

# A Model on the Factors that Drives the Smartphone Demand from the Retailer's Perspective, Thrissur

Karthik Illikkottil, AvinashShivdas

**Abstract:** *Purpose Mobile phone markets in india is witnessing one of the most challenging phases in its evolution. The economic growth added with the rise in disposable income has seen consumers demand more smartphones than in the past. To keep up with this demand companies are expanding and developing their distributional channels across rural and urban india. Though there have been several studies on the consumer purchase side, there has been scant research on the role of the retailer. This study aims at understanding the factors that drive the demand of smartphones from the perspective of retailers and their ecosystem Design/methodology/approach – to evaluate the role of actors including the retailers in the ecosystem, a holistic approach is needed. Systems theory was found suitable to evaluate the interactions and the roles of players in this ecosystems. The interview method was adopted to develop the model and understand the nuances of the interactions between the actors. Findings – Evaluating factors based from literature as well as interview transcripts, it was seen that trade margins, functional value of smartphones, inventory turnover and brand awareness were major factors propelling demand among retailers. Originality/value – This study advances the body of knowledge by presenting drivers of demand for smartphones from the retailer perspective, which is under researched, especially in the emerging market context. The implications from this study could serve as a platform for future research in similar economies and further shed light on influencing factors that could aid in enhancing market development activities for practitioners. Further the emerging market context of the study provides insights to industry and academia to advance research in This study provides insights on the factors which have an effect on the increased demand of certain smartphone brands from the retailer side and can be a basis to understand the strategies which mobile brands follows to adopt for increased penetration in Indian market. This study concentrates on the retailer's perspective and only limited studies have been done on this.*

**Keywords** Market trends India, Systems theory, Smartphones, Retailers

## I. INTRODUCTION

Mobile phone technology development has seen an extended history of innovation and advances that have emerged as a result of changes in the needs and preferences of consumers.

Smartphone devices have one of the fastest rates of adoption compared to any tech used by households in the modern history of the world. (Comer and Wikle, 2008)[1], they have become a necessity rather than a luxury in today's world. For the next few years, India will be the fastest growing, large smartphone market, making it a must for any smartphone player to be here. With increasing consolidation, however, any new brand will find it difficult to carve a space here (Navkendar Singh, DC India Associate Research Director)[2], The rapid economic growth rate of emerging market like India has resulted in the rise of disposable income which is supporting the high aspirations to own better and technologically advances smart phones. While on the supply side, it is seen that with tech advancement, the price of smart phones are declining on account of drop in raw material prices, miniaturization. This can be seen as a testimony to Moore's Law: "the number of transistors on a microchip doubles every two years, though the cost of computers is halved". In other words, we can expect that the speed and capability of our computers will increase every couple of years, and we will pay less for them. Thus, the drop in prices and the rise in disposable income has created a huge market potential for smartphones in emerging markets. Where there is potential, there is heavy competition. Manufactures are adopting both the offline as well as online channels to lure customers into purchase of these devices. In order to gain presence in the offline channels, firms compete for visibility, which ultimately infers to prominent shelf space. Retailers can not only increase their profit, but also reduce costs by managing the allocation of shelf space properly and displaying products There have been several studies that have focused on consumer purchase decision. But, studies on factors that motivate retailers to provide prominent shelf space and act as brand ambassadors for the brand have received limited attention. This paper aims at addressing this critical gap by evaluating the factors that influence positive retailer perceptions towards a brand. It uniquely, adopts systems theory to evaluate this research question in a holistic manner by understanding the key actors and the interactions among them in this ecosystem. This study was carried out in Thrissur a city in Kerala, India with a population of 3.16 lakhs and has around 120 smartphone retailer outlets in the city region. This area was chosen because of the following reasons – an abundance of small-scale smart phone retailer's s and an availability of the outlets of the various smartphone brands. It has been found that there is a trend of switching of brands over a time period by the customers. Along these switches it's observed that the customers go for some particular newly introduced brands rather than established brands and market leaders,. Retailer has the capacity to convince a customer to buy a particular brand, supply and demand for smartphones are increasing.

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In this kind of environment it becomes critical for the retailers to consider certain factors. The retailer is not the sole player but a complete ecosystem which goes in hand to hand.

It's critical to understand the players and the factors that is present in this system to understand this we employed systems theory. A system is a set of inter-related elements. Business processes can be considered an organizational system abstraction. A process is a behavior sequence that constitutes a system and has a purpose-producing function. A system's environment is a set of elements and their respective properties, the elements of which are not part of the system but a change in any of which may result in a change in the system's state. Systems theory is an interdisciplinary theory about the nature of complex systems in nature, society, and science, and is a framework through which one can investigate and/or describe any group of objects working together to produce some result. This may be a single organism, any organization or society, or any artifact of electromechanical or information. Closed loop system was used where in an output from one activity triggers another and finally feeding back in to the initiating activity. (Forrester 1968)[3]. Closed loop systems occur in nature, for example in ecosystems where small organisms serve as food for larger organisms in chains that flow back to small organisms when large organisms die and decay. They also take place in organizations (Forrester 1968; Wieck 1979)[4] and Families (Cox and Paley 1997). This paper is structured in the following manner first we have the abstract followed by the introduction about the topic and then the literature review that covers studies that have taken place at the costumer side and the retailer side of demand then a brief introduction about the systems concept, the models are discussed then followed by the representation of the model and the methodology, findings, discussions and implications.

## II. LITERATURE REVIEW

In order to aid the model development, we referred focused on evaluating factors that influence the product choice for (a) end users (b) retail buyers and (c) the articles that portrays the interdependency between these two actors.

A comparative study to understand the influential factors affecting the choice of mobile phones between the Indian and American consumers revealed that the 'price' is the most important factor for the Indians, while 'brand name' emerged as the critical factor for an American buyer (Samantha and Banerjee, 2016). Further, in two studies in Finland, it was observed that, technical problems were the basic reason for students to switch mobile phones, while price, brand, interface, and properties were the most influential factors affecting the actual choice between brands (Karjaluo and Karvonen, 2018)[5]. In Mauritius, Juwaheer et al. (2014) found that branding, pricing, features, lifestyle, age and gender influence the choice of mobile phones[6]. In emerging markets like China, Sata (2013) observed that price along with features affected the mobile phone preference[7]. While in India, a study by Ahmed and Nasreen (2015) that was focused on young consumers revealed that branding, appearance and price effect consumers purchasing decision of mobile phones. In a

recent study, Trivedi and Raval (2018)[8] observed that product features, price, brand image, promotional offers, service center, brand image and appearance influencing consumers purchase intentions towards smartphones.

There are extremely scant studies focusing of the motiving factors that drive retailers stocking intention of mobile phones.

Hwang et al. (2005)[9], found the factors that drive retailer's acceptance or rejection of new products in Taiwan. They followed mixed method research to have a depth as well as breadth in the study. The results from the study indicate that, apart from product and market factors, jointly termed as non-relationship factors, buyer-supplier relationship factors strongly influence the retailer's acceptance of new products. The suppliers incentive programs combined with close relationships with retailers tend to enhance the retailer's decisions further. Blumenfeld (2007)[10] developed a queueing model to analyze how response time in manufacturing affects retailer's inventory needed to meet demand. A retailer orders new items to replenish the inventory as items are being sold. Once an order has been placed, it takes time to deliver the items to the retailer. This time is the response time for manufacturing. It includes time to process, manufacture and delivery. These different time components can lead to long and uncertain response times.

Schroder, Wulf and Schumacher (2003)[11] instigated a study which revolves around customers view of a retailers orientation affect relationship outcomes from which it was inferred that the efforts a retailer takes to maintain the regular customers and the inclination of a consumer to get into relationships with retailers of specific product categories.

Viswanathan, Rosa, & Julie (2010)[12] carried out qualitative study of subsistence consumers-merchants (SCMs) in Chennai, India, which revealed that they maintain relationships in three interdependent areas: vendor, customer, and family. The authors interpret the subsystems as closed loop and self-sustaining relationships based on long interview data. Subsystems are managed by SCMs through purchasing and selling activities in addition to receiving and granting credit, and these activities give rise to three aspects of commitment: continuity, affection and normative.

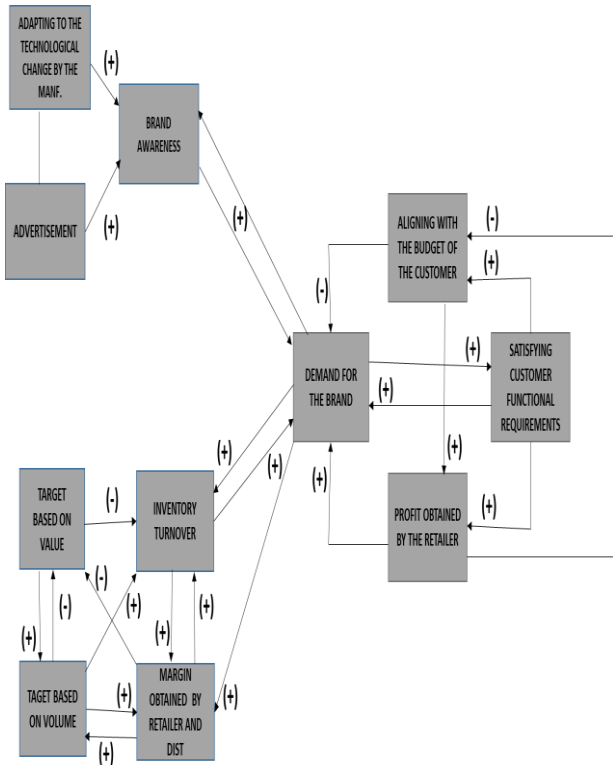
## III. DESIGN/METHODOLOGY/APPROACH

A qualitative approach was carried out by gathering data's through long interviews of the retailers such that the reasons and factors the retailers had on adopting the brands to their shops can be identified. 45 smartphone retailers were interviewed for this paper. The interviews were carried out till theoretical saturation was obtained plus 5 interviews.

Also the benefits the distributors or the brands provide to the retailers are identified through these interviews, the interview included the channel through which the sale is done, the promotions and incentives provided for the retailers.

All the retailers that have been informed has a retailing experience of more than 2 years and are having more than two brands for sale in their stores.

The interview included open ended questions including buying and selling activities, relationship with the customers and distributors, interviews were written down and was about a duration of 20-30 minutes. The interviews were carried out in Malayalam and then translated to English.



IV. FINDINGS

Retailer – customer model

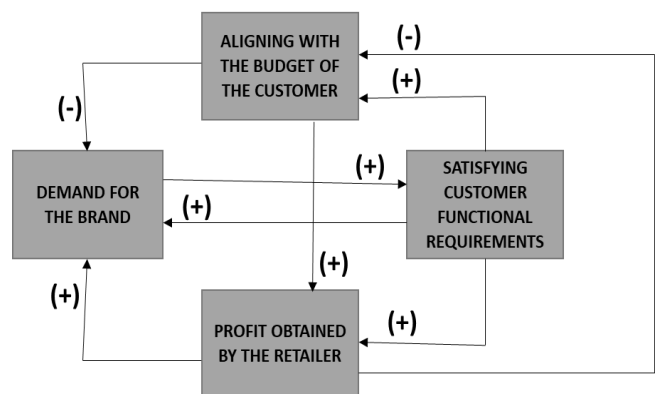
The main process that takes place is in the retailer customer sub system as the sales of a mobile brand to obtain profit takes place in this system. The retailer deals with mainly two kinds of customers that is regular customer to the shop and customers that uses the service and products provided by the retailer at once or at random. As stated by Webster (1992)[13] an exchange is a necessary and sufficient condition for the existence of a relationship, marking the beginning of a continuum of relations. So when a customer visits the shop to buy a smartphone the first thing the retailer asks to the customer is whether they have a phone in their mind, what is their requirements, the budget and then after these questions the retailer then presents them with the ideal option of the phone now here is where the two kinds of customer comes into play. As written by Zboja, (2006)[14] while retailers can gain more consumer traffic by aligning themselves with popular brands, the direct assessment of the retailer by the consumer influences whether or not customers return.

If the retailer’s customer is a regular one who makes use of the retailer store recharges and buying accessories the retailer has an obligation to maintain this relation with the customer so the retailer keeps in mind to give a product which satisfies the need of the customer at the best price. In the case of non-regular customer the retailer keeps in mind

to present with alternatives and will provide with the product at a profitable rate. So here making more profit out of a deal or transaction is considered as a negative flow for maintaining a rapport with the customer, since maintaining a positive relationship with the customer always is needed so as the customer avails other services that is offered by the retailer. But the thing that is happening now as pointed out by the retailers is that the customers are asking for specific brands that comes in their budget as well as satisfies their product requirements, “Customers now prefer brands that provides a wide variety of features and which gives a good functioning of 2 years over the priced devices that have high durability. This is where the some of the specific brand smartphones which the customers asks for comes into play” Preference towards phones that are not only with high technology specifications but also they are comparatively at a lower price than their competitors in the market, coming to the technological specifications “a retailer pointed out that the camera of the Chinese smartphones are superior in quality than the ones offered by the competitors’ products in the similar price range which makes the these products to be demanded more since some of the customers comes in for camera quality others for gaming purposes, showing that some of the customer’s needs the phone for specific attributes.” Considering all of this the main challenge that the retailer faces is to maintain the customers at the same time gaining profit, now this demands for a product that fulfills the technical and budget requirement of the customer along with being profitable to the retailer. Such a product will bring in demand to the retailer as well as the customer side now this was provided by the some of the brands.

This model thus emphasize on how the demand for the smartphone is effected by satisfying the customers functional requirements at the same time aligning with their budget also it should generate a margin for the retailer. When there is only margin for the retailer there is no demand for the product.

Interactions



Interactions in the retailer customer subsystem starts with satisfying customers functional requirement, when a product matches the functional requirement then the pricing range is told to the customer, now the price of the product should be such that it should be profitable to the customer at the same time it should align with the budget of the customer then there is positive interaction to the demand of the phone.

Whereas if it's only focused on satisfying the functional requirements and aligning with budget but not profitable to the customer the demand from the retailer side has a negative interaction.

**Retailor – Distributor model**

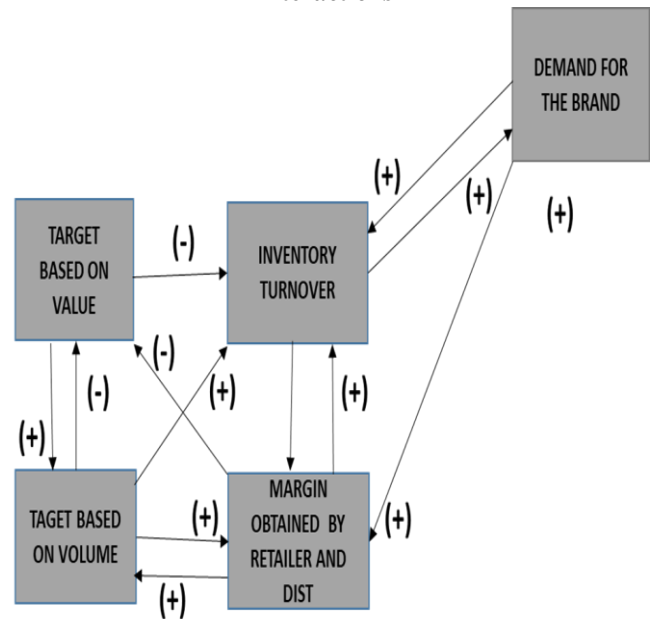
For the retailers to take a phone of particular brand there should be a demand for the brand and the product that has been purchased should sell off completely within a specified time period as the value of the phone depreciates with the flow time of time since products having the same or advanced technology are coming at the same price.

“Since we go and take phones from the distributor , it is preferable now to take phones that has a demand from the customer side as the more time a phone sits in the shelf , the less profit it generates” While changing technological attributes brought in change in the consumer demand and moving of the products from the retailer inventory to the customers the retailers started favoring the brands which has increased demand and a considerable margin for the same. Some brands offered them both along with other benefits which then made the retailers adapt and started retailer-ship of the same. Rao and Rao (2009)[15] a high inventory turnover ratio showed how the company is best at selling its products economically. Inventory turnover is a measure of the ability of management to make effective and efficient use of resources. Another factor was the type of target that was given to the retailers by the distributors (the targets for the distributors are given by the brands). “Before the introduction of OPPO and VIVO were introduced to the market the Indian brands and the other brands were using targets based on total value of the sales done, making it difficult for the retailers as well as the distributors to gain a considerable margin by sales as the sometimes the target cannot be achieved this would means not obtaining our margins” Then some of the brands made brought in a change to this by setting targets based on total volume by sales , means that the targets were set on the basis of total number units sold by the distributor and the retailer this was more favorable for them since this provided a better margin for them. Also the margin per unit given by the brands to the retailers were much greater than those provided by other brands. Thus the retailers take in the products in bulk from the distributor all the while if the distributors sells this to the retailers with considerably low margin the margin given by the brands due to the sales ensures they get their share of the profit. “When compared with Samsung and other brands, the chines brands like oppo and vivo provides us with higher margins, also there is demand for these brands from the customer side”

Also this has made it convenient to the retailers, distributors as well since this makes sure there is a flow of stocks which then fulfills their target and an increased marginal rate.

Thus this emphasizes on how the inventory turnover drives the demand for the smartphones,

**Interactions**



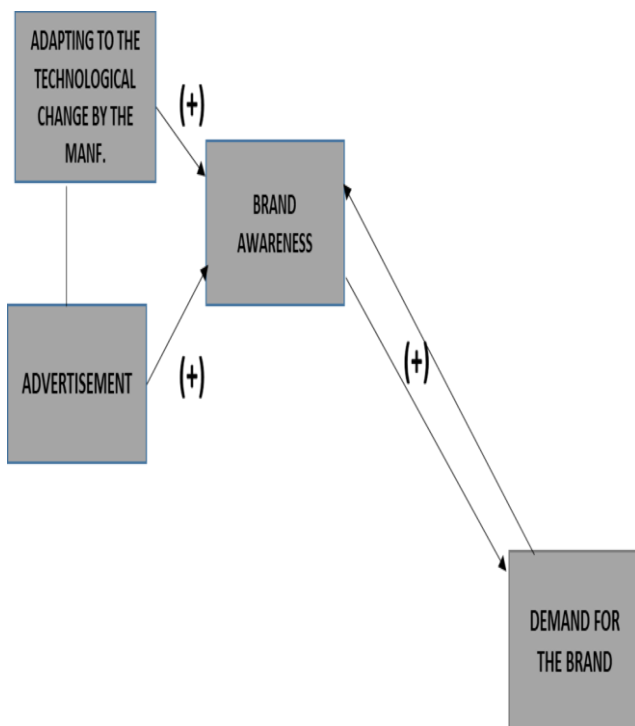
There are two types of phone categories that is target given on volume basis and target given on value basis, the value basis has a positive interaction with the margin obtained and the inventory turnover since there is an increased demand for the phones because of the comparatively high margin obtained. The other is value driven targets which has a negative interaction with margin as compared with the volume driven, also for this inventory turnover is less since there at the same price range there is phones with better attributes. Making demand for the products less. Value driven targets has a positive interaction with volume driven targets since, this is aiding as an advantage for the volume driven since it provides more margin.

**Retailor – Manufacturer model**

While the technological and marginal attributes that are provided for the retailers are superior in a scale by the some of the brands they also makes sure to keep a marketing relationship with the small scale retailers. Manufacturers and suppliers concerned with the strategic value of new product marketing should recognize that the acceptance of new products by retailers is highly dependent on relationships (Lin & Chan, 2016). The outlets of the retailers are provided modification and decoration by the boards, flexes, lightings, banners and other accessories of the brand for free, this provides benefit to the brand as well as the retailer since this works as a marketing channel for the brand. Along with this type of marketing , there is a great follow up in other marketing mediums by the brands which made the brands popular in the market , this added up with the benefits provided to the retailers ensured there is a word of mouth effect from the retailer sides also. When the sudden introduction of 4G network to the Indian market there was an uncertainty in the smartphone brand market since there was a lack of phones that supported 4G networks Volte technology other than premium phones.

Indian and Korean brands at the time was providing with 3G supported phones while in the Chinese markets there was already 4G smartphones. The gap that was created due to this introduction 4G network was thus able to fill by the Chinese smartphone brands leading to the increased popularity and a part of the market share was captured by these brands. Another advantage that some of the Chinese brands seized were that of the manufacturing cost for them was comparatively lesser due the availability of the parts and cheap labor this was an added advantage for the brands since phones with current technology and a cheap price that did not compromise on the overall quality was what the Indian market wanted and the Chinese brands provided them with this, the reduction in data charges also aided in the increased popularity of smartphones and Chinese smartphone brands ensured that there is a phone for every price range that is from low end pricing to high end pricing. Though most of the sales at the initial phase was done through ecommerce websites then due to the popularity and demand these brands started to the retailer and distributor sectors and the 4G introduction paved an easier path for the same. So in short the brands kept in mind to keep rapport with the retailers providing them with benefits and incentives, which made the retailers carry up the brand to customers, also the adapting to the changing marketing needs and the technologies the some brands were faster to respond and this ensured a smooth flow of products for the retailers as well.

**Interactions**



Brand awareness is positively driven by the manufacturer adapting to the technological advancements and the promotions that the manufacturer provides for the product , apart from the margins that is been provided to the retailer there should also be awareness of a particular brand to instill a demand for it.

**V. RESULT ANALYSIS**

From analysing the interactions from the model plotted with use of systems theory between the various players in the ecosystem it was found that the retailers tend to choose brands which offer them which offer them with better promotions and which adapts to the technological requirements of the end customers whereas on the distributors end its mainly based on the margin they obtain and also the pace in which the inventory or the product moves. When it comes to the end customer side the the main factors that drives the smartphone demand was aligning with the budget of the end customer , profitable for the retailer as well as it should satisfy the functional requirements of the customer. Furthermore the use of systems theory helped in developing the nature of the relationships between the various players. Demand for the smartphone being the core of the system.

**VI. DISCUSSIONS**

Mobile phone consumers across the globe found to be heavily influenced by the various factors that affect mobile phone purchase decision. These factors may be related to the consumer's characteristics and mobile phone-related features. This leads mobile phone companies with different brands and features to come up with a variety of mobile devices. Several research studies have been conducted to identify factors that affect the choice of mobile phones by consumers. These studies indicated a range of items as a determinant of the decision to purchase. These factors include price, characteristics, quality, brand name, durability, social factors etc. (Li2010; Zheng, 2007; Zhang, 2006; Huang, 2004). This study came up with the factors such as brand awareness, inventory turnover and satisfying the functional requirements of the customer, with the help of a model plotted using system theory the various interactions between the players in the ecosystem was found out and stated in this paper. The brands and the distributors can make use of this information while creating a demand for a product on the retailers as well end customers side.

**5. Limitations and direction for future research**

There are a few limitations in this research that will provide a path for future research. First, this study's scope is limited only to smartphones. Studies on other categories, such as automobiles, electronics, services, etc., may be carried out in the future. This research was conducted in a single city and is therefore isolated only to this geographical location. Future study could therefore be carried out in other cities in India in order to obtain a broader perspective of retailers on the demand for a brand. The present study was carried out taking into account the perspective of retailers on the market share change and then building a model out of it. Future studies can be used to obtain a model involving more subsystems from other potential moderator's perspective. The indications in this study can be used to understand how certain factors contribute to product sudden market demand and be used in future studies in this field.

## VII. CONCLUSION

With the use of the model plotted from the interviews it was found that that trade margins, functional value of smartphones, inventory turnover and brand awareness were major factors driving demand among retailers for smartphones of a particular brand moreover the proposed model also helped in understanding the interaction between the various players in the retailer's ecosystem. In order to make the retailer prefer a brand from the manufacturer and the distributor they should provide the retailers with the margin and maintain a good rapport with them. Also the product should have a reasonable cost and satisfy the functional requirements of the customers.

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