Vision Document: Subscription finance

Objectives of subscription business

Since subscription to products in retail business is not so popular/available in current market, one needs to understand the potential differences between normal retail business and subscription business. In a normal retail business a customer logs in to a portal, adds the desired items to his cart, makes payment and finally shopping site delivers him his desired goods. Potential differences between these two business lines would be

1. Normal online shopping is an instantaneous business where the purpose is to buy a product at given price only once. Customer pays the price of a product (with some discounts, if offered by merchant) when he purchases it, and the association of customer with that price ends there. Any other day if he checks the same item, it may offer a different (discount) price (more or less).

In case of subscription the intent is to establish a long term association of customer with a product (or set of products), where he/she wishes to receive the selected products repeatedly at desired intervals. He would not like to see different prices (different discounts) for different intervals. Since he is committing a long term association with merchant, the merchant too need to commit him single price per product that he would be charged for every periodic delivery.

1. In normal form, business has flexibility to immediately reflect the changes in prices so as to meet inflation or losses. But in subscription business, subscriptions made earlier need to fulfil their price commitments made to customers.
2. In normal business typically individual products are offered with varied discounts. Some inquisitive customers may compare the prices and decide to buy few items from one portal whereas others from competitor’s portal, so to maximize their gains.

In case of subscription business customers are expected to buy multiple items for longer term. So in addition to individual discounts, basket level benefits become very important. Attracting a customer to buy more and more can be accelerated by offering basket level benefits. Also respecting their long term association with a merchant should also be rewarded by offering some loyalty benefits.

Hence managing a products price dynamics in isolation do not help, as every product going into a basket should contribute to the basket/loyalty benefits. So products should be considered as profit(or loss) carrying agents which collaborates with each other for contributing to the basket/loyalty level benefits as well as help each other recovering from losses, wherever applicable.

Based on these difference in the fundamentals of subscription business following list provides the objectives which the subscription platform should commit to fulfil.

Objectives:

1. Price of a product committed to a customer will remain same until end of his subscription. This should hold true even if the product/merchant is making losses OR purchase price of that product has changed.
2. Though price of a product committed to customer should remain same, it can change across customers if they subscribe of different days.
3. Along with product level discount, basket level benefits should also be offered. Subscription business is not sustainable if subscriptions for single/few products are encouraged. In order to handle profit/loss dynamics among products, in order to minimize operating expenses and in order to maximize benefits on sales and marketing expense it is essential to encourage a customer to add more and more items in his basket.
4. For the same reasons platform should make provisions for offering benefits for the loyal customers.
5. The overall benefit to be offered to a customer should be distributed between product, basket and loyalty So platform should provide configurable rules to set policies for making customers eligible for different benefits.
6. Products should collaborate so as to share their profits and losses as well as for building corpus for basket and loyalty level benefits.

Estimation

When a merchant wishes to provision subscription services for customers, he is expected to have some estimation/forecast regarding

1. Probable number of subscribers he may win over a period(monthly, quarterly, yearly) as well as probable turnaround of subscribers(subscribers leaving their subscription OR they are not renewing their expired subscriptions due to competition or other reasons)
2. Average subscription amount per subscriber(say Rs. 2000 per subscriber)
3. Probable average distribution of subscription basket (how many product categories an average basket will constitute. Example: grain, bathing soap, washing powder, suger, house cleaning items, spices, sauces/jams, ready to eat food items etc.)
4. Periodic operating expenses(total monthly/yearly as well as per subscriber monthly/yearly )
5. Sales and marketing expenses to acquire every new subscriber.
6. Probable changes in the prices of items due to inflation, short of stock or other reasons.
7. Other losses due to situations like payment defaulters, rejection/returning of goods by subscribers, wastages and handling damages, interest on delayed payments etc.

Provisioning

Based on this estimation merchant is expected to allocate some annual budget for the subscription business. It is the provision of amount he has made to run the subscription business, as well as to recover from any possible losses. Typical provisions include

1. Cost of goods/purchase price for different products as per the estimation about their demand and usage volume. Since the subscription platform does not take care of the actual purchase process and relies on the main shopping application to take care of it, this is simply a purchase price of an item when someone subscribes for it. The job of forecasting the future need and investing onto its procurement is out of scope for the subscription business and main shopping application is expected to take care of it. This price becomes the investment reference against which the margins are estimated, sale prices are decided for each product as well as actual margins are realized.
2. Provision for basket level discounts. Basket represents set of products (each with certain quantity) which a customer has subscribed to for periodic buying. Subscription business demands more discount at basket level than at individual product level, so as to attract subscribers to add more to basket as well get benefitted more for subscribing to higher volume of goods, loyalty with merchant/brand. This provision is expected to be required only for initial set up of subscription business because after it is stabilised every profit making product is expected to contribute into it.
3. Provision for promoting overall sale/create goodwill. This amount is typically expected to be used for offering additional /seasonal/surprise discounts in additional to the normal discount calculations already made for every product as well as at basket level. In case of crisis situation for some products which are incurring losses, this can be used as a rescue mechanism in order to boost the sale for these products. This provision is optional. Whether to make this provision is on merchant’s discretion.
4. Provision for Operating expenses. It includes the expenses incurred on managing the inventory of subscribed products, cost one periodic deliveries to subscribers, cost of managing the software systems for subscription business, cost on personnel required to run the business etc.
5. Sales and marketing expenses so as to acquire more subscribers as well as an attempt to retain them. Again the actual efforts on sales and marketing is not in scope for subscription business but will be carried out by the parent organization along with normal/instantaneous business. But the investment being made on subscription specific sales/marketing should be known to compute the impact of it on acquisition and retention of customers for subscription business. Its computation provides some metrics(Lifetime subscriber value(LSV), Lifetime subscriber period, Cost of acquiring a subscriber(CAS), LSV/CAS ratio etc. which indicate health of subscription business.
6. Provisioning for losses due to reasons mentioned above.

Distribution

The allocated budget should be distributed to **different accounts**. This is to ensure that equilibrium of business should be maintained instead of putting money on high demand products only OR high profit making products only. The accounts should be as follows

1. **Product Account:** To take care of provisioning number 1. A product is periodically purchased from manufacturers/ wholesalers using this money. Since main shopping application is taking care of actual accounting for purchase, subscription platform will only account for a purchase price of an item when it is subscribed by a subscriber.

Forecast

Firstly product account has targets/forecasts. Every target contains targeted number of items sale per period (week/month), forecasted purchase price, forecasted sale price, from date of the forecast, to date of the forecast. The forecast should be entered manually for every set period (weekly/monthly etc.).

Merchant can set forecast of many months ahead of time, depending upon his confidence level on a given product.

Actuals

Each product account has **price buckets** in order to keep track of the offered prices for that product as well as registered subscriber for each offered price. When the product is launched on a day a price bucket is created for it, having the current **purchase price (and date) and sale price** of that product. When a subscriber subscribes to that product on the same day his/her id is registered with this price bucket.

Whenever the offered (sale) price of the product changes due to profit margin and discounting calculations a new price bucket will get created where the subscribers subscribing on the price change day are registered with this bucket.

Whenever purchase price of a product changes due to inflation or shortage, all the price buckets will get impacted. In this case a new version of purchase price will be added in each price bucket indicating the day on which purchase price has changed and the changed purchase price.

**Example:** consider that subscriber has subscribed to two units of a toothpaste per month on 1st January 2016.On this day purchase price is 45 rs. And current offered sale price is 72 rs, then system will create a price bucket in which it will having first version of purchase price dated 1 Jan 2016 and amount as 45 rs, offered sale price as 72 Rs and the subscriber’s Id registered to this bucket. So all the subscribers who have subscribed to this toothpaste on the same day will get registered with the same price bucket.

After few days when few new subscribers are subscribing to the same toothpaste, if the offered price has been changed from 72 Rs to 69 Rs a new price bucket has been created mentioning the same purchase price but a different offered price and these subscribers will get registered to this new bucket.

So assume that there are these two price buckets only as of date 23rd Feb 2016. Now if the purchase price of the toothpaste has changed from 45 Rs to 48 Rs., both these price buckets will be updated where a new version of purchase price will get added to both with current date. So both buckets will have to versions of purchase price ; 1st with 45 Rs. dated 1st Jan 2016 and other with 48 Rs. dated 23rd Feb 2016.

Though purchase price of the product has changed, offered price for the subscribers who have subscribed to the earlier price cannot be changed. But the same will get changed for any new subscribers subscribing to the toothpaste newly on 23rd Feb 2016 or later by creating a new price bucket.

The product account also has **total debit** where sum of products of every purchase price and the items subscribed at that purchase price is calculated.

Then it will have **total credit** where sum of products of every sale price and number of items registered at that sale price has been calculated.

Finally it should have **provision for contingencies**. In case the product needs money in addition to the money that it is earning, then it will refer to this contingency before borrowing it form the nodal account. Thus in case of loss making products, if product wish to offer more discount in an attempt to recover from losses it will make use of this provision. In case available provision is not enough then it will try to borrow money from nodal account. It should be typically an annual deposit which few percent of the total spend (purchase) on the product.

Most importantly this account should be self-sustainable. In case it is unable to sustain itself t should raise a notification to the merchant so that the merchant will do manual intervention either by pouring additional contingency amount or by deciding to take the product out of subscription business.

One Rule to be followed is that when a product is making profits beyond the set targets, then this account will hold only amount equivalent of targeted profit in addition to the spend. The incremental/additional profit will be deposited to XYZ account for it to be used for provisioning across products and customers.

Example: Consider at start of the year merchant has targeted 3000 per month sale of a product, whose purchase price is 30 Rs and sale price is 50 Rs. So this is how the flow will happen.

1. A forecast is created by merchant for each month, where he will set the forecasted sale volume, forecasted purchase price and sale price and finally from and to dates for each forecast. These figures are completely based on his past experience. So volume forecast is 3000,forecasted purchase cost will be 3000\*30=90,000 Rs and forecasted sale amount with proposed offered price of 50 Rs will be 3000\*50= 150,000 Rs.( so expected profit of 60,000 Rs.), from date of forecast 1 Jan 2016 ,to date as 31 Jan 2016.
2. A contingency amount of 9000 Rs. (10% of purchase cost) has been added in the contingency provision.
3. A price bracket will get created with purchase price 30 Rs dated say 1st Jan 2016 and offered price 50 Rs, MRP as 56 Rs.
4. Say 300 subscribers register for this price bracket. So they get registered with the first price bucket. Total debit will be 300 \* 30 = 9000 rs and total credit is 300 \* 50 = 15000 Rs.
5. At the end of Jan 2016 if there is a volume of 3400 subscriptions for that product. The profit incurred out of the forecasted sale volume(3000) is the earning of this product( 3000\*(50-30)=60,000 Rs).
6. Since this is more than the forecasted volume of sale of 3000 the profit earned from additional sale of 400 items (400 \* (50-30)= 8000 Rs) is a bonus which should be transferred to the nodal account.
7. **Operating expenses Account**. This amount is provisioned only be used for operating expenses. As some elements under operating expenses are associated with volume of sale, in case the volume of sale increases beyond estimated, resulting into more operating expenses than provisioned, then it can borrow money from product accounts who are doing better than their set targets.
8. **Account for sales and marketing expenses** (should we have this under scope??). This amount is spent for acquiring more subscribers and retaining existing subscribers. These expenses should be correlated to the number of new subscribers joining each period to check the effectiveness of the effort. In case it is not enough then a separate additional provision should be made for it.
9. **Nodal Account** for motivating customers for buy more as well as to remain associated longer. This provision is used for basket level discounts for the eligible subscribers. There should be rules on how much basket level discount should be provided and to whom. Initially some provision will be made by the merchant but later all products should contribute to this account, as basket is an aggregation of these items for a customer. So if a product is making excess profit than its forecast, then it should contribute this excess profit amount to this account.
10. **Merchant’s account**. A Marchant will anticipate some periodic profit for himself on each product that he is selling under subscription. So every product should deposit that expected percentage of profit out of total profit into this account. The products who are making lesser profits than merchant’s expectations for himself or those which are making losses will not contribute to this account. Merchant can decide to spare the money from this account for any purpose that he wishes to and it will be a manual process.