CONSUMER LOGISTICS IN HYPERMARKET AND ITS APPLICATION TO SMES IN MALAYSIA

NORSHAHEEDA BINTI MOHD NOOR, MOHD NOOR BIN MAMAT & ZAIMAH BINTI DARAWI

ABSTRACT

The aim of this paper is to analyze consumer logistic amongst hypermarket customers in Malaysia and its implication to the SME grocers retailing subsector. The scope of this paper is to focus on the importance and the application of the consumer logistics concept around the Klang Valley. Among the elements of the consumer logistics discussed are 1) the scarcity of time, 2) selection of shopping location, 3) planned and impulse shopping and 4) brand switching with retailers are unable to stock up on preferred brands. Taking this result, this paper discusses on the possible application to SMEs in order to resolve the problem of moving products to the consumers. We found that certain consumer behaviour needs to be understood by the SME retailers in their business management. The operating hours, product quality and other services are important aspects of consumer logistics to be given high priority.

Keywords: hypermarket; logistics; customers; SMEs.

1. Introduction

Consumer logistics is a new method of distribution amongst hypermarket consumers. Where business logistics ends consumer logistics starts in moving consumer products from where they originated to the place they are used. It is focused on functions performed by household members. Consumer logistics complements business logistics. Business logistics function have consumer logistics counterpart. Example of consumer logistics are distance travelled on a shopping trip, substitution for products out of stock, stockpiling purchased items, and so on. Hence households also perform logistics activities such as transportation, storing and handling, inventory, location and communication.

Consumer logistics promises to improve retailer-customer interface function. In particular, it helps retailer to identify useful market segmentation strategies and learn about creating values for customers. Among important elements of consumer logistics are: 1) consumers regard time as limited resource, 2) they have location preferences for shopping, 3) major shopping trips is more likely to include impulse purchases than fill-in shopping, and 4) brand switching is affected by degree of difficulty that shoppers have within stores locating their brands. Consumer participation in consumer logistics can provide useful profiles of retail segments (Granzin and Painter, 1997).

In general the objectives of the research are to examine whether hypermarkets in Malaysia provide consumers with low prices reliable variety, and high quality products and good after sales services. Secondly, it is aimed to evaluate whether the concept and advantages of consumer logistic in hypermarkets could be applied and adapted by local SMEs especially in enhancing and strategizing their marketing and promotional activities.
2. Consumer Logistics Issues

Superstores, regarded as large food stores and retail warehouses is the preferred retail format for a number of retailer groups in the United States, United Kingdom as well as throughout the world (Guy et al 2005). This retail format is also called hypermarket (http://www.tesco.com.my). One main reason for the choice of this retailing format is that the advantages of the economies of scale can be exploited. Through large retailing operation with edge- or out-of-town locations, retailer cost which include labour cost, goods delivery cost and store operation cost can be reduced through increased store size. In addition, the mentioned retail format promotes increased customer loyalty and expenditure per visit. The hypermarket retailing format could benefit consumers through lower product prices, good quality products, and reliable supply of a great variety of goods as well as good after sales services.

Under the current high cost of living partly contributed by the high cost of fuel, lower grocery and consumer product prices would enable more consumers to afford more buying them. Reliable and variety of product supply would again reduce the cost of transportation by consumers since a one-stop centre could limit their cost and time consumption for shopping. High quality goods are important to consumers for both groceries and consumer products since these products would be useful in meeting customer expectations. In addition, the good quality can be assured through good after sales services such as money-back guarantee or free repair services etc.

Since consumer logistics begins where business logistics ends, so it involves the movement of goods from the point of purchase to the point of consumption, which also includes stock management. The current hypermarket format in retailing exploits the economies of scale thus reducing the cost of store operation which finally affords store owners to offer lower product prices. These combined effects of low price, supply reliability and variety, high quality products may result in customers’ loyalty, a characteristic well sought after by store owners especially when competition within the industry is intense. In addition it may also contribute to the efficiency of consumer logistics which is a counterpart to business logistics. As opposed to traditional consumer shopping at small local stores and wet markets, the hypermarket retailing format alters consumer behaviour in terms of their logistics. Consumers in Malaysia who are more affluent regard time as a limited resource and so try to develop shopping habits that saves time. Shoppers’ mobility and travelling cost suggest the importance of store location as a strategy to attract customers.

Shoppers usually make two types of shopping trips namely the main shopping and the fill-in shopping. The main shopping trip is when shoppers purchase most of their grocery requirement while fill-in shopping trips are when they purchase products that have ran out of stock at home or that have been left out during the first trip. Main shopping trips are less focused and many unplanned products are purchased. The fill-in shopping trips can be more focussed to those products that are left or missed during the main trip.

The claim that hypermarkets offer low prices, higher product quality and varieties that may result in store loyalty may hurt small traditional stores. While at the same time these hypermarkets can be a source of supply for small businesses. These small businesses become minor fill-in centres where product purchase in hypermarkets can become costly both in time and transport cost. It is also observed that in Malaysia especially, small cities surrounding Kuala Lumpur, the trend of small fresh product outlets are on the increase. It becomes a convenient outlet where consumers fill-in their weekly or daily requirements.
3. Methodology
To study further into the Consumer Logistic, a survey was conducted among 300 selected hypermarket consumers around the Klang Valley. The area is well known for its dense population in Malaysia. The populations of this area are mostly educated and affluent. The survey was conducted in selected hypermarkets around the Klang Valley. The data were collected by distribution of questionnaires consisting both open-ended, multiple-choice and Likert scale questions. The questionnaire is divided into three sections which are; 1) Consumer Behaviour, 2) Consumer Logistics and 3) Demographic Information. The data collected was first entered into Microsoft Excel program and then analyzed by using Statistical Package for the Social Sciences (SPSS).

4. Literature Review
Consumer Logistics (CL) is a relatively less researched area in the study of logistics. It started mainly in the 1980s and became more popular in the 1990s. In this article we define the CL concept and review the previous studies. These studies on CL particularly concentrate on hypermarkets although some studies consider supermarkets, superstores and specialized markets. Relating to the CL concept, attributes that are considered to contribute to consumer satisfaction are store characteristics such as merchandizing, store image, store accessibility, pricing etc. The ultimate objective of businesses in their effort to provide customers with good services is to ultimately achieve customer’s loyalty.

CL, which refers to consumer participation in the movement and handling of goods from where it is acquired to the consumption point, is relatively less studied until recent times (Granzin and Painter, 1997). It commences over from where business logistics ends. Factors such as distance travelled on shopping trips, substitution for out-of-stock products as well as the behaviour of stockpiling purchased items are identified as CL functions. Business logistics, a relatively well studied concept comprises of a number of functions consisting of transportation, storage and handling, inventory, location and communication up to the point where products are sold to the consumers in store.

CL concerns how consumers decide to buy, what they buy and shop where they shop (Verdisco, 1998). It is where the action is. CL involves members of the household who performs the logistic functions. Preferences of these households to shop in hypermarkets rather than other stores stems from two main factors i.e. convenience and lower prices (Farhangmehr et al, 2001). The convenience attribute is sourced from the store characteristic of good merchandizing which provides the customers with all their needs. Hence, it is unnecessary for the customers to undergo the inconvenience of visiting other stores in search of their desired products.

Upon studying the purchase behaviour and demographic attributes of hypermarket customers, Granzin and Painter, (1997) had divided the consumers into six segments. The consumer segments are as follows:

4.1 Household Captains
This segment of consumers is usually females, generally middle-aged homemakers who manage the entire logistics process. They are primarily involved in storage management while on the secondary perspective, they are mainly involved in inventory acquisition, logistics coordination, and store selection. These consumers who generally do not live with their parents and spend a high personal purchase of groceries. They are less inclined to shop at convenient stores and walk to the stores. Their primary shopping are at the larger stores. Due
to their relatively high expenditure pattern on groceries, they can be considered to be the most lucrative consumer segment probably for the hypermarkets. They are mature and experienced shoppers and hence to persuade them through advertisements may not work.

4.2 Minimisers

The consumer segment called the Minimisers is generally of low income, live alone and do not own a house. Their shopping behaviour preferences are for the convenience stores and they walk to the stores. The study, unlike the Household Captains could not identify the age range for this consumer segment. Convenient store owners may want to locate where the demographic profile of the population meets this consumer segment in order to exploit this market to the maximum.

4.3 Extended Shoppers

These are leisurely extended weekday shoppers. They are characterised as a mature, self-employed and lives in the area for a relatively long time. They dislike convenience stores as well as fast-food restaurants and usually shop Mondays through Thursdays. They generally require assistance with their transportation but are less likely to buy on impulse. For store owners who would like to capture this market segment may want to locate their busiest in areas served by efficient public transportation.

4.4 Family Supporters

Family Supporters are relatively young, residing at the present address for a relatively short time. Unlike the Household Captains, Family Supporters only perform CL activities at places outside their homes. Hence, they are not involved in the CL activity of managing storage. They must satisfy their own as well as the need of others, hence the name Family Supporters. These relatively young consumers are willing to compare and switch brands and therefore are relatively responsive to appealing advertisements.

4.5 Flexible Supporters

This segment of consumers is relatively flexible in their choice of brand as well as they are willing to substitute a product for another such as substituting beans for peas. They are relatively young, living with parents and less educated. They are often asked to accompany their parents on extended shopping trips and are also often obliged to do fill-in shopping at convenience stores. They tend to prefer less product variety because with such preference they tend to require less effort on making purchase decision.

4.6 Helpers

These are helpers who accompany the principal shoppers on shopping trips for planned purchases. Helpers plan ahead and usually know exactly what they want to buy when they reach the store. In order to provide them with better services, store management should probably provide proper and clear signage on the location of products.

However business logistics and CL are found to be not exclusive of each other. Heikilla (2002) on one hand asserted that supply chain efficiency which can be achieved through the Supply Chain Management (SCM) and customer satisfaction obtained through the consumer relation management (CRM) are both desirable attributes of businesses. However, these two attributes undermine each other, i.e. going too far with customer satisfaction efforts would
ruin supply chain efficiency and vice-versa. On the other hand, an integrative supply chain strategy creates value for customers, which is formed through a linkage process. Linkage here means the relationship between value activity performance and the cost of performance of another.

In the hypermarkets sector, the use of price as an influencing tool for the customer purchase decision is practised less intensely compared to discount stores (Cataluna et al, 2005). Defined as offering self-service retailing format, floor space exceeding 2,500 square meters and free parking etc. hypermarkets are found to charge higher prices than discount stores. The question that arises is that if not by price competition how would a hypermarket compete in the retail grocery market. Contrary to this finding however, Farhangmehr et al (2001) who studied hypermarkets in Portugal found that hypermarkets typically offer lower prices compared to superstores and convenience shops. Hence apart from being better in terms of offering bigger spectrum of product range, the superior competitive ability of Portuguese hypermarkets is also due to the lower prices of their products. This contradicting findings points to the notion that price may not be the most important factor in determining customer patronage of stores.

TESCO, through its own research identified ten customer attributes that would contribute to their customer satisfaction. The specific factors are in turn classified into three customer groups namely Up-Market, Mid-Market and Less Affluent as shown in table 2.1.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Up-Market</th>
<th>Mid-Market</th>
<th>Less Affluent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Standards of hygiene</td>
<td>Standards of hygiene</td>
<td>Standards of hygiene</td>
</tr>
<tr>
<td>2</td>
<td>Overall food quality</td>
<td>Value for money</td>
<td>Value for money</td>
</tr>
<tr>
<td>3</td>
<td>Value for money</td>
<td>Quality of fresh meat</td>
<td>Quality of fresh meat</td>
</tr>
<tr>
<td>4</td>
<td>Consistency of quality</td>
<td>Overall food quality</td>
<td>Prices</td>
</tr>
<tr>
<td>5</td>
<td>Quality of fresh food</td>
<td>Quality of delicatessen</td>
<td>Overall quality of food</td>
</tr>
<tr>
<td>6</td>
<td>Quality of delicatessen</td>
<td>Prices</td>
<td>Quality of delicatessen</td>
</tr>
<tr>
<td>7</td>
<td>Queues at checkout</td>
<td>Quality of fresh food</td>
<td>Quality of fresh food</td>
</tr>
<tr>
<td>8</td>
<td>Quality of fresh meat</td>
<td>Queues at checkout</td>
<td>Shopping environment</td>
</tr>
<tr>
<td>9</td>
<td>Prices</td>
<td>Consistency of quality</td>
<td>Special offer</td>
</tr>
<tr>
<td>10</td>
<td>Overall customer service</td>
<td>Stock levels</td>
<td>Quality of budget own label</td>
</tr>
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Source: Tesco (http://www.tesco.co.uk)

In all customer categories, the standard of hygiene is considered as the most important. In the influencing the customers’ satisfaction is Up-Market category, quality is the second-most important attribute while also placed highly the mid- and less affluent markets are the value for money and price factor. Traditional logistics performance measurement systems encompass asset management, cost, customer service, productivity and logistics quality.

Logistics performance measure by business from the customer’s satisfaction angle is rather deficient in most business (Fawcett and Cooper, 1998). Performance measurement of business logistics is traditionally focussed on five activities which are regarded as essential to accomplishing organisational logistics activities. These are 1) asset management, 2) cost, 3) customer service, 4) productivity and 5) quality. Examples of these measurements are as shown in Table 2.2 below.
Table 2.2: Some Business Logistics Performance Measurement

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Example of performance measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Management</td>
<td>Capacity utilisation, return on investment</td>
</tr>
<tr>
<td>Cost</td>
<td>Cost per 100kg, transportation cost per unit</td>
</tr>
<tr>
<td>Customer Service</td>
<td>Average transit time, transit time variability</td>
</tr>
<tr>
<td>Productivity</td>
<td>Orders delivered per vehicle, full versus partial load</td>
</tr>
<tr>
<td>Quality</td>
<td>Damage in transit, documentation accuracy</td>
</tr>
</tbody>
</table>

*Source: Faucett and Cooper (1998)*

This traditional performance measurement has been surpassed by technological and management style developments. The later management of just in time strategy and globalisation in networking practices has rendered their measurements obsolete. In addition, greater emphasis on customer needs had changed performance measurement to provide greater focus on the customer. Compared to the 1980s situation, customer needs measurement now has improved much better although surprisingly, it had placed low focus on customer satisfaction.

Businesses would like to know how the customers plan and decide what and where to buy because this plan is essential to success (Verdisco 1998). It is recognised that each individual customer is different and her purchase decision can be moulded by her demographics characteristics. An average customer in Europe buys groceries at least twice a week (Teller et al 2006). This information is very important element in planning businesses activities to capture these customers’ characteristics.

Customer service is an important determinant of influence on customer purchase. Its measurement is a subset of a bigger measure of customer satisfaction (Turnball 2006). Typically, customer service is measured by a percentage value. Similarly, customer satisfaction is also measured in percentage just as used in the measurement of customer loyalty. High customer satisfaction should be reflected by high customers’ loyalty.

Time economy is placed high in the consumer preference for purchasing their household products from their chosen stores (Thang and Tan, 2003, Teller et al 2006). Customers view time highly and therefore store attributes that can reduce customers’ transaction time are most preferred. Apart from time economy, the decision to shop at any particular store is based on the stimuli-organism-response (SOR) concept. In this case the stimuli are merchandising, store atmosphere, in store services, accessibility, promotion, reputation, facilities and post-transaction service is found to be of less importance.

The important attributes however can generally be linked back to transaction time economy and merchandising. These two attributes provide the facility of “shopping under one roof” which economise on consumer time taken to perform their shopping. A customer visits to the store involves the purchase of multiple goods and therefore merchandising provides the necessary atmosphere for the customers without having to visit other stores as well thus save time for shopping. However important time-saving is conceived by consumers, they are unable to convert the resources and the travel efforts into their cost of shopping (Teller et al 2006). Hence, customers are considered to be partially rational in this aspect. In fact their shopping opportunity cost is considered as zero. They consider traditional shopping to be not too much of an effort.

Location which facilitates customer facility is the second-most important store attribute to mentioned customers. Such details as proximity to bus stops, taxi stands and sub-way stations can make a difference to the customer preference of stores. Store distance from home, which was perceived to be important can be clouded by such details of the attributes i.e.
proximity to transportation facilities. The third most important attribute found is store reputation. Store reputation is earned through the long history of good customer services, value for money of their product on sale, reliability and the good word about the store that is passed on from month-to-month.

In-store service sums include up the services provided by the store such as congeniality, advice on purchase, gift wrapping and convenience on payment. Shoppers have favourable perception for stores that provide good in-store services and would make repeat visits. This makes the store to gain acceptance and stronger preference by the customers.

Store atmosphere comprising of external and internal the combination of decorations, good layout, and ease of movement and pleasant display of merchandises is also one of the important store attribute that can attract customers. A pleasantly presented store offers comfort and gratification to the customers providing them with a sense of well being making their store visit of high quality which in turn increases their preference for the store. To constantly attract consumers, in-store product promotions should be a constant feature of the store. Customers value such attribute relatively high.

The attributes accessibility, merchandising and in-store services contribute to shopping time economy. Consumers are found to optimise their visit to stores with the mentioned attributes and are less inclined to switch stores, i.e. they become loyal to their chosen hypermarket. They would avoid stores that have uncertainty in merchandise availability and lack of parking for their cars.

5. Study Approaches

As mentioned earlier, the history of CL research is relatively short. Hence, studies in this area concentrate around exploratory research. Most are based on primary data. In almost all studies reviewed, data collection is based on consumer and store surveys. On the sampling of survey respondents, most studies the fully random sampling of between 300 and 500 samples. The threshold sample size for undertaking Structural Equation Modelling is 200 samples (Teller et al 2006).

Granzin and Painter (1997) selected 480 residents of a large western metropolitan area in the United States. The sampling technique employed in the study was quota sampling. The quota sampling was according to 12 gender-and-age categories. A precisely random sampling was not chosen because the study focussed on variation i.e. to study patterns rather than segment size or incidence rate. Farhangmehr et al (2001) used close-ended questionnaires on 500 households and 204 retailers, both completely random samples when they studied consumers and retailers in Portugal when studying the linkage of consumer perception to preference of retail stores, Thang and Tan (2003) had completely sampled 350 respondents where the random sampling was done by picking every fifth customer while alternating in gender type.

In summary, CL is concerned with the purchasing behaviour by customers. Convenience and lower prices have been the choice variables for customers, according to Farhangmehr et al (2001). However, research undertaken by TESCO did not support this idea especially the conclusion on prices. Customers, especially the higher income group are less inclined to put prices as high in importance in their decision to shop at TESCO, unlike shoppers of discount stores. They are more concerned about quality and customer service. These are subset of a bigger customer attribute of customer satisfaction, which when overly aimed for could undermine supply chain efficiency.
Customers who lack time resource place customer service highly in their criteria for shopping decisions. Customer service, which includes advice, congeniality, gift wrapping service, etc., is a subset of a bigger attribute of customer satisfaction which can finally lead to customer loyalty. Cost of shopping is however not well considered. They generally consider their opportunity cost of going shopping as zero, which in a sense makes them partially rational. Transportation and store atmosphere which encompass displays, cleanliness, ease of movement and price information is an important attribute.

In this study area, the survey of consumers is the usual approach. It is usually based on personal interviews with the assistance of a questionnaire. The number of samples can be above 200 samples. The respondents are usually randomly selected.

6. CL Application and Importance in SME Product Marketing

CL begins where business logistics ends. As such it takes over the function of moving merchandise to the household for consumption while the wastes from consumption are disposed off in various ways. The movement of merchandise from hypermarket to the home, if this is inefficient could hamper the business logistics part. Without good flow on the part of CL will similarly affect the business logistics. It could clog-up storage space and could result in costly damage to products in addition to the increase storage cost.

Movement of merchandise from the store to the home should therefore coordinate with the business logistics. This study found that customers have certain purchase behaviours which should be understood by those managing business logistics. First is the income level which can be considered as middle income. Economics have indicated that consumers with different income would influence the quantity and quality of product purchase. With hypermarket customers being generally of middle income, we would expect that they would demand higher quality products which usually carry a higher price. With this group of customers, a hypermarket study has found that they are less concerned with prices compared to other factors that provide convenience for them.

Mode of transportation is also important as it facilitates the movement of purchased merchandise to the household. Being on average 12 kilometers from hypermarket, customers require good transportation with ample cargo capacity. Hence cars are their main mode of transportation. Observation as well as own experience indicated that hypermarket provides free and sufficient parking space.

With hypermarket customers, opening store hours is important because they generally like to shop at night rather than during the day. They are mostly at work during the day. Hypermarket should expect and organize the business logistics in order to be able to move merchandise at night. Business would also concentrate on weekends and intensify during the end of the month. Hence business logistics at hypermarkets should meet this CL requirement.

7. Conclusion and Recommendation

SMEs in Malaysia face various problems but the most acute is in the marketing of their products. Most local SMEs produce low quality products, lack product availability to meet big market requirements, product freshness, and product information especially in product labelling. These attributes are important in order to achieve high customer loyalty and customer satisfaction to target hypermarkets as a market outlet. SMEs operators must be aware that most of these high volume retailers one advanced and has the highest customer satisfaction and loyalty. Majority of customers especially the working shoppers customers lack time resources for shopping. They also have relatively low priority on low priced and
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low quality items but give higher priority on supply availability so that they save their repeat shopping trips that would save time and money. Based on the research findings, most customers have several variables affecting their decision on shopping trip namely convenience, short distance, ease of access, time of shopping and good customer services.

Learning from the above conclusion on customers shopping behaviour, SMEs should strategise their production by aiming for hypermarkets as one market channel. On the other hand SME retailers would need to improve on their product quality as well as having continuous supply in order to achieve high product availability in the stores. Entering hypermarkets would be strategic SMEs to market their products. For example TESCO in the United Kingdom have taken in various SME products as their house brand and therefore ensure a market. However SMEs need to work in tandem to take advantage of the consumer logistics that have implemented in their stores with the modern trend in customer shopping mainly in hypermarket. SMEs can regard hypermarkets as their partner in business.

Reference


Tesco PLC, United Kingdom. 2008. [http://www.tesco.co.uk], accessed on 18th June 2008