# Introduction

The world of internet is progressing towards making individuals’ life easier to live. It does it by means of various appliances, gadgets and online services by which an individual can either take his products to the world or get benefitted by the ones provided online by others. In the shopping world too, the benefits are realized by society, where not only customers are happy buying their needs online at competitive prices but merchants also are able to reach to very large volume of customers and hence able to register large profits through big volume turnover.

Retail shopping portals provide customers an ability to choose their products from among thousands of options available and buy them online with hassle free home deliveries. They also provide ability to return some goods if not found suitable to one’s choice. Retail giants are offering lucrative discounts and cash back options in order to be ahead of their competitors. Merchants can do that because they have reached to the remotest customer in the region who carries a smartphone, which makes them deal with huge volume of goods. So gaining even a smallest profit per unit of sale enables them to earn huge profit figures. Sharing some portion of their gains with customers helps increasing the customer base as well as customer affinity further and this cycle continues.

Along with these “e” initiatives there are parallel initiatives such as “curbside” are also picking up well. A person can place an order to the third party agency through their mobile app/website, mentioning the name of the retail outlet/mall(s) of choice and, can receive his/her package on the way home by roadside “curbside” outlet. He saves significant time in finding closer parking for his car, spending few hours together in the mall as well as in the billing line every day/week/month and still have control on what is he buying and from where he wishes to buy.

The most important benefit of both these initiatives is, “lot of valuable time” that a person can save which he can spend on “better things”.

Growth of such initiatives clearly indicates that customer’s convenience is playing major role in growth of e initiative as well as hybrid initiative. The notion of “Time is money” for a customer is really playing very well for the merchants. Any innovations which will add value to the customer convenience are going to be the key to the profound success in retail business.

It is giving rise to tougher competitions. Though competitions are posing bigger challenges in front of merchants, they are benefitting the customers as they are getting more options to choose from. They can carefully compare the prices being offered by different competitors and choose their supplier based on the lowest price offers for the desired brands.

Merchants are making all efforts, to get their existing customers remain associated with them for any of their shopping needs. But due to price wars and competitive quality of service customers may not be in a position to appreciate the affinity with a single merchant.

## Online selling Trends

Shopping portals are primarily of two kinds: the ones which are launched by merchants themselves and responsible for attracting and retaining customer base in order to remain in the market. In this case the extent to which benefits can be provided are based on how that merchant is financially doing and what is his appetite to face the brutal price competition.

The second category of portals is the ones which are launched by some third party IT organizations (example: Amazon, Alibaba) and provide online platform for merchants across the region to promote the sale of their goods using it. In this case the benefits to customers are provided by the merchants who are hosting their products on the online platform and the owner of hosting platform earn their money by charging some commission from merchants for enabling their business on the hosted platform.

The self-hosted portals, incur considerable additional expenses as they have to manage the IT services behind the online portal, in addition to their actual business. But they have a better opportunity to create their brand proposition, as they are known by their portal name. Also they are free to apply/change their shopping/pricing/discounting rules.

Third party portals on the other hand enable even smaller merchants to take their products to the masses and thus help upcoming businesses/product/services to grow faster using their infrastructure. They, on the other hand are restricted on the pricing/discounting rules. Also their own brand name may get shadowed by the brand name of the third party portal on which they are running the business. They can run only those shopping schemes which are provided by hosting platform.

Materialization of a customer to a merchant is the result of

* Lot of advertisements/promotional campaigns to establish themselves in the market as a brand
* Continuous efforts of attracting new customers and engaging earlier customers by offering competitive prices,
* Collaboration with payment instruments( credit card providers, PayPal, apple pay etc.) to provide attractive payment options and
* Assured quality of products/services being offered.
* Customer’s earlier buying experience with the same merchant.

Among the above mentioned contributors of successful business, the last contributor is a result of all earlier contributors.; i.e. Unless customer gets good quality service from a ‘well known’ merchant ,at a discounted price he may not be fully satisfied with the merchant.

In order to get a customer into habit of buying products always form same merchant, gathering of his multiple experiences with same merchant is the key to the success. Merchants are spending hell lot of money just for this purpose.

A concrete step towards building multiple good experiences with a merchant is to sell good quality products/services so as to enable customer consider same merchant when same products/services are needed. Consider a portal selling vegetables and fruits (bigbasket.com). If customer gets good quality fresh vegetables and fruits from a merchant he would surely go back to same merchant next time. This is how long term affiliation can be built between merchant and his customers.

But selling good quality products alone may not ensure customers’ long term association as

* Multiple merchants may be selling good quality products.
* Branded products have established quality standards. So customer may not see any advantage of buying them from a specific merchant instead of other.

# Buying Trends

When we consider patterns in customer buying of their needs, primarily two buying trends emerge out based on their need patterns.

## Instantaneous Buying

Few products are required by the customers on need basis and nature of need is spontaneous, triggered by some incident or occasion. Customer buys a product as a response to this trigger. Example: Customer buying a new headphone when his earlier one breaks down OR he wishes to upgrade to a latest one OR he/she wishes to gift it to someone.

Customer buys a new mobile handset as a result of breakdown of earlier one OR he/she wishes to upgrade to a newer version with more speed and capabilities.

Customer buys furniture when he is fed up of using the existing one OR it is broken OR it does not match the new colour scheme/theme which he/she has adopted for his house OR when he buys a new house.

Due to spontaneity of need and its trigger/event based nature, periodicity of buying such products is not fixed. Usually products purchased in instantaneous buying patterns last longer/used for relatively longer period. Next time when buying the product under same category, customer’s choice may have changed due to changing trends. Example: A customer who had bought a Nokia Lumia phone (Windows based) may want to opt for an Android phone, as it is currently more popular and then try for some other brand. Similar behaviour may be observed while buying fashion apparels (Jeans, trousers etc.).

Similar to periodicity and choice customer’s association with merchant may also change. Customer may not buy the product from the same merchant every time. He/she will first surf available product catalogues provided by different merchants, compare prices and then decide from which merchant the product should be purchased. For non-branded/trivial products where price variations are huge, lowest offered price is usually most significant determination factor.

Thus customer’s association with merchant for buying a product is more “instantaneous” in nature. Customer approaches desired merchant (either physically or on online portal) makes his purchase and walks away. There is no commitment from either side that purchase of same/related/similar product next time will be done by that customer from the same merchant.

As customer’s affinity cannot be ensured in sale of these type of products, the main revenue/profit determination factor is the volume of sale of these items. Once a customer purchases a product from the merchant, instead of tracking the same customer for probability of him/her coming back to same merchant next time, the merchant focuses on acquiring new customer so that overall volume turnover of sale will increase(at least remains constant). Though by offering lucrative discounts/cash back offers as well as ensuring sale of good quality products, merchants try to create an opportunity for gaining the same customers back repeatedly, there is no science by which the same can be assured and predicted.

Such an “Instantaneous” nature of business poses multiple challenges in front of merchants.

The first and foremost challenge in front of any merchant is to keep the business in a predictable state. Merely increasing customer base for some period does not suffice the need as such as growth may be unpredictable/short lived. A merchant is considered to be doing bad if a customer who has purchased some products from him in past does not turn up again to the same merchant. So even if merchant’s business is growing due to acquisition of new customers, its stability will always be a question mark if at least some percent of these customer do not come back to him.

Second challenge is associated with keeping control on offered prices by controlling expenses and waste. Merely making efforts to gain new customers does not enable merchant build precise business forecasts, because probable new customers are in thin air and it is impossible to predict if they will really materialize. There may be even tougher challenges associated with demand due to varying customer density as well as varying needs from new coming customers for each product across geographies, periods and demography. For example customer base in cities prefer different product brands than those in small towns. Moreover due to difference in usage patterns the consumption is different.

Unpredictable demands adversely impact procurement of goods, inventory management, operating expenses and may lead to either customer dissatisfaction due to “out of stock” kind of situations or lot of wastage due to expiries of batches of goods. Discounted prices are determined mostly based on certain demand predictions and assuming assured revenue/profits. Such an unpredictability shatters these assumptions and ultimately they result into vast underperforming of business on revenue and profit fronts. Unpredictable demand also significantly impacts operating expense per unit of goods, as utilization of resources such storage space, electricity charges, expenses on operating staff, expenses related to delivery of goods as part of supply chain etc. are impossible to optimize in case of unpredictable demands.

Different merchants try different options to circumvent around this problem of variable/unpredictable demand. Some may prefer to manage their own stock of inventory using some statistical analysis of historical demand information. Some try out “Just In Time” strategy where they collaborate with regional/local/on site retailers and fulfil local orders through them. In turn the local retailers pay them commission for awarding business.

In first approach the ‘per item’ net profit is inefficient due to inability to control wastages, operating expenses and product pricing.

In second approach merchants rely on the local retailers for inventories being managed by them, quality of the goods as well as services provided by them. They in turn gain much less gain as compared to first approach because they themselves are not dealing with suppliers in wholesale but rather selling items which are purchased by their regional counterparts. As the regional purchases are negligible in volume as volume is sufficient just to take care of regional needs. Hence the purchase price per unit of goods is much higher as compared to first approach. Benefit of this approach is saving of inventory cost, transportation as well as zero accountability of wastages.

These challenges are much bigger due to their wider reach. They use sophisticated analytics tools to predict the consumption based on historical trends. But the percentage of assurance in this predictions is close to 0% because nature of business is instantaneous and there is no guarantee that a customer once made purchase from a merchant will come back again to the same merchant.

Another challenge is to determine the right price of every product being sold. Due to turnover of huge volume of goods, even if a single penny is earned on a unit as profit, it yields millions at the end of a day. The same is inversely true if single penny per unit is lost.

Price of any product is mainly driven by its demand (against all its substitutes) as well as many other factors such as

* Cost incurred (in addition to purchase price of a product) to sell product in market (fixed + variable cost)
* Price of competitor products
* Price offered by competitor merchants.
* Geographic +demographic aspect determining purchasing power and perceptions of buyer population

Considering “demand” as the primary factor driving offer price, see the following problem for illustration.

If product X has breakeven price (purchase price +costs per unit) of 50 Rs. and MRP as 110 Rs., in order to get profit of 100,000 Rs. On sale of X, at what price it should be sold?

In order to solve one should know the “demand forecast” for product X. If expected demand is 2000 units, then offered price should be 100 Rs. so that.

2000\*100 – 2000\*50 = 2000\*50 = 100000 Rs.

Whereas if expected demand is 4000 then price should be reduced to 75 Rs.

4000\*75 – 4000\*50=4000\*25=100000 Rs.

Now if the prediction system predicts a demand of 4000 Rs., based on which unit price is determined as 75 Rs. and actual sale is 3000 units then profit is reduced to 75000 Rs (which is 25% less than forecasted profit)

3000\*75 -3000\*50=3000\*25=75000 Rs.

If the market is very volatile, and merchants are unable to predict demand, they face real challenges in determining prices. The price per unit that they have offered(with some discounts) , anticipating certain sales growth in coming months may turn loss making as the predicated growth did not happen but the cost being constant.

In case of shopping malls they offer the prices based on the geography where they are located. In areas having majority of wealthy people, charging too low price may negatively impact sale as buyers can start suspecting on the quality of products, which are sold at cheaper prices. On the contrary if prices with heavy discounts are not offered in the areas where less wealthy people are living, it may negatively impact the sale.

Online shopping sites may not have this luxury of charging different prices in different geographies because the same site is accessible from all locations.

When a competitor merchant drops price of a product, others have to introspect offer price of the same product, else there is a likelihood of lowest price offering merchant will pull away customers from all.

When cost of substitute of a product (competitor products) goes up it may positively impact it’s demand. Thus substitute price also plays a major role in price determination.

All the factors discussed above contribute to determination of price being offered to customers. As and when these factors keep changing the offered price keep moving between breakeven price and MRP.

In reality it is extremely difficult to predict customer behaviour in volatile market situation. His buying decisions are impacted by inflation, change of taste, offers by competitors, performance of substitute products etc. In instantaneous world it is extremely difficult to keep offering prices which can keep customers bound to the same merchants.

## Periodic Buying

If one categorizes the range of retail products being consumed by an average customer it can be realized that range of few products is repeatedly required by customers and their usage frequency is predictable. Example: toothpaste is required every month (numbers depending on family size), milk is required daily, washing and body soaps are required in some quantity every month, medicines are required at a prescribed time periods.

Needless to say, their consumption pattern and hence buying pattern is almost predictable. Each product may have its own consumption pattern.

Example: In my family I consume two Miswak toothpastes, one 200 gm Taj Mahal tea pack,3 packs(10 in each) of Huggies diapers for my baby,4 lux soaps, half kg of rice, half kg of lentil, two body sprays,2 bottles of Dove shampoo,1 Kg sugar,…. Etc.

Other characteristic of periodically needed products is that brand preferences per person/family are usually fixed and rarely change OR they change over a relatively longer duration. Typically people do less experiments with food items, health safety related products and hence their preferences vary rarely.

If you apply the same rule for health associated products such as protein drinks/health supplements, medicines, medicated oils, skin creams, hair dye and certain range of health related products such as diapers you will see that it follows exact same behaviour as described above.

In retail/medicine world there is more likelihood and probability of buying a package of periodic products from the same merchant and at fixed intervals. Variations is each of their prices may not make a significant difference on buyer’s pocket and hence people do less scrutiny while choosing a merchant for buying these type of products. Of course It should not make merchant take his/her customers granted for an assured business. They should have policies in place which should influence customers to buy more and more items from them and for longer duration.

Thus there is a more likelihood of retaining customer affinity in case of products exhibiting periodic buying patterns. So in addition to increasing volume of sale by acquiring new customers merchant can take efforts to retain existing customers in such category of products.

If you introspect range of all products that you are using in your daily life and list them down you will realize that it has a significant proportion of the products which have been periodically bought by you.

If you compare the impact of demand predictions in managing inventory, operating expense decisions thereby determining right offer price per unit in products exhibiting periodic buying pattern, you will realize that the percentage of accuracy can go up to 70% as compared to products exhibiting random buying pattern and random selection of merchants. This is because a customer buying two Colgate toothpaste a month will continue buying the same volume ever month and probably buy them from same customer. In other words you can say that existing periodic buyer may remain associated with same products and with same merchants for much longer duration. Hence their future demand of those products from the same merchant is not just a prediction but it is real.

The scope of this analysis is to focus on the trading of products which exhibit periodic buying pattern and study how their business by means of subscription not only benefits the merchants but also helps maximize gains of the customers.

# Subscription space

As we have seen above in case of periodic buying needs sustained (not just increasing) customer base by means of establishment of long term relationship between merchant and customers is possible in a large segment of products family. The opportunities are not obvious just because these products are periodically needed by customers with a relatively fixed periodicity.

Since customer has so many options to buy his periodic needs, if he does not have any specific incentive(s) to buy them from the same merchant he may not commit a long term as well as long lasting relationship with a merchant. Merchant needs a business model by which he/she can exhibit respect towards loyal customers by maximizing their gains out of this relationship along with maximizing his own gains. A systematic engagement with every customer where customer gets more & more benefitted by buying more volume of goods and by buying for longer duration from the same merchant, is essential in ensuring predictable and sustainable business for the merchant.

The “Subscription” concept tries to complement the expectations of customers to obtain their “periodic” needs with maximum benefits, with merchants who wish to retain their existing customer base for as long duration as possible (in addition to gaining new customers) in order to ensure a predictable, sustainable and thereby prospering business.

Concept of subscription is not new. It has been popular in publications business since long time. In IT world it has been practiced for SAAS (Software as a Service) business too. There are good evaluation metrics developed for SAAS to measure the effectiveness of the SAAS model. In telecom business, too different tariff plans are based on subscription model.

In simple understanding a ‘subscriber’ is the one who subscribes (registers for periodic receipts) for a set of products (articles and/or magazines in case of publications) or services (software licenses in case of SAAS or mobile plans in case of telecom business) by getting into long term agreement with supplier and keep on receiving these products/services periodically at a predefined interval. Periodic deliveries of desired goods/services save subscriber’s efforts on procuring them every time by new agreements with different suppliers or renewed agreements with existing suppliers.

In publications as well as SAAS business models the market and cost vulnerabilities are limited and predictable as compared to retail business, mainly the one which is related to everyone’s daily needs.

Subscription to products in other periodic selling business (such as retail, health products and medicines etc.) is not so popular/ practiced. It may be because in volatile market situations and due to instability of product prices there is no business model available which can ensure sustainable business along with assured(and growing) gains for both stakeholders (subscriber and merchant).

We will see the benefits of a true subscription business model and consider them as objectives to define a subscription business model which can be applied to periodic selling retail market as well as other similar markets( such as medicines and health products).

Then we will work on each of these objective and define business rules and processes for the business to abide by them. If all of these rules and processes are strictly adhered to by the practitioners they will ensure a sustainable and prosperous business proposition for them.

## Long term association

The basis and intent of subscription concept itself is to establish a long term association of customer with a merchant, where he/she agrees to receive a fixed set of selected products repeatedly at desired intervals. That is where a customer is termed as ‘Subscriber’.

The first obvious advantage for a subscriber of ‘subscribing’ is ‘saving of lot of time and energy on buying his periodic repeatable needs’. An order needs to be placed by customer just once for a fixed length of period, mentioning the number and periodicity of every item being subscribed. Packages with appropriate product contents are delivered to his doorsteps on completion of every delivery period. No periodic visits to malls, no standing in long billing queues, not even periodic ordering online thereby paying different prices for the same product at different times; Order once and you are done for subscription period. Let’s term it as the “Convenience” aspect of subscription model. It is one of the attracting force for a customer to turn into a subscriber. A Merchant who offers a subscription business model thereby allowing a subscriber to register for set of products at respective delivery frequencies and delivering branded as well as good quality products precisely at the defined frequencies to the customer’s doorsteps is fulfilling first business rule of subscription business model.

But merely “convenience” may not ensure long stream of subscribers getting associated with merchant for longer term. A subscriber may wish to get into a longer term agreement with a merchant also because he/she would expect extra benefits for his/her “loyalty’ in addition to the “Convenience” aspect described above. Merchant should have proposition to answer “What’s there in it for me?” question from the customers who are intended to get into long term associations with him/her.

A successful merchant who arranges a business proposition so as to attract such longer term agreements with his customers then have stable and predictable business as he almost precisely knows the demand of each of the products being sold and then can focus his efforts on minimizing wastage as well as negotiating better rates from his suppliers.

Conventional Instantaneous business measures growth in terms of volume of sale. Since it does offers a facility to retain existing customer base, it does not track the duration and volume of association with each customer and merely measures /predicts growth based on actual volume of sale against predicted demand and per unit gain aggregated into total gain.

Subscription business is measured in terms of volume of incoming (new) customers, duration of merchants association (subscription) with each of them, their purchase volumes (basket sizes), rate of customers churning, and thereby overall revenue, gross and net profit. It means different business proposition is needed in case of subscription business as the intent is to attract new subscribers, retain existing subscriber as long as you can, attract them to buy higher volume of goods per period, reduce churning (as it indicates subscriber dissatisfaction) and measure the success of business not only in terms of attracting high volume of subscribers but also in terms of longer average retention rate and minimum possible churning rate.

This is because sustainability of business is the key to success for subscription business. If large volume of new subscribers are getting added to merchant’s portfolio, but large volume of subscribers are getting churned out in between their subscription period, then something is going wrong in the business and merchant needs to introspect and correct wherever required.

Since an average customer in subscription agreement typically subscribes for more than one product as well as for more than one time, it is appropriate to forecast and measure the business in terms of subscriptions instead of subscribers. This is because

* Subscriber may subscribe to more than one product per unit period and for definite periodicity and duration.
* The same subscription repeatedly adds to revenue/profit for the agreed subscription period.
* A subscriber can change his total subscriptions one or more times during subscription period resulting into changing revenue for from the same subscriber.

Also if subscribers are changing their product subscriptions multiple times (replacing products, removing products from baskets) during subscription period, it may negatively impact forecasting and management of resources.

## Multidimensional Benefits model

As indicated above merchant needs to answer “What’s there in it for me?” when a customer is intending to turn into a subscriber.

When a customer wants to buy set of products, he may choose products based on two criterions.

* Brand preference: Out of various brands available which brand he/she would like to buy.
* Quantity required for the desired time period.

In case of grocery goods, if a subscriber is buying 10 different products, he may be firm about his brand choice for 7 of them, but may be flexible about the brands for remaining 3. These numbers are just for illustration purpose and may vary from subscriber to subscriber. But this behaviour is mostly common across all type of subscribers. Example: As a customer I would not like to use any toothpaste other than Colgate Total, but in case of biscuits I may be flexible. Rather I may wish to try some new brand of biscuits.

Cost sensitive customers are more flexible on brand preference as they may tend to choose the products which provide them more cost saving or some added benefits. The choices (and quantity) are also influenced by the ‘added’ tangible/intangible benefits being offered by merchants. The duration and quantity of subscription gets positively impacted by these added offerings.

The above description may not be applicable to buying of medicines, as they will be mostly bought based on doctor’s prescription (though there too, is a flexibility to buy reputed brands or generic medicines)

Now when the customer wishes to turn into a ‘subscriber’, he will obviously expect some added benefits for getting into long term relationship with merchant.

So what are the benefits that he can expect vs. merchant can offer?

Let’s see what are those few “toppings” (on top of this basic advantage), those can be offered so as motivate customers turn into subscribers.

### Topping 1: Discounted Price

Since success of subscription business lies in

1. Achieving large subscriber base,
2. Ensuring prolonged relationship with each of them,
3. Attracting them to buy maximum goods and
4. Minimizing churning of existing subscribers

The total benefits to be awarded to subscribers should be determined according to each of these attributes.

A Merchant should be able to offer products at discounted prices (prices lesser than their MRP) as an offering to subscribers for registering subscriptions with that merchant. This discount is to reward his association with merchant.

But how will this be different than those in instantaneous business? Even merchants into instantaneous business are also offering products at discounted prices in order to attract customers.

### Topping 2: Committed Price/Discount

When a subscriber subscribes to a product for a six monthly/yearly subscription so that he would expect that product to be shipped to him/her weekly/monthly/quarterly by a specific quantity, he/she is registering to buy the product for multiple times. He/she is doing that because the discounted price offered by the merchant is appearing a good deal to him. The challenge is on the merchant side. Can merchant sale it for the same price during his whole subscription period?

Merchant has to make provision in such a way that he/she will succeed in providing some sort of price commitment at least for some products, if not all. A merchant marks products for different types of price commitments or no commitments, based on experience so that subscribers subscribing to those products are charged accordingly.

Subscription business model assumes three types of product pricing categories which will be offered to subscribers based how these products react to the changing business demands.

1. Price committed products: many branded products such as tooth pastes or shampoos do not fluctuate greatly on price fronts. Their price gradually increases as response to inflation or increasing demands but the overall rise in a year is within acceptable limits. They are termed as “Price Inelastic” products. So the merchant may find it safer to commit prices of such products to a subscriber for his/her entire subscription period.

In case of price committed products, price of a product **committed to a subscriber** should remain same until end of his current subscription period. This should hold true even if the product/merchant has started incurring losses on that product OR cost of that product gets changed one/many times during that subscription period.

The idea here is not to commit same price to all the subscribers subscribing at any time. Every hour/day/week, based on certain supply demand dynamic a new offered price is published for every subscriptionable product. At that instance whosoever is subscribing for that product will get the recently published offered price. Thus subscribers subscribing on a different day may be committed a different offered price for the same product. Since the maximum allowed subscription period can be restricted to a reasonable period (say one year) the committed price is expected to be served only during that period. After committing a price on a day if price undergoes change due to increased demand or due to change in purchase price due to inflation, the newly registered subscribers will get new offered price. But earlier committed subscribers (with old price) should be served with the older price until the end of their current subscription contract period.

1. Percentage discount committed products: Some products may fluctuate more frequently and considerably but they provide relatively constant margin. These are “Price Elastic” products. Committing absolute price for entire subscription period may be risky but instead it is relatively safer to commit percentage discount on their latest price.

In case of percentage discount committed product the subscriber should get a constant committed percentage discount on the latest MRP/offered price at the time of every delivery. In this case the actual price to be paid by subscriber will vary as the percentage discount is calculated on latest price at the time of every delivery.

1. No commitment products: Many products mostly categorized under primary needs such as food grains, edible oil, sugar vary so unpredictably on price front that it is impossible to either commit price or percentage discount for them for entire subscription period. They are highly “Price Elastic” and gains on them are also not ensured.

In case of no commitment products the subscriber has to pay latest offered price on the product at every delivery. Some time it can be much lesser than the one shown at the time of subscription and sometimes it may be considerably more.

The same product may be categorized differently in different countries in either of the above three categories, depending upon goods producing percentage and demand pattern. So merchant need to mark them accordingly, depending upon country in which products are getting sold.

### Topping 3: Volume based /Duration based benefits

The discounted pricing model though offers gains to subscribers, it does not distinguish subscribers who are subscribing for larger volume of items against those who opt for much lesser volume. Similarly it does not distinguish between subscribers having much longer subscription period as against the others. So clearly product offerings at a discounted prices would be necessary but not sufficient to attract people for subscriptions.

A subscriber who is subscribing to longer term association with merchant as compared with other subscribers should be rewarded benefits in proportion to his/her duration of association with merchant.

A subscriber who is subscribing to more volume of good per subscription period should be rewarded benefits in proportion the volume of subscription.

A subscriber who has completed agreed subscription duration and adhered to agreed subscription content should be getting all above benefits. A subscriber who may be revoking his/her subscription before subscription end date should get benefits in proportion to the duration of active subscription life. Similarly a subscriber changing his subscription content during subscription period should be rewarded benefits in proportion to revenue that he/she is contributing to the merchant.

### Topping 4: Loyalty based benefits

All above benefits are limited to an active subscription contract. What if a subscriber who completed his current subscription and renewed it again for the future period. So his loyalties towards the merchant should be rewarded in terms of some benefits associated with loyalty.

The above multi-layered benefits model which greatly benefits not only to subscribers but also merchants is only possible in subscription business approach. Those subscribers who are contributing to more assured business for merchant as well as to maximizing his/her gain will be in turn maximize their own savings in form of multilevel benefits as described above.

Another intangible benefit of this multilevel benefits model is that it is not possible to do an ‘apple to apple’ comparison between the gains by two subscribers.

# Objectives of Subscription Business Model

Let’s lay down the main objectives in front of the stakeholders if they are to be benefitted by following subscription business approach. These objectives are based on their obvious expectations from the long term relationship notion in subscription business model as well as few innovative advantages which are available due to nature of business model

## Subscriber centric objectives

### Quality

Regardless of nature of business (periodic or instantaneous) quality of purchased goods has always been and will always be the first criteria for any customer. In case of branded products this is not needed to be handled by merchants as customers are already associated with some brands or the other. This may be an issue for non-branded products such as fruits and vegetables.

So merchant has to ensure that whatever products (branded or no branded) products he/she is offering they should be of good quality. Many new/upcoming products get launched in market with highly competent prices as well as lucrative margins for merchants. Hence merchant as well as subscribers may get tempted to offer them/buy them. But if these are found to be of inferior quality subscribers will not blame their own choices but will blame the merchant who offered these products.

### Convenience

Lot of convenience, by buying things online has been one of the main motivation factors for customers.

* Subscribers will be happy buying their periodic needs online through a self-intuitive user interface, so that they will save lot of their time going to market for shopping of these items, standing in long billing queues etc.
* Subscribers will want to get the purchased goods to be delivered at their doorsteps, mostly on precise time. These are periodic needs; so they may not wait for the goods to be delivered later than the day when they need these products. As much as possible no delivery charges should be explicitly demanded from subscribers but instead these should be adjusted against the overall gains from subscribers due to their long term associations with merchants.
* If subscribers are subscribing for multiple products, they may not need all of them at the same interval as each of their consumption rate may be different. Example: customer may want two toothpastes per month but need toothbrushes to be delivered every four months.

So they will need different items to be delivered to them, at different times, closer to their need time. It means that subscription business should manage multiple deliveries for a registered subscription, each of them having their own periodicity and these deliveries are received by subscriber close to their needs. In order to optimize on the delivery cost overlapping product deliveries should be clubbed together (example: items to be delivered quarterly should be delivered along with every third delivery having items getting delivered each month) and the timetable of deliveries will be projected upfront to the subscriber and his/her consent is taken on this delivery schedule.

* Payment of procuring goods is a challenging endeavour in subscription business. This is because subscriber will be subscribing for deliveries for now as well as for coming days/months. It may not be appropriate to charge all subscribers in advance for the whole subscription. This is because total subscription amount may be huge which a subscriber may not be ready to invest upfront. Moreover as subscriber may be altering his/her orders during subscription period and hence due amount will also be varying. On the other had it may be annoying to claim the dues periodically through monthly reminders. He/she should be provided easier options of payment suiting to his/her appetite. Some may prefer all payment to be done in advance whereas others may prefer cash on delivery kind of options. Few may make some payment in advance but process the remaining payment in instalments.
* Money should not be the only instrument for making payments. When subscribers are subscribing for large volume of goods or for longer subscription duration they should be rewarded with appropriate number of reward points proportional to the volume and/or duration of subscription. In addition recurring renewal of subscriptions with same merchant should also enable them to earn reward points on account of their loyalty with same merchant. They should have an option to pay their dues using the accumulated reward points. It is synonymous to an investor making investment in a business to grow it and gains returns from the business in proportion to its growth and his/her contribution to the growth. It will be a very big “feel good” factor for subscribers that their current/earlier associations with a merchant is paying them off and thus motivates them to retain this association for even longer period and for even bigger volume of orders.

### Benefits

We have already discussed in multi layered business model that subscribers should be benefitted on account of his/her association for merchant, for the duration of association and for the volume of purchases that he has been registering with merchant. The benefits model should attract a subscriber to subscribe for more, to subscribe for longer duration and to subscribe again and again with the same merchant.

* For periodical needs such as grocery items or medicines, subscribers may prefer to subscribe for them if these are offered at some discounted prices. This is how a subscriber will maximize his/her gain as the same item will be shipped to him periodically for longer duration with discounted price. As merchant is dealing with large volume of goods he should manage to determine the offer price of every product based on its demand vs supply dynamics and gains coming for it in such a way that he/she should be able to offer subscribers most of the products with attractive discounted prices and still be able to registers huge profits with each of them.
* Customer happiness may ruin away if merchants start charging considerable shipping charges on the delivery packages. In case the shipping charge grows proportional to package size/weight it may further add to customer dissatisfaction. The sole purpose of making a subscriber subscribe for more and more items will ruin away if shipping charges increase proportional to package size. They may find it more appropriate to buy these items from a nearby mall (although it is less convenient).It is for the merchant to manage operating expenses in such as manner their effect should not be visible to the subscribers through some sort of shipping charges.
* The most difficult problem to handle in case of subscription model is the product price to charge to a subscriber during whole subscription period. Should subscriber pay the same price for a product throughout subscription contract? If price of a product increases, what will be its impact on existing subscriptions? As far as a subscriber is concerned he/she would not want to see multiple prices for the same product during subscription period. He/she may feel being cheated as some price was offered for a product (due to which he/she was tempted to subscribe to it) and later the price was increased. A merchant should have a mechanism to give a feel of stable prices to a subscription, though price of the same product are going to vary during some ongoing subscriptions. We will clarify it while detailing out on product pricing categories and pricing mechanisms.

### Value added benefits

Some segment of customer base perceives different products at lesser prices than their offered (discounted) prices. Such price sensitive customers may compare offered prices of different branded products at different shopping malls/portals and selectively buy their needs from different shopping malls/portals so as to maximize their overall benefit. Also their choice of a merchant keeps on changing based on who is providing maximum benefits for each of their needed product at every time.

If customers are provided ‘package’ level benefit as an alternative to/in addition to product level benefits, they will be tempted to add more items in their package(because more the package amount more is the benefit),thereby buying all their needs from same merchant. Also the more time (more subscription duration) they keep buying from the same merchant more will be their benefits.

Notion of package level benefits is that, when a subscriber buys a goods worth ‘X’ amount and other subscriber buys worth ‘2X’ amount, each of them will be awarded some package level benefit proportional to the amount of goods each of them is subscribing to. In this case the second subscriber should be appraised with more benefits, as he/she is contributing more to merchant’s overall revenue and profit. This is how second customer will get a feeling of added gain and it will add to his satisfaction level.

### Rewards for loyalty

If a subscribing is periodically buying his needs from the same merchant, is he/she being rewarded for his/her long term affiliation with that merchant?

Looking little deeper in this kind of relationship, a subscriber is getting into long term agreement with the merchant where he promises to buy certain (perhaps same) set of products periodically for the agreement duration. So the merchant is awarded with an assured business for a fixed duration. It is resulting into merchant making more precise demand predictions, negotiate better on price front, reduce losses, optimize on operating expenses and maximize self-gain. Hence such a subscriber loyalty with the merchant should be rewarded in some form or the other. It can be in the form of additional discounts or cash back schemes or loyalty/reward points etc. Thus this loyalty makes the subscriber win more benefits on top of product level and volume based benefits.

As merchant is automatically wining a long term relationship with existing subscriber, he can focus more on winning new subscribers.

There should be strategies in place which will compute the loyalty units for every customer based on duration of their agreement as well as number of renewals of agreements. They should then be converted in the form of benefits such as redemption points, added discounts, gifts etc.

## Merchant centric Objectives

### Sustainable customer base

In case merchant attracts customers to get into such long term association it will be a complete business transformation for him.

His/her relentless efforts and investments to obtain new customers as well as retain existing customers will be greatly saved as customers are turning into ‘subscribers’ with the intent of not just buying once but buy periodically and hence remain associated with him for a longer duration.

If merchant takes appropriate measures to ensure longer term association of existing subscribers by proportionately rewarding them for their loyalty/relationship, it helps create affinity for him among subscribers. Such a relationship is much more precious than just a momentary commercial association for the purpose of trading.

Moreover such relationship also enables him to know his customers better, by knowing their choices/preferences, their usage patterns, their periodic volume needs, cost vs. brand preferences etc. This data is extremely valuable asset for analysing and categorizing customer base, so as to offer them better value proposition based on their personas. This too will help affinity towards him.

So when merchant is adopting subscription business model the model should provide him appropriate metrics which are not just useful to measure business growth but should also be useful in

* Analysing customer behaviour
* Current buying trends
* Customer expectations
* Individual product performance graph
* Identification of products which prove themselves eligible for subscription model whereas some others which may prove to be not suitable for trading through this model
* Results of efforts put on cost optimization
* Areas where investments need to be increased instead of spend optimizations

Merchant can make strategy decisions based on these inputs and tune the business so as to improve further on current improvements as well as avoid policies which are hindering customer experience.

### Optimizations through Precise Predictions

Through subscription business model merchant should be more equipped to make considerably precise predictions related to business forecast. 60-70% of his future business will be the actual on-going subscriptions, which are going to continue in near future. Remaining 30-40% will be predictions about new subscriptions based on current trend. This is how the future prediction are much more precise as compared to those made in case of instantaneous business.

Such precise predictions will make him better prepared to manage goods as well as resources well. As he almost exactly knows how many subscribers to serve, at what periodicity, with what quantity, he can precisely order goods for current/future period.

Moreover he knows how many baskets/packages are to be delivered, at what periodicity; with what weight (per basket) he can precisely budget for transportation/delivery cost. Such information not only helps him manage budget for theses expense but also help him negotiate better with logistics vendors, if any and ensure better rates from them.

Due to predictable demands and logistics, merchant is in a better position to optimize on personnel cost of infrastructure etc. etc.

As the inflow and outflow of goods is assured, he can negotiate better with suppliers (may be getting into long term supply agreement with them). It will help him reduce wastage cost to minimum. In turn he can launch his products at competitive prices which will be difficult for his competitors to beat.

The reduction of wastage which is improvising his gains can be used to feedback subscribers in terms of discounts as well as different form of benefits and this process should be recursively goes on which is improving customer satisfaction more and more.

### Optimization of Operating Cost

Imagine that a shopping portal is trading in instantaneous mode. Customers purchase products and those are shipped to them. Assume that it is dealing with approximately 10,000 customers per month. Some customers make purchase of multiple items per instance, but many of them purchase single item at an instance. So merchant is making approximately 7000 to 10000 deliveries per month. In this it is shipping 10000 to 20000 items (i.e. approximately 1.5 to 2 items per delivery). If average shipping cost per delivery is 40 Rs. then shipping cost per item is approximately 20 Rs.

In all the cases, it may not be possible to absorb the shipping cost by merchant as the price of the content in a delivery is not bringing enough gains for the merchant so as to absorb such a high shipping cost. So in case of shopping of less expensive items, the shipping cost is separately charged to the buyer.

Now assume that same portal is dealing in subscription mode and with same number (10,000) of subscribers. So it will be making 10,000 deliveries. But as subscription is providing better benefits if more content is subscribed to, a shipment may contain 10-20 items. So in same number of deliveries, around 100,000 to 2, 00,000 items are getting delivered. Even if average shipping cost per delivery is 60 Rs. (as weight of delivery increased due to more items in it), cost per item is 3 to 6 Rs.

Due to repetitive nature of ensured business, and cost being less as compared to price of item, it will be more possible absorb this cost in the available gains.

In case future deliveries to be made are already known in advance, logistics costs (storage, shipping, routing etc.) can be better optimized. Such optimizations can add huge gains into merchant’s wallet.

As a summary, when any business reaches at its saturation level, merchants can increase their profits by optimizing their costs per item sold. As we have seen above, a merchant in subscription business has better avenues for the cost optimizations than those available in instantaneous business.

Hence the expectation is, given the average shipping cost per kg of delivery anywhere in the region subscription business model should be capable of deriving per unit shipping cost for each product. This per unit cost should be proportional to the price of the product, though delivery itself is evaluated based on its weight. This is how more expensive products will absorb more portion of shipping cost (for the package) as compared to their less expensive products. Here the assumption is that products with more selling price usually yield more absolute profit (may not be always true).

### Value based benefits instead of competitive benefits

In instantaneous business world, different merchants compete with each other to attract more customers as well as get customers into habit of using them as de-facto shopping channel.

It gives rise to price wars. Many times merchants are ready to bear huge losses, by offering products at dirt cheap prices. Because they think that, cheapest prices visible on their shopping sites, will get their customers into a habit of buying anything from them. Game theory based pricing determination models are being used for this purpose.

In subscription approach the ‘offered’ price of every product should be the function of all of the following

1. Breakeven price of the product, and margin available( between MRP and breakeven price)
2. Current demand of the product
3. Time of subscription(every day new/same price may be available for a product)
4. Total basket (delivery per period) size ,value
5. Duration of subscription.
6. Subscriber’s loyalty with merchant (total duration of all subscriptions with same merchant, number of subscription renewals etc.)

So same product will be offered to subscribers at different resultant prices based on all above criterion.

Due to this it is not possible to compare price of a product on different sites and determine the cheapest option, because price is not only calculated on product characteristics but also on the subscriber’s and subscription’s characteristics.

Instead of giving haphazard discounts on individual products (just for beating competition), benefits for a subscriber can be better organized based on volume of purchase, duration of their association, loyalty, brand loyalty etc. Such a multi layered benefit model not only attracts more subscription but also tempts subscribers to buy more goods as well as extend association for longer term.

### Intelligent Budgeting and corrections

As 70% of the future business is getting registered in advance and remaining 30% is forecasted based on this 70%, the precision in the forecast is higher and it should drive budget provisioning for different cost headers/activities.

Due to precise predictions it may be possible that merchant may be fixing the purchase volume of each product in the beginning by negotiating with suppliers. Hence provision of purchase should be recommended by the business model instead of merchant calculating how much investment is needed for purchasing of goods.

Similarly 70% of the delivery schedule as well as volume per package is known expenses on delivery should also be recommended.

Same applies to investment on goods space, electricity/other operational charges as well as need for staff to manage the business should be recommended by business.

It may be obvious that some products are doing bad and hence more efforts and money will be needed to boost their sale (before concluding on taking them out of the business). If forecasts are revealing bad performers and difference between target performance and actual performance of each of them, business should recommend how much provision should be made on an effort to boost their sale.

Moreover the business should tell the merchant when a slab of budgeted amount should be released for its consumption. Even if annual provision under each expense category has been made, one should also be able to determine how much of the provision should be released in each cycle and how are the cycles scheduled. This way merchant will be notified if out of cycle release of some provisioned amount under a specific category needs to be released. It means that spend of budgeted money for a category is not going as per the predicted path and there is some intermediate surge in demand of money due to some deviation in business. Such an indication of deviation may be a good or bad sign. For example if merchant comes to know that he has to release additional money for purchase of additional goods stock much ahead of its anticipated purchase date, it is a good sign because it indicates that business is growing much faster than anticipated. Whereas if merchant needs to release additional money for branding/advertising expenses of a product or for making provision for additional discounts, out of schedule it means that product may be doing really bad business and hence needs urgent monetary support to boost its sale.

Another approach is to feed back the deviations in anticipated/forecasted demands to the business so that business model should be able to recalculate revised needs for additional/lesser monetary provisions. For example: Sale of a product is exponentially growing much ahead of its forecasted demand. It indicates more provision for purchase of its additional stock. It may also indicates more provisions for delivery expenses as more subscribers are connected to business than anticipated.

If the business rules in subscription business model help the merchant make the budgetary decisions, he will be able to equip himself very well against the dynamics in the market.

### Products collaboration model

In banking business, few wealthy people keep their income in banks in the form of deposits and earn interest on it. Bank uses the same money to lend it to the needed but deserving people and earn interest from them. Bank charges more interest from the lenders than what it pays to the depositors and thus makes money to run the business.

Here the proposition is to have a centralized “Nodal” account where ‘well doing’ products will deposit their “excess” profits. This money is lend to the new coming products or non performing products to launch/boost their business. It can be used on advertising expenses on these products or offering additional/promotional discounts. The “Donor” products will gain credit points in proportion to the contributions that they have made and the “Lender” products will lose credit points in proportion to the amount they lend. This credit history will be used to clearly distinguish Top rated products from the low performing products. In case of top performing products merchant may wish to adopt different pricing strategy due to their dominant/monopolistic business growth. In case of low performing products merchant may work on appropriate business recovery measures or may decide to take some of them from subscription business.

# Subscription – A Multi-layered Benefits Model

Conventional retail business metrics are centred on volume of product sale as the epic around which to measure revenue growth, profit making, losses, operating cost etc. Due to instantaneous nature of business (where association of a customer with merchant and with a purchased product (and its price) is true for an instance and finishes when the product is purchased by that customer) there are no metrics or measures by which customer’s affinity with a merchant is measured or focused on for business growth. Next time even if the same customer is buying (probably the same) product again from same merchant it will be a fresh association and it does not carry any memories of earlier association.

Subscription business needs to fulfil expectations of customers by engaging them into long term and hence its business model should be multidimensional.

## First dimension: Subscriber

Since average customer in subscription business typically subscribes for more than one product as well as for more than one time, it is appropriate to forecast and measure the business in terms of subscriptions instead of subscriptions. This is because

* A subscriber may subscribe to more than one product and for definite periodicity and duration. So instead of volume of product sale volume of subscriptions (each containing multiple product orders registered) is more relevant to the nature of business.
* For the same subscriber a subscription repeatedly adds to revenue for the given subscription period.
* Same subscriber may remain associated with merchant but can change his/her total subscriptions one or more times during subscription period resulting into different revenue for his subscriptions.
* Same subscriber may renew his subscription after existing one has been exhausted. Thus subscriber count remains the same but subscription count increases.

## Second dimension: Subscriptions (Association with products)

When a subscriber subscribes for set of products for some subscription period, he is intending to establish long term association with each of these products, expecting their steady in-flow at a constant price. But the products themselves have number of attributes such as their purchase price, MRP, offered price, which may vary multiple times during subscription period.

* If a product is consistently growing in demand for the stated price, its offered price may need to be increased in order to rip more profits from it. If it does not do well, its offered price may have to be lowered down so as to promote its sale. But if a subscriber has subscribed to that product with a specific offer price, these demand centric price fluctuations should not impact him during his current subscription period, as they may make losing his trust in the merchant.
* Alternatively, its purchase price (thereby MRP) may get changed due to exponential increase in market demand or stock shortage. Hence, its offered price should be recalculated with reference to new purchase price and offered to new subscribers. Again existing active subscribers should not be impacted by this price change.

In case of price committed products, in either of the above scenarios the product still needs to be served with earlier committed prices to existing subscribers (registered before offered price change). The new price will be applied to new subscribers subscribing after the price change.

Thus every product may carry multiple active offered prices (Let’s call them price buckets) at any given instance. Different number of subscribers is associated with each price bucket depending on when they have joined the subscription journey. How to track such price dynamics happening differently at each product level at different times?

Due to the price dynamics when a different price is offered for a product almost every day, it will apply to new subscribers joining since new price is offered.

In case increased price is offered than its earlier offered prices, all existing subscribers are now yielding lesser profits or even incur losses as compared to new subscribers, as they are being served with lesser prices.

In case new price is lower than earlier price then new joining subscribers start lowering profits or even losses, as they will be served with lower prices than earlier ones.

Moreover if the purchase price and MRP of a product increases, thereby increasing its offered price, all existing subscribers are now getting served by incurring losses as they may have been offered prices lesser than new breakeven price.

Such change may happen even daily depending upon volatility in its demand. The same rule applies to all products regardless of if they are price committed, percentage discount committed to none committed.

The profit and loss dynamics resulting from the price dynamics can be limited by

* Anticipating for future price changes in every price being offered for a product and compensating for forecasted losses in current offered price in a piecemeal way AND/OR
* Limiting the total subscription period max limit (to say one year), so as to limit the losses. At renewal of subscription period subscriber will be offered freshly calculated price.

It should also track the added expenses incurred at product level as some of them are strongly related to its demand and its delivery frequency. For example: Sales and marketing expenses may be more for some products as they are relatively new as against those which are well established brands. Also in periodic subscriptions, some items are needed more frequently/in more quantity than other products (example: toothpaste is needed every month but toothbrush may be need only once in 4-6 months.).

So the subscription model proposes the product to be the self-managed entity in subscription business where it should

* Forecast for dynamics in its demand, price, revenue and profit.
* Track/measure the actual progress against the forecast
* Propose price changes depending upon increase or decrease it demand
* Track subscribers being registered with each offered price
* Track actuals now with revised offered price
* Create foundation of future forecast based on current actuals.

# Elements of subscription business model

## Product

### Types of Products

### Lifecycle

### Interactions

## Subscriber/Subscription

### Lifecycle

### Interactions

# Benefits

## Lifecycle

## Interactions

# Payments

## Modes of Payment

## Lifecycle

## Interactions

# Business Account

## Provision Types

## Lifecycle

## Interaction

# Business Activity Monitoring

# Processing Support