solutions were designed to increase purchase decisions at the point of purchase. table 1 captures some explanations about the selected solutions.

Shopper Solution Metrics: Marketing and retailing experts have deployed various metrics to measure retailer performance and their experimental solutions. Brand new metrics, were based on inputs and outputs of store, were introduced in retailing world. These metrics are specified in table 2.

Conceptual Model: The conceptual model was shaped at two levels, as shown in figure-1. At shopperology level, we defined some metrics which were actually the research model metrics.

At solution engineering level, we defined some solutions aimed to increase purchase decisions at POP in ETKA. After implementation of the model, the defined metrics will be measured again to assess the proposed model.

Table-1
Selected solutions and their definition

Solution	Operational definition
Layered Merchandising	Shopper segmentation according to trip efficiency (min/1000 toman ⁱ) - retailer design according to different segment and big head/long tail products ⁱⁱ .
Serpentine Path	Design a path like snake with wide aisle to eliminate navigational angst
Bundling	Product assortment from different categories in unique and innovative way according to ETKA concepts
Shopper Choice Reduction	Reduction of shopper choices to desirable point to eliminate choice angst
Multi-Sensory Retailing	Creation of emotional connection with shoppers by engaging shopper five senses in POP according to ETKA position

i. Toman is the one of Iran currencies. ii. Big head: most frequently purchase products- assortment in high-traffic area (quick trip retail space)⁹.

Table-2
Selected Metrics and their definition

Metric	Definition
Sales	The critical metric
Double Conversion	Share of visitors who become shoppers ⁱ , Share of shoppers who become buyers
Shopper purchase decisions made in-store (SPDMIS)	SPDMIS is calculated by addition of generally planned (G.P), unplanned (UP) and substituted (Sub) purchase decisions ⁱⁱ .
Satisfaction rate	Percentage of shoppers whose satisfaction level from Store is 4 or 5 in A typical Five-Point Scale.
Net Promoter Score (NPS®)	The NPS is created by subtracting the percentage of detractors among current customers from the percentage of promoters among current customers ⁱⁱⁱ .

i. Purchase behavior most commonly can be observed by spending some time via visitors³. ii. Generally planned: Purchases that were mentioned generically in the pre-shopping interview, but not bought by brand¹⁰. Unplanned: Purchases that were not mentioned in the pre-shopping interview but bought on impulse¹⁰. Substitute: Purchases that were specifically identified by name in a pre-shopping interview, but actual purchase reflected a substitute of brand or product¹⁰. iii. Promoters: Customers who are willing to recommend the store to others (who gave the store a rating of 9 or 10 on a 10 point scale)¹¹. Detractors: Customers who are unwilling to recommend the store to others (ratings of 0 to 6)¹¹.

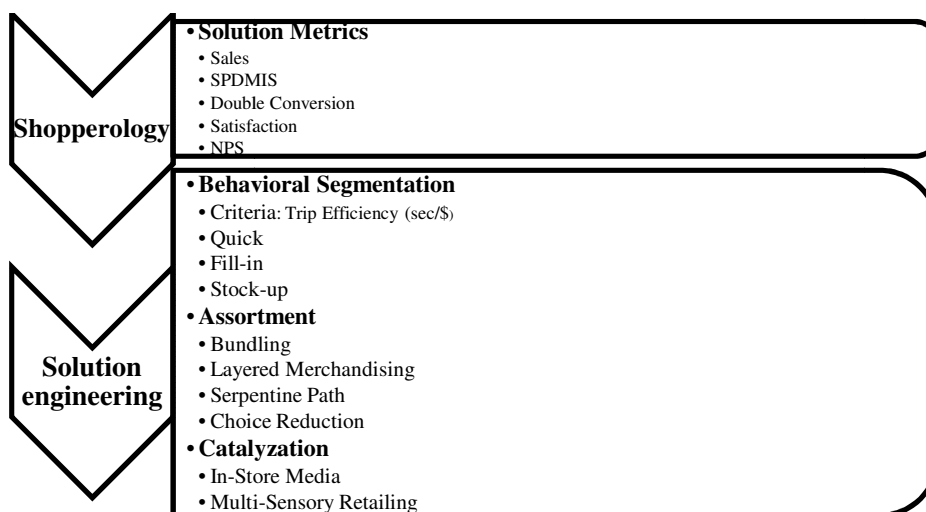


Figure-1
Conceptual Model

Methodology

A total sample of 250 shoppers was interviewed and observed for the core methodology. Population was ETKA chain stores throughout Iran and the study was executed across the main branch of ETKA chain stores (Shahid Chamran). This outlet was large, high-volume store and the leading branch among ETKA chain stores. Moreover, according to official statistics, Tehran is a proper sample for data generalization to Iran population. The sample was tested at the beginning, middle and the end of a month, because the salary time of the shoppers was recognized as the key extraneous variable and this variable was controlled by this method. As the share of each period was calculated, the average is considered.

Methods and Instruments of Data Collecting: Depending on each metric, the proper method to collect data was selected, as demonstrated in table 3.

Validity and Reliability: All metrics and their collecting method were extracted from valid international references, so the reliability and validity of this study are dependable. For instance, Inter-rater reliability was 0.916 for double conversion metric.

Data Analysis: Demographic information about SPDMIS metric can be analyzed using the chart shown in figure 2.

Table-3
Collecting method for each metric

Metric	Method to collect data	information
SPDMIS	Intercept interview	Planned purchases (unaided category and brand planning), Demographics and profiling information
Double conversion	Non-participant observation	Visitors who become shoppers, Shoppers who became buyers
Satisfaction	Intercept interview	Satisfaction level from in-store retailer environment
NPS	Intercept interview	Willingness to recommend the store

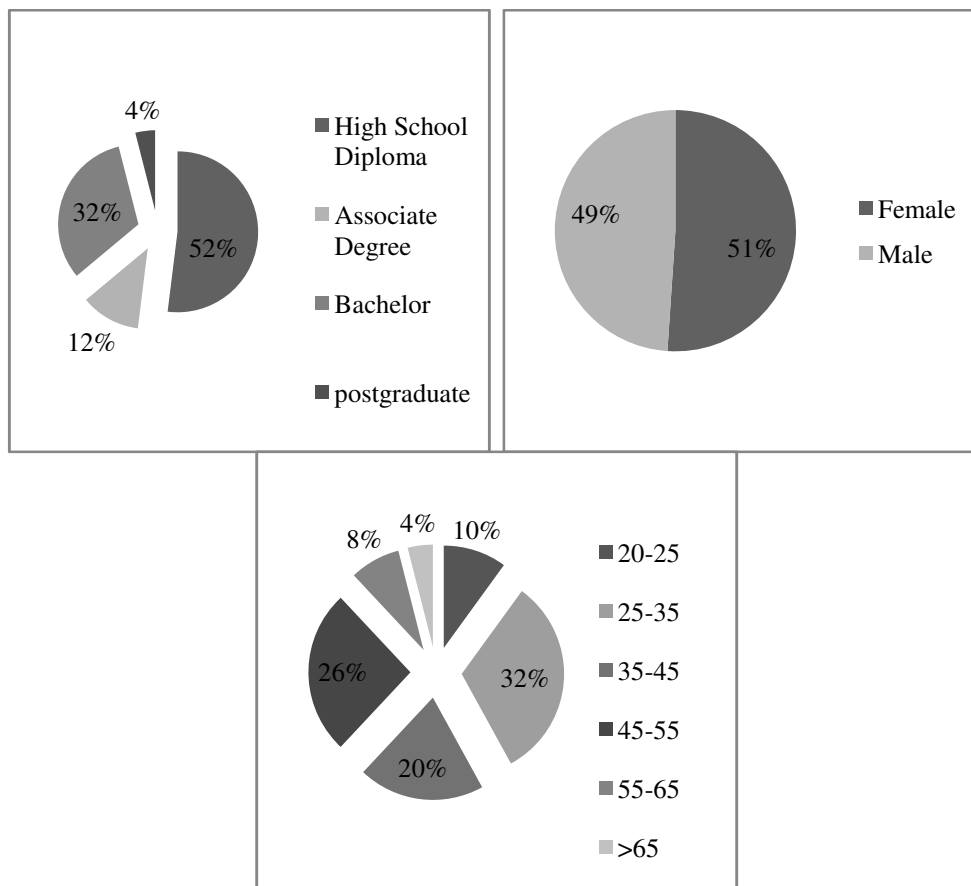


Figure-2
Demographic information about SPDMIS metric

The results demonstrated that the major of shoppers had been interviewed to measure SPDMS metric were undergraduate and between 25-35 years old.

Results and Discussion

Shopper Segmentation: By mathematically clustering shoppers by their trip efficiency, three basic segments were shaped, as shown in figure 3. Quick-trip shoppers spend more quickly than others. It is noticeable that trip efficiency is measured in minutes per 1000 toman in this article.

Each of the segments exhibits distinctive shopping behavior. These behaviors consist in: i. Quick: Short time, small area, slow walk, high-spending speed, very efficient. ii. Fill-in: Medium time, medium area, slow walk, average spending

speed, modest efficiency. iii. Stock-up: Long time, large area, fast walk, low-spending speed, lowest efficiency³.

As shown in figure 3, Quick Trips are the most common trip for consumer packaged goods or food shopping in ETKA store. 60 percent of all trips were classified as Quick Trips in the ETKA store. That such a high percentage of trips were Quick Trips was eye-opening, but it was absolutely shocking that, in average, shoppers spend 1000 toman per three minutes.

Shopper Purchase Decisions Made In-Store (SPDMIS) in ETKA: This metric was measured for three categories: Necessary foods, detergents, and hygienic. As mentioned before, SPDMS was calculated by addition of generally planned (G.P), unplanned (UP) and substituted (Sub) purchase decisions.

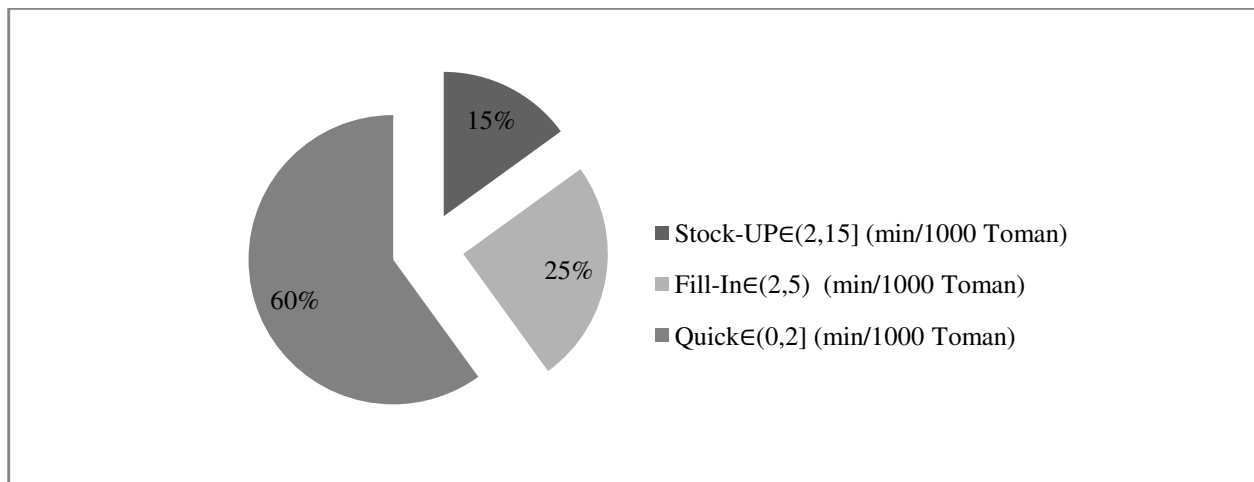


Figure-3
 Shopper segmentation in ETKA (based on trip efficiency)

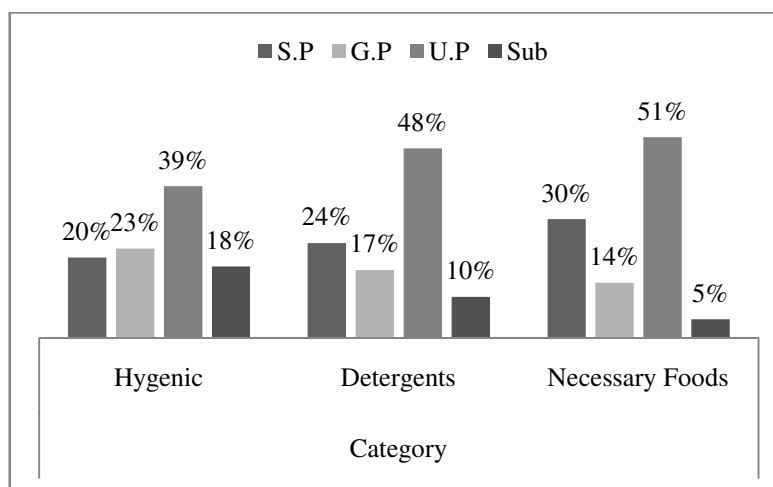


Figure-4
 Shopper Purchase Decisions Classification in ETKA

As shown in figure 4, in average, 25 percent of shopper purchase decisions were specifically planned (S.P). Necessary foods category had the lion share of S.P decisions among shoppers. It was also noticeable that 46 percent of shopper purchase decisions were unplanned. Necessary foods category had the most share of U.P decisions among shoppers.

Finally, the SPDMS metric was calculated for each category as shown in figure 5. This was absolutely unexpectedly that in average, 75.3 percent of purchase decisions were made in-store. The highest share of SPDMS rate was for hygienic category (80%).

Double Conversion in ETKA: This metric is calculated for four products: soap, grain, washing powder and edible oils.

The results demonstrated that, in average, shopper/visitor and buyer/shopper conversion rates were approx. 55 and 74 percent, respectively, as shown in figure 6.

Satisfaction Rate in ETKA: The results of interview show that satisfaction rate is 65 percent between ETKA shoppers. It is calculated after interviewing with 265 shoppers in Shahid Chamran branch of ETKA.

Net Promoter Score in ETKA: Net promoter score in the ETKA store was -4 percent, as shown in figure 7. This score was calculated according to promoter, passive and detractor shoppers.

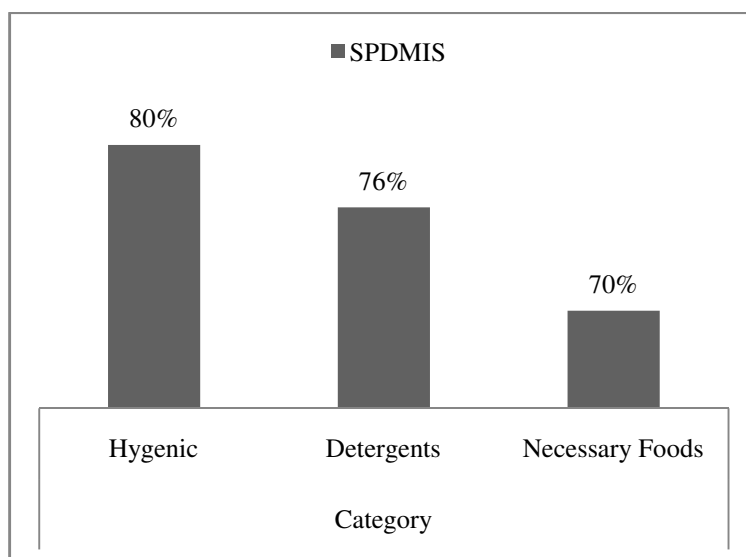


Figure-5
 Shopper Purchase Decisions Made In-store in ETKA

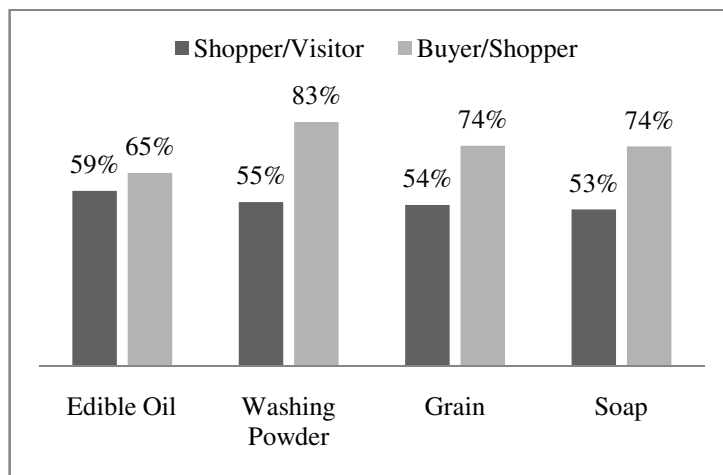


Figure-6
 Double Conversion in ETKA

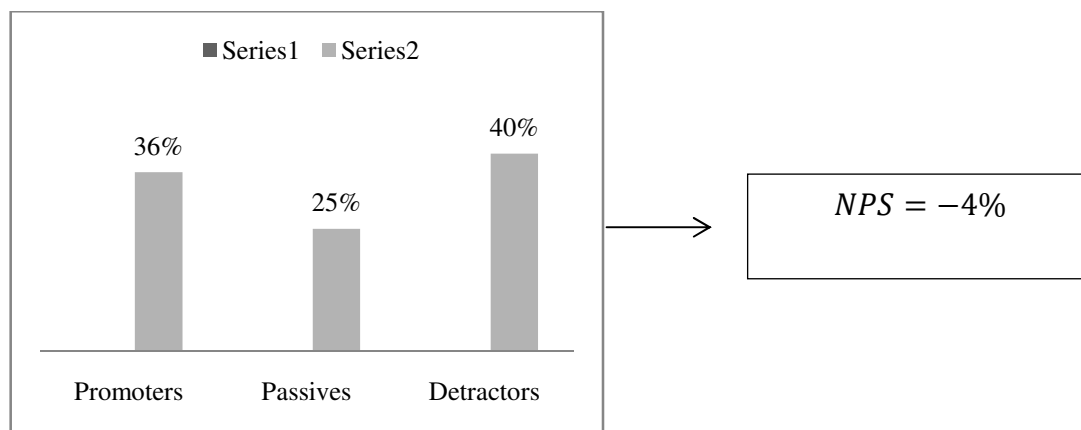


Figure-7
Net Promoter Score in ETKA

Conclusion

New studies have been conducted in retailing world which have led to unprecedented changes that shatter the core of all the traditional, “proven” marketing models. These studies recommended some solutions and metrics in harmony with each retailer and its shoppers. In this article a comprehensive plan which contains some new solutions and metrics was proposed to ETKA chain stores. Current situations of Shahid Chamran branch in selected metrics was assessed to provide a correct and accurate picture for ETKA chain stores. Solutions involved in layered merchandising, serpentine path, bundling, choice reduction and multi-sensory retailing. Current situation of this branch in confirmed metrics were discussed below.

SPDMIS: Today the in-store decision rate in ETKA is 75%. It reveals that Shoppers decide more at the shelf. Notably, unplanned decisions rate is 46 percent, suggesting that what goes on inside the store—including how the store is designed and what selection is offered and where—has a tremendous impact on sales. Following shoppers around on the trips through stores can reveal a great deal about how to make stores more profitable. POPAI recent study began in the fall of 2011 and concluded in March 2012 showed that in-store decision rate across the four broad U.S. census regions was 76 percent that is so close to the rate in the ETKA store.

Double Conversion: Shopper/visitor conversion rate in this store is low. Survey revealed that the most important reasons were: i. Improper position of big head products in long tail space. ii. There were no enthusiastic solutions which attract shoppers. iii. There were too much shopping paths which created significant frustration and led to angst.

Satisfaction: This study indicated that reported satisfaction rate was 65 percent. Shoppers stated that some factors made them unsatisfied with the in-store environment. Most shopper statements were: i. Brand diversity in some categories is low, specifically in big head categories. ii. There are too much

shopping paths which create significant frustration and leads to angst. iii. The store charges high prices for some categories.

Net Promoter Score: The negative NPS revealed that there were no specific competitive advantages in comparison with other stores, so shoppers showed unwillingness to recommend the store to their friends or colleagues, that is, the store was not doing a good job of securing their Shoppers’ loyalty and active evangelism. Negative NPS is important early warning signal for the store.

Recommendations for Further Research and Retailers: This study can heralds a new era in retailing in Iran. Shopper engineering solution approach is evolution of shopper marketing. The goal is to find a win-win-win solution for retailer-shopper-manufacturer that leads to more purchase decision at the point of purchase. Since retailers are the key decision maker in this triple interaction, this study focused on retailer-shopper relation. Researchers should consider manufacturers, the third side, and propose a comprehensive shopper solution plan which gathers retailer and manufacturer as partners to create innovative ways to provide shoppers with better solutions. But success of the plan depends on proper understanding of shoppers and their in-store behavior. Shoppers are complex, illogical and increasingly and frequently contradictory, which makes the process of understanding them more challenging than ever². So there is no unique formula to success in all stores and retailers should first create their unique concepts and then design their stores in harmony with those concepts. This is a competitive advantage.

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