

# Distributors demand Forecasting and its Factual Case Studies

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**Abstract:** This paper reviews about how the distributors are tackling the situations in terms of stock management, and how they fill their pockets by checking out all the factors and their behaviour in marketplace on how it is affecting the distributor and sales. The main thing is to provide proper ideology for the stock management or order management in order to control risk factor for there business. We are also going to discuss the traditional ways of what we believe and what actually it is.

**Keywords:** CPG (consumer packed goods),

## I. INTRODUCTION

Mainly the distributor conceptual chain exists majorly in India. The middlemen gains better deals than manufacturers or retailers because they are the one who are taking the high amount of risk in distribution and inventory movement in reaching out consumers so these distributor is trying to maintain good relation with them by providing some offers and incentives.

Many of the distributors are having the high domain experience and demographic segmentation. They actually have the good potential to record data and their main intention is to clear there shelves, for this they import less in quantity but also logistics is a major factor playing with cost-margin. Most of the times they have option to depend on the prehistoric data and also geographic segmentation and order they get from retailers.

## II. FACTORS DEPENDING ON THE DEMAND FOR A PARTICULAR PRODUCT FROM DISTRIBUTOR POINT OF VIEW

Looking from the NPD (new product development), the first and foremost thing distributor checks is the product recognition in market and also the estimations & analysis provided by the CPG companies regarding the product survival. If they are convinced then only they go ahead in taking up the risk factor in buying large volumes of products and in later stage they go for re-order after emptying there shelves.

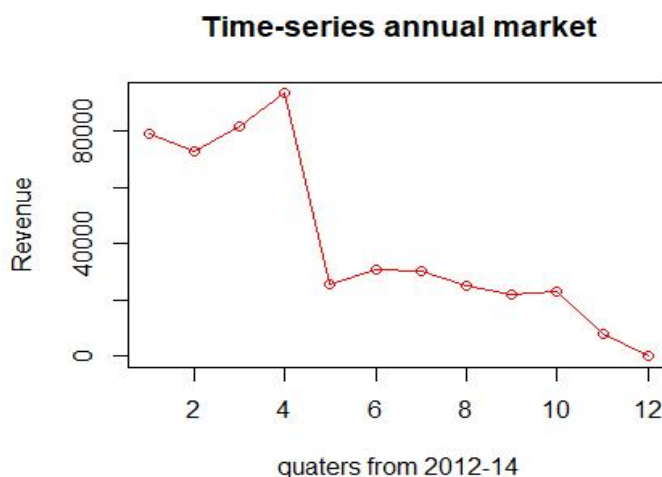
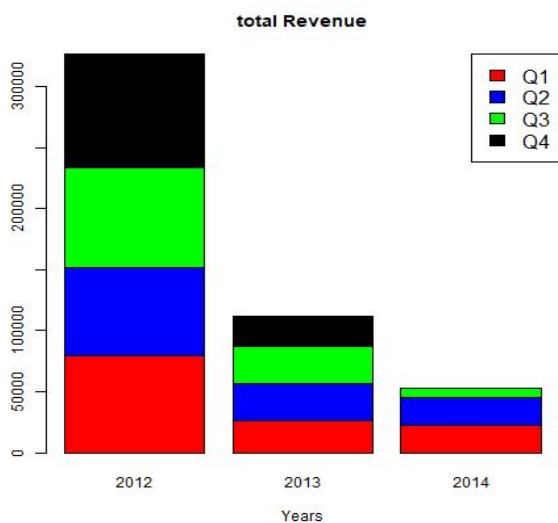
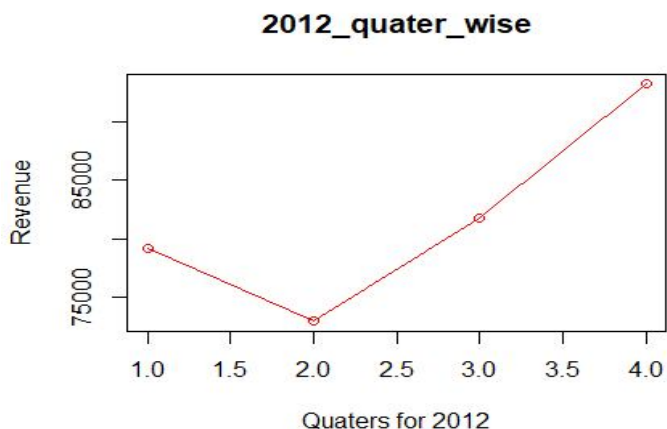
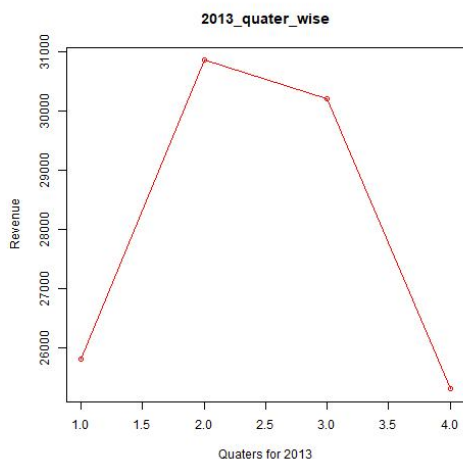
This is a small implementation on quaterly sales revenue in 2012-14 for a particular product. Initial three data sets can be maintained at distributor end.

### A. Prehistoric Sales Revenue Analysis

Many of the distributors what they do is, they keep check on there marginal cost and they mainly dependent on the difference in price at what they get and at what they distribute among retailers. So these distributors are mainly concerned with the current pricing and requirement in market. Before going for the re-order at manufacturer they check out the no of orders they get and no of retailers ask.

- 1) The first dataset will be on the basis of the retailers information (retailer type, class and type of Outlet) and what are the products and brands they order along with the location which will be useful.
- 2) Dataset containing information regarding the order details of the particular brands product in quarterly manner in year wise with the revenue.
- 3) This one will be the dataset regarding the CPG company information and order information along with the logistic information. First data would help in no of retailer holding for a particular product and also which one is having the near distance for supply accordingly. Next one would help you out in segregation the all area wise separately and forecasting the total revenue and it's trends accordingly in time series based. I have considered a revenue sales for a personal care product sunscreen lotion which is of shield brand. After considering the sales over United States in year 2012,2013,2014[1].

Considering 2012 sales as shown in the figure below the graph was increasing over 90000 but coming to 2013 sales the graph was not as previous one like 2012 where drastic change was occurred and even more drastic in 2014. The revenue didn't even crossed 31000 in 2013 and 25000 in 2014.



According to above graphical analysis we can say that the traditional methods of statistics like linear trend or exponential trend are out-dated. Due to the huge competition in the market the trends and many various factors which affect in demand for a product and many practical problems which could be turned out as good income.

As we have seen above graphs were truly uncertain from year to year leading to unpredictable sales for product survival, this may be common in FMCG goods, since they have short product life cycle but the drastic change from 2012 q4-2013 q1 will deal a great loss for distributors in terms of the stock management and this change may be because all the retailers has got goods but they are waiting to get those sold out, once it get sold out there will be again huge orders but it's is time taking may be for this product its greater but since FMCG products has expiry it will be wasted for some goods.

From above points we cannot predict the product requirement simply on the basis of the previous sales data. There are many other factors which deals with this market space for the particular product which we discuss in next part of paper.

### B. Product Branding And New Product Branding

One of the major factors is product recognition in the market, for that we need the big amount of promotions needed for a new product. Many of the CPG companies think spending amount on promotions is worthless, so they go for extended versions or next versions of already existing products. For example if we consider electronics market, Samsung has launched s5,s6,s7,s8 and s9 like wise and coming to its upgrades were s7 edge, s8 plus etc to avoid the promotions in huge amount this will give an easy recognition the market it's previous is having an established market. So many of the distributors cannot take risk in spending amount in new products, and in India many of the retailers will be at low end and they doubt on new product if it is a similar to existing product they think it would be better than before.

### *C. Logistics And Geographic Segmentation*

From the distributor point of view, this is also one of the major factor because importing the stock plays a vital role. Transport cost minimization is key for revenue. The cost for importing the stock will add huge expense for distributor.

Logistics may not be included only from the CPG orders but also supply to the retailers where the market is established and also demand for the product in that area. See because retail supply logistics is more complex than importing stock from manufacturer. Importing is just a wholesome process and once in a while, but retailer need a regular supply in bit's and pieces.

If we consider a situation like a particular product in 400 unit's gives a profit margin on the whole gives 8000 rupees profit but simply transport takes 5000 rupees for importing the stock, so what distributor gets is only 3000 rupees. So many of the distributors try to increase this number "3000" by importing the huge in quantity but still there is a chance if we import more and doesn't get sold out from shelf i.e; it's simply waste in stock or if we send back the leftover stock, again logistics will get paid. So ultimately the stock which distributors import is big deal and often been a problem. Importing excess or importing less is always a big deal. Predicting the quantity is also complex thing. To overcome this again it depends on the other factors like marketing, strategies etc.

### *D. Marketing And Retailer Relations Management*

Marketing is main and important task which includes finding out right consumer the retailers and let them know what distributors got and which one will give them a good revenue. Whatever the amount of stock the only thing required is good and quick marketing skill set besides maintaining the relationship with retailers so that you can empty your shelves and earn margins at an ease. A good marketing strategy will always fetch you good profit, this will be a key in case of excess of stock situation. But on the name of retailer management if you get a big order and unable meet the customer demands retailers may go and purchase goods from other distributors at low margin which lead in losing a retailer.

There might be many reasons for happening above situation like example, inefficiency in production at manufacturer end, which may lead in delay in delivery of products but retailer will not wait until distributor gets stock, soon they will find another distributor. Unable to meet consumer demands will affect distributor in retailer management. To encounter this there has to be proper logistics, production power in CPG company and timely stock management. This stock management can be improved by issue of ASN's (Advance ship notice) and consumer analysis. For example, if we consider normal bathing soap is our product, majority of the consumers buys products in monthly time series manner for example assume it is month starting and they get salaries. Retailer get the stock ready before month starting so that his maximum no of goods get sold and no customer is disappointed.

### *E. Market Competition*

Before selecting a product, we need to know the reason for the product origin and why customer would buy it. If found any other alternative product, found to be more useful than existing one and also at price point of view then chances for selecting the new one would be more which may deal in gaining market space and there is maximum chance for decrease in demand for existing one and may not be ordered by retailer again. Selecting a product itself is an important one which is able to survive.

### *F. In Case Of New Product*

Before launching a product into the market by company through distributor, they need to check the response in the target market and surveys, price margin they get for and also they need to check the alternative products or it's a completely a new one having uniqueness.

Besides this data provided by the manufacturer, distributor also thinks from the retailer point of view and customer acceptance sparing with the domain experience in determining its survival.

### *G. Consumer Behavior Variation*

One of the most uncertain things in the marketplace is the customer behavior. Survival date for a particular is not expected or predicted, but from experience they are able to say that till need for a product is there it remains in market or else advanced product which is replacing it i.e; the true competitor has arrived in the market. Whatever the surveys and promotional feedback conducted in the target market by CPG analysis is most of the time found to be not reliable, since taste and preferences of consumer are fickle which would increase the already existing risk on distributors head. But considering this aspect for product will always be a huge risk and also needed.

### *H. Change In Pricing In Future*

Whenever there is a change in pricing for a product, it will also affect the demands for the supportive products, alternative products and competitors too. For instance, we will consider coffee powder as a supplied product by distributor.

Case 1: if cost of tea powder is increased then obviously it's supportive product like sugar substance will increase since it's competitive products like coffee will also increase.

Case 2: if cost of tea powder is decreased then obviously it's supportive product like sugar substance will increase and also it's competitive products like coffee will also decrease.

Here the point to be noted is distributor has to keep other product's price factor too which may affect his orders in order to have good income. Distributor can import the supportive products which will definitely be one of the good move in this field.

Change in price for a product will lead to either in favor of positive response or negative response if we consider two case studies price is drop and increased.

Case 1: If the price per unit for a product is increased. Question arises "why price is increased?" From the consumer point of view most of the times they think, demand is more or for those ones taste and preferences doesn't match with product will create small kind of hatred for that product. Case 2: If the price per unit for a product is increased. Question arises "why price is increased?" From the consumer point of view, most of the times they think there is no other customer is willing in buying the product so they had dropped price or they think it is a nice opportunity to buy, since price is lowered. On the whole we need to remember is, when there is high demand, low supply will lead to higher the pricing but when demand is low, supply is high will lead in lowering of prices.

Coming to retailer each retailer will be having an idea like which type consumers exist in there market they will be specific set of people, so most of the times retailers will think from their consumer set point of view. Considering above points in view distributor has to be aware and prior informed about of the price drop alert or price hike alert. The ambiguity in pricing could affect the gross margin for a distributor which is the main source of income for them and stock will be in high volumes compared to wholesalers and retailers.

#### *I. Size And Market Position*

Before selecting a product distributors has to be well aware of the market space for that product and need to be aware of the requirement for the product like how often they needed that particular product and how many people are interested in buying it along with that particular brand position in market. This will be a static function until product's replacement is found in market.

#### *J. Retailer Classification And Its Space*

Classifying a retailer as a customer for a distributor will always be an added advantage. For example we assume distributor is cheese product supplier, there are two retailers we classify them as one is "bakery" and other is "General store". We know that many of the milk products are sold at bakery and bakery needs them as ingredient sometimes. On the whole are able to bakery is stable customer and demand at their end will be at stable rate, but coming to general store the stock is truly unpredictable even retailers don't know when stock gets over it may take 1 day, 1 week or sometimes it may take more than a month. This will be helpful for distributors in standardize there stock.

#### *K. Income Level Of Consumer/Purchasing Power*

Income level means we are dealing with the capacity of the consumer will affect in purchase trend of the particular product. Here there are two case studies again to discuss as they are leading in ambiguity.

Case 1: For example, if we consider a low income consumer who is hardly purchasing a some particular product, now the income level is hiked for that consumer so now this consumer we acquire that product in high amount leading to increase in demand.

Case 2: Now for the same consumer we think like this, if his income level is increased then leaving the previously purchased product and now he will go to upgraded version of that product which indirectly decrease the previously purchased product demand. By studying the above two case studies we are unable to say that income factor is an ambiguity in finding out the demand on basis of income level, but yes it is dependent on it and varies.

#### *L. Demand Curve Analysis*

This is one of the traditional method for analyzing the demand by plotting the graph between the price and quantity. This also includes by keeping the factors like taste and preference, market size, substitute goods and complementary goods, income level etc along with the coefficient. This coefficients are maintained by amount of contribution in variation. This variations again generated by the surveys and real time consumer interactions etc which are most of the time found to be not accurate enough to say that and also sometimes people tend to fake the review.

Here this curve is graph between price and quantity, so we are able to say either price or quantity by keeping one of it as constant like  $c(\text{quantity}) = a - b(\text{price})$  here  $b$  &  $c$  are constants regarding price and quantity and 'a' is a constant which is based on all the factors according to the contribution they do in calculating demand but excluding income, Trend/fashion for product etc but fashion for product give a tough factor and cannot be ignored but see this curve based analysis are restricted to for few cases. Whenever there is a change in factor quantity there is a shift in graph.

This price vs quantity analysis will help majorly for distributors, since they are the one who majorly deal with the product quantity for orders and stock. But this dependencies most of the time found to be disproved and covered by other factors too.

### III.CONCLUSIONS

This paper reviews about the factual studies of the demand for a product and how it is going to effect the other products and points to keep in mind for a distributor in his value chain. This would help out in analysing the demand for a product from all aspects, so that a distributor is able to forecast his business who are always bear the risk of CPG industry.

Forecasting the demand for a particular CPG product and predicting the stock quantity to be needed is not only depended on data recorded or annual revenue, it also depends on the various factors and demographics. For this CPG market arena, domain experience plays a vital role and distributors has to be in adaptive way so that whatever the market situation is distributor has to be ready to meet demands by keeping all the factors in mind. According to the market situation for a product's distributors should act accordingly for each and every factor on how it is behaving. with the above solution we can reduce the redundant work in making analysis with supportive products which may be helpful for importing.

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