Marketing Analytics
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Lecture-45
Customer Churn and Customer Lifetime Value

Hello everybody welcome to Marketing Analytics course, this is Doctor Swagato Chatterjee from VG SOM, IIT Kharagpur who is taking this course for you. Today we are in week 9 and this is session 1 in week 9. And this session, this particular week we will discuss about customer churn and customer lifetime value. Now, before I start this particular week, I would just want to give a quick recap of whatever we have done till now.

So we have understood that what customers want after the R coding and etc, we started with that, that what customers want. So if you remember that any customer, if you want to do anything with the customer, you have to first of all understand that what they want, what is the needs, wants and desires for those particular customers and how you can convert them to a demand. So, that is what we have started and we have done some different kind of analysis, regression, conjoint and etc to find out that what customers are looking for.

And then we also found that how much will be the demand of this or before going to the demand, we actually also have seen that how customers can be divided into multiple groups based on their preferences, based on their behavior. And then within those groups, what customers want, that differs, we have seen that. Then we have discussed about customer demand and based on customer demand, we have done various kinds of pricing, quite a bit of extensive pricing exercises has been done.

And once pricing has been done, we have come to marketing advertising models, we have discussed about marketing mix models, advertising models, media decision. So once you know that, so price has been talked about promotion. So out of 4 Ps, price, place, promotion, we have talked about in marketing mix, we have talked about all of them. In advertising models, we majorly focused on the promotion part. And in pricing we focus on price.

And in the product is actually something that we discussed a little bit in conjoint and new product development is something that we will discuss later also. We, in the demand forecasting also we have talked about how new product diffusion happens. After that, we are focused on retail marketing and retail related analytics quite a bit. Now, another important factor in marketing which we have not covered yet is called services.

So, what is a service? A service is something which cannot be stored. So, for example, you buy a product, you buy some sugar or some amount of milk or let us say one TV, you can keep it somewhere, you can store it somewhere and you can use it later. But services is something that you cannot use later, you have to consume then and there. It is intangible, you cannot touch a service, you cannot feel a service you can only consume a service.

So, it is intangible, it is not storable, it is highly dependent on human to human interaction and moments-of-truth. So, those kinds of things are called services. Examples can be airlines, example can be, retail is one service actually, example can also be hospitality, example can be restaurants, it can be hotels, and there are lots of different kind of professional and non professional services that we know about.

Now, in often if it is moments-of-truth based service encounter or consumption encounters, then it becomes very important for a marketing manager to keep this particular person alive to keep the relationship intact. So, because keeping relationship intact is very major aspect, because you do not get all your money in one single interaction. For example, Doctor, for a doctor or for a hospital, they do not make money from a customer or patient in one single interaction.

So, they try to give an all round 360 degree kind of health care to you, your OPD needs, your inpatient, means a little bit serious needs, your medical needs in terms of medicines they provide sometimes, diagnostic tests sometimes they provide, even medical insurance sometimes they provide. So they try to give you all round service to you, so that they know that by multiple moments-of-truth, they can give you better value and in turn can get, in exchange they can get more amount of money.

So, that is something that they are looking forward to. So, that is something that is true for all services, whether it is a profit making or non profit making. For example, government also tries to give all round kind of service to you. He gives you to Police Service, it gives you Developmental Services, it gives you Healthcare Services, Educational Services, so, it is an all round thing that they try to give you. And that is not based on one single interaction.

It is not like you just went, bought the service and come away, you have to consume the service in multiple instances. So when that is an important factor, then customer relationship management or keeping this particular relationship alive, so that multiple moments-of-truth can be created, is something that is a very important factor for a marketing manager. So, if that is one of the major important factor for a marketing manager, then he has to think carefully that how will I make sure that this relationship will go on for a certain amount of time.

And how much time is vary depending on which kind of business you are in. For example, if I ask you that how much is a average lifespan of a customer? How much does this generally a customer becomes related to a service provider, if the service is let us say, a mobile phone? So sometimes, so a mobile phone number, sometimes that mobile phone number that you have been using, you remain with that particular number or the service provider for years, 2 years, 3 years you remain with him.

For doctors also it might be sometimes years. But if I ask you that what is your association with the service, what is the average length of engagement with a service which let us say and educational service provider, a corporate trainer, then that will be probably six months at max. Or what education service, the largest is, the longest is probably the school days, but you have already passed the school days, so now it might be 1 year or 2 years at max.

So that is the lifespan, that is something that if a customer stays up to that time period, then he is alive, his relationship is alive. If he goes out of the customer base before that or if he stops taking service before that then this customer is not alive. Now depending on situations also how you measure that whether a customer is alive or not alive, also changes. So one thing that I just told is the average lifespan, that is something which is important.

Another important thing that creates a story here is let us say, oftentimes, we have mobile phones with 2 SIM slots. So you have slots where you can put 2 different SIMs. So 2 different numbers you can use. Can you tell me why there are 2 slots where you can use 2 different numbers? Because sometimes some particular service provider gives some offer which is more suitable to your needs X and some other service provider, other telecom company gives some other offers, which is more suitable to your need Y.

And the need X and need Y is something which you both want to be catered by the telecom service provider. On the other hand, sometimes it is also a case that you need 2 numbers, one is for your business people, one is for your family. So during the family time, you generally keep your business number off, so that nobody can disturb you at that point of time. So that is how we actually have different kind of needs and we have 2 slots. Now what are some, now let us say one person is using these 2 slots, 2 numbers he is using, okay.

And now all of a sudden what happens is, he was using both calls and mobile and data and etc. So for a certain period of time, data is common, right. He will not take call during his family time, but data is common. So data he used to use the SIM 1, the number 1, whatever is his mobile number 1, with that he was using that data services. Let us say all of a sudden, he reduces that data services to minimum possible data service which is required for the pack and the top up which he used to do before, which is a large top up he stopped doing that.

Now, this number is still alive. He is still using it for mobile calls, he is still using for some SMS but data service he has stopped using. So do you think that this guy has stopped using data service at all? He has stopped doing any internet connection, any internet related activity at all? No, he has shifted the consumption, part of his consumption from one service provided to other service provider. So some service provider 1 the consumption came down, it did not become 0. It became down and comes, I am sorry, for provider 2 it went up.

Now, service provider 1 has no idea what this customer is doing with service provider 2. So he has no idea but he just sees that okay, the consumption dropped by 40%. So he will try to give this kind of offers or that kind of offers so that the consumption goes up. But he is not tracking down exactly why is the reason this guy have shifted. Probably the cost is not the reason, probably something else is the reason.

So until and unless you can identify that properly, you can identify a switching properly or you can identify… For example, another example I want to give, it is a classic example, banks. Banks take the average of a nine to five I am not sure whether all bank takes, but quite a few banks take the average monthly balance in a business say, monthly average balance as the measurement of whether you are alive in this particular bank, you are a customer of this bank or not.

Let us say you like this bank, let us see there is some bank X, you liked it for quite some time. But this was the bank which was the only bank available at your household. Now when private banks have come up, there are lots of other banks have come up in your locality. So what you did is you opened another accounting, you found the services of the new banks are better, so you opened another account in the new bank.

But your salary account is in the old back and sometimes certain companies actually say that okay you have to tie up with this bank, because we have a tie up with this one, so I will only pay in this bank's account. So, there was one time, even today, if you know there are certain organizations and institutions which do that. Now, if that is the case, if they will only pay in bank X what do you do? You create an auto action, automatic action that every month, on the 10th of that month, you will pass on whatever salary you used to get to account X to account Y, you will pass on the whole thing on the 10th of the month.

So, because sometimes depending on which time period or delay and etc the money can be debited a little bit late, 1 or 2 days late. So, it is better to do it on 10th of every month. So, once you do that, 10th of every month it goes to another account. So, what happens is, what is the mean average balance. So, let us say if your salary is X amount, let us say 1 lakh rupees per month, then your mean account balance in that thing is 33,000 and 1 lakh for 10 days, that means 33,000 for 30 days if you do just the maths.

So, the mean, so first 10 days the account balance was 1 lakh and last 20 days it was zero. So, mean account balance is 33,000. If the mean account balance is 33,000, this particular bank thinks you are an alive customer because that is average, more than average than the mean account balance in that particular bank probably. So, if that is the case, he thinks that you are a profitable customer, you are a customer who is alive and they send all of these things to you and they do not care about you actually, they do not think that you are a customer who can switch.

They think that you are still alive, so there is no problem with you. But actually you are not the customer of Bank A, you are actually shifting all your money to bank B and then doing all the transactions there. So there has to be some way to identify who has, who is churning, who is not churning, who is staying back, who is not staying back, the definition has to be clear. Once the definition is clear, you have to find out how I can correctly identify who are the people who has higher probability of churning.

If you can identify that in a better way, in a reasonably good way, then you can target those customers particularly so that you can give them certain kind of service, certain kind of offerings so that they can be converted back or their switching behavior can be stopped. So that is the purpose, broad major purpose of this particular video or this particular week's study. And we will be, as we go ahead in this particular week, we will actually find out that what are the various nuances that can predict a customer churning behavior.

And in the further studies we will see that if I can control customer churn and if I can make a customer stay for a certain period of time, then what kind of money that I can make, which type of customer should I target and all those details can be found out. So, that is a brief introduction of this particular week. In the next video, I will talk about how to detect the potential churning behavior. Thank you.