

Retail Management
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Lecture - 03
Introduction to Retailing - Part 3

Hello everybody. Welcome to the NPTEL Swayam course on Retail Management. This is Dr. Swagato Chatterjee from VGSOM, IIT Kharagpur, who is taking this course for you. We are in week one and the overall topic that we are discussing today is Introduction to Retailing. So we are in lecture 3 of this particular topic.

And the specific topic that we will be discussing under Introduction to Retailing is called Futuristic Retailing. So that is the topic for today's discussion. So retail as an industry is changing a lot. And you have experienced that in your day-to-day life also. So when we were probably around 20 years back, we only could see brick and mortar retail stores.

There were very few or probably almost no web based retail stores that were available. And then came up web based retail stores. Like Amazon came up in USA. In India Flipkart came up. And both of these two stores have come up as basically retail of books.

And people who were looking for books and they were placed in such places where books were not available in good amount, they used to go to this particular website, search for very, sometimes some of the books which are not available in common days, common world, will be available in this particular retail store and they used to buy that.

And slowly from book based retail store, they moved to other kind of retailing as well. So they started selling groceries. This groceries came much later. They started selling electronics, computers, laptops, tablets, mobile phones, and then started

apparel. And then slowly we are now also doing a retailing of groceries, even vegetables, are we getting retail.

So all these products are getting retailed and people are changing, the retailing techniques are changing a lot. Now for some period of time, we thought that okay, so there were two different types of retail stores. One is brick and mortar, and one is web. So when I am thinking about omnichannel strategies, we have to think about two different places, one is virtual, one is brick and mortar.

But within the virtual also there are, like brick and mortar we have seen different kind of retail stores. And we will be discussing that in week two, different formats of retail store. But even in the virtual world, we started seeing different formats of retail stores. One thing is channel. For example, whether it is web based, or whether it is mobile specific, or whether it is both ways.

Now various people with the coming up of Android technologies and etc., people started creating apps. And apps become very popular because what are the drivers of app based retailing. Because Internet became cheap. People got internet at a lower price. People got Android smart mobile phones also at a lower price. Because Android made it open for developers to develop apps and products.

People, all the developers started developing products and it became an open community. And when the apps are fighting with each other, it is a perfect competition, the price will come down. So the prices of mobile phones came down. The prices of products came down, the data products came down. So data and information became accessible to various people.

And that led to retailing in the mobile space as well along with retailing in the web space. Now some retailers thought that okay, we will be doing retailing only in webspace when I am doing about a virtual retailing. Some thought that no, only web is not good for us, we will do both web and mobile. Some people thought okay we will do only mobile.

And there are also various kinds of I would say strategies behind that. When will you go for only mobile and when will go for only web and when will you go for both? Because managing both and keeping a sync between the web based one and the mobile based one the app based one is something sometimes it is difficult. And you have to create a constant sync between these two.

So those kinds of retailing came up. Now this is only channel based retailing. Along with that came up different kinds of technologies. Now when these web based or virtual based retailing become stronger, all the brick and mortar stores which are big, huge brick and mortar stores thought that what will we do, our business are going to that place.

What will we do? How will I manage or make sure that my customers come back to my place? How will I stop the showrooming, that they come to the showroom, they watches the products and they watch the product, they check the product quality and etc., and then they go to somewhere else and buy the product in an online store. How will I stop that?

So I need to have my own online presence as well. And that online price and my offline price has to be same because if I come to Big Bazaar today, and if I see that okay Big Bazaar, this product is being sold in X rupees and I go to big bazaar.com or something like that and there I see the same product is sold at a lower price. I will go and ask the manager what are you doing, you are cheating me.

So that kind of things has to be taken care of. But along with that, if I can go to big bazaar.com I can also go to bigbasket.com. The same product if it is sold at different prices in bigbasket or some other grocery let us say Spencer, then I will buy from there though I am checking the quality here. So that kind of I would say losing of customers were becoming very prominent in the brick and mortar retail store.

So they started creating omnichannel. But along with that omnichannel they wanted the people to come to the brick and mortar store, because they have invested heavily on brick and mortar store. They have created a huge store, they have recruited manpower, they have invested resources, what will they do? If the customers do not come to the retail store what will they do?

So they wanted to make the retailing, the activity of shopping in more informative, more attractive, it will give more enjoyment. So in the last discussion of drivers of channel choice, we were discussing that attractiveness or information availability or touch and feel, these are all some certain things, which leads people to choose whether I will go to retail store which is online or offline.

So offline gives you that touch and feel facility. Offline retail store gives you the ability to go with various friends and together buy and that shopping activity becomes enjoyment. You become sometimes it becomes a amusement for various people.

For example, if you see warehouse, I will discuss about this retailing format which is called warehouse retails, which are big retailers like let us say Metro Cash & Carry or Best Buy in USA or let us say in India if you see the retail store which is Decathlon. You will see they have warehouse kind retail store, very huge retail store which from the outside looks like a warehouse.

But when you go inside there are lots of products which are stacked and there are experts which who are sportsmen which are there in the Decathlon this thing, so you can go and purchase there. You can also purchase from Decathlon website.

But the very activity of driving down to that store and purchasing and trying and sometimes playing with the product before you purchase and driving down there with your family member, with your kids and making them interested with playing and etc., itself is an enjoyment related activity. People actually took that as a family get-together, a family outing kind of activity which created enjoyment.

Now along with this kind of things which is enjoyment which is common, if I am a smaller retail store, a very specialized retail store, I cannot give this kind of enjoyment of partying and going out and travel and etc. If I am a let us say apparel retail store, my apparel store will be in inside the locality, inside residential complexes or residential locality if not complexes.

So if I am situated there inside a residential locality, I cannot create this kind of vibe of okay you can party here, spend a holiday here, almost a day tour. It cannot happen because this guy is probably living around 5 kilometers away from me that is all. So he will drive down. It will take hardly 15, 20 minutes for him to come down to my place. So it is not a day trip at all.

So how I can make the shopping more attractive for this kind of people? So they created lots of opportunities and I will talk about some of them.

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The Store of the Future

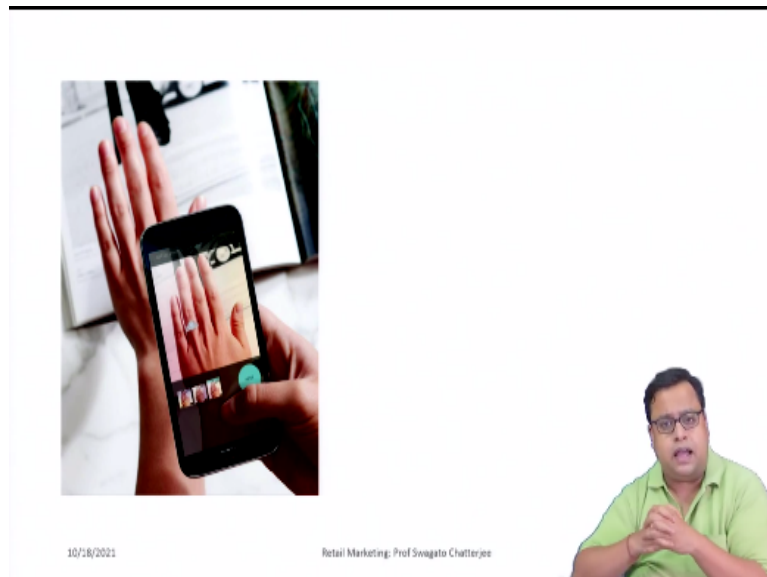
Please click URL to view:
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So you can actually go and see this particular video that I have shared here, which talks about how retail the future of retail is changing to make to give people more convenience, more information, more enjoyment, and making, giving them more value at the end of the day, you will get a real picture of that.

In addition to whatever has been shown here, so I will ask you to stop your video here and go to this link, probably copy the link from the PPT or just type it down in your browser and see the video. You will see lots of futuristic actions in this particular link.

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But there are more things that we can see in futuristic retail that is coming up in the real world situation which is more than whatever I have shown there. So one of the very prominent introductions or very prominent innovation in the field of retailing is called artificial reality and virtual reality, AR VR. So these AR VR technologies are coming up. What is artificial reality and what is virtual reality?

Artificial reality is something which is which you are creating, which is not there and virtual reality is that is present in the virtual world. So for example, there are people who actually right now wears this virtual reality VR goggles, or VR devices which you can wear in a retail store, and you can view a different world inside the retail store.

So you can be a different person in a different world walking or moving around or doing this or that. So those kind of techniques are coming up. They were heavily used initially in games. People used to watch and play video games by wearing those goggles or those devices. But VR devices right now slowly become common in the retail sector as well. How? Let us say, let me give an example.

Let us say you have gone to a retailer who is basically a retailer of travel services. Let us say you have gone to Thomas Cook or that kind of a companies. Their retail outlet is there, you want to plan your holiday. Now you are deciding that how does it look like in the hotel room, how does it look like? Or even in the hotel rooms context you can think about. So hotels are giving advertisements like that.

So if you want to see how the hotel room looks like or how this particular place look like you are designing it for your whole family because your whole family will go together. So you want to make sure that whatever facilities are there is very up to the mark and etc., etc. So they are giving advertisements. Now in the earlier time how do a particular place will give you advertisement?

They will give nice pictures. They will ask a photographer, a professional photographer who will take snaps of the hotels or snaps of the places where you are going to visit in and around the hotel and they will give these advertisements.

Like all the, I would say this travel or tourism development websites of different governments, even India Incredible Incredible India that particular website, if you go there you will get beautiful pictures of India's travel destinations and also the hotels and also probably the Maharajah trains and etc.

But further better advertisement can be given if you make the person who is purchasing the product stand at the particular place. How will you do that? You can create a virtual environment. So they create a virtual video basically. And they ask this person why do you not wear it for five minutes and see, experience what you are going to experience there.

So you get a demo of the experience, of the actual experience that you will be doing there, a demo of that inside the traveling retail store. So that travel agent probably will book all these things, but before that he will, he or she will basically show you how this video looks like or how the views look like. So that is how VR works.

It works in travel industry a lot. It works in hospitality industry a lot. Right now it is also coming up in let us say industries which is related to painting let us say. Even you want to see that how your house looks like. You can roam around a house after painting. Painting also has application of AR, I will talk about that in a few minutes.

But VR has an application in let us say, if not painting in a real estate industry. You have created a house and you want the person to visit the house and see how it looks like in different environment, in the evening, in the night, in the early morning, in the afternoon. So you can change the environment of the video or you have probably shoot 4, 5, 6 videos of different time of the day.

And then you are asking this person that wear the VR device and walk around the house, walk around the house, walk around the complex, so that you can actually feel how living in this particular residential complex is going to be. So that is a altogether different kind of retailing that is coming up in real world situation.

AR on the other hand has artificial reality. It is not everything virtual. There is something which is actually there and something which is implanted there. Like the picture that has been shown here, if you can see the picture, there is a hand there and that is a real hand. So you can see that with a camera.

And once you have taken that camera you will they are placing this ring on the top of the hand to show you how the hand with the ring will look like. In real in Indian context if you have seen let us say Lenskart. Lenskart you can buy a frame or before buying a frame, you can try out a frame. Now how will you do? You will you have to put your face at a particular position in that particular view.

And then it will show you how this particular frame looks like on your face. You have to take three pictures, one is like this, one is like this and so on if I am not wrong, and then they will take a measurement of your face using a computer vision kind of

technologies and using those kinds of technologies they will know that okay, this is your face.

Now they will put this particular picture on the, picture of the frame on your face. And even if you if the face moves around, you will be able to see how it looks like, how your face looks like when the picture is there. Same thing can be applied in the painting one.

That you probably take certain pictures of certain parts of your house and they will tell you, that retailer of painting, let us say Asian Paints or Deluxe, Dulux sorry will tell you that how this particular picture will look like.

How this particular wall will look like once this paint is because paint samples are like this or paint pictures that you paint I would say color samples that is shown in the brochure or somewhere else, sometimes you are not very sure that when it is actually painted whether the same color combination will be coming up in the wall or not or how it will look.

So whether it will match with my furnitures or not, so you can create that. So those kinds of technologies are coming up in the real world situation. People are trying products. So let us say you are standing in front of a mirror and the mirror is basically an AR mirror. It takes your picture, understands this is your body and suggests different kind of products which is apparels available in the store and you can try out.

And if it is not available in the store in your size you can in a omnichannel facility you can book it from the retail, online retail store of the same store and it will be delivered at your house. So those things are coming up in real world situation. Now that is the consumer side of the story. The AR VR thing is the future of retailing in the consumer side.

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What other kind of changes are coming up? Information. The first one was experience. The second one is in the consumer side information is also available at a very, so for example in a retail store if you can, earlier what used to happen, there were scanners. So you can go and scan the code that is written on the website, on the packaging of the particular product.

And in the website of the retail store you can see the product specifications. You do not have to search. You will know that okay from where it has been bought, when it has been manufactured, when it has been brought in the store, so all those details. Probably you can sometimes do product comparisons as well. So those kind of facilities were available.

Now you do not even have to go up to that level and scan the QR code, no requirement. You can take a picture of a particular line of a or alley of the retail store and they know using computer, again using computer vision and using image processing, they know that which alley's picture you have taken.

They will and they know exactly, the backend database knows that in this alley what kind of products are there, what its position were and what is the price of the product, which one has more discounts. So the discounts or the value for money products or

whatever you are looking for they say you just write that okay, when you come into the retail store, you tell the app that I am planning for a party.

Now party requires lots of things. When you throw a party at your home, it requires cold drinks, it requires certain snacks, it requires certain kind of, let us say food items, certain disposable glasses, plates, some other probably drinks if you want to also serve hot drinks.

If you want to serve certain food items, which is let us say which has to be frozen food items, which has to be fried and served, those kind of items are there. So all those are not stored at a single place, those are stored in some other different places. So you can just tell that and in your retail in your small map it will pop up that at what position what you will get and at what price you will get.

So all those kinds of technologies, which is information related technologies are coming up a lot in the consumer side of the store. In the supply chain side of the story, now these two I have talked about majorly about brick and mortar retail store.

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In the supply chain side of the story, we have come up with or we call it dark warehouses. Dark warehouses means the warehouse has no light in it, there is no single bulb or any lamp in it, it remains dark. Even in the morning, in the daytime and

in the night. Why do we do that? Who requires light? Why do you think light is required? Light is required to see a product right, to see something.

So there has to be a receptor which will get the light and recognize that okay, this product is that. That is why light is required and that is why generally warehouses are, there are lamps and lights there so that people can work.

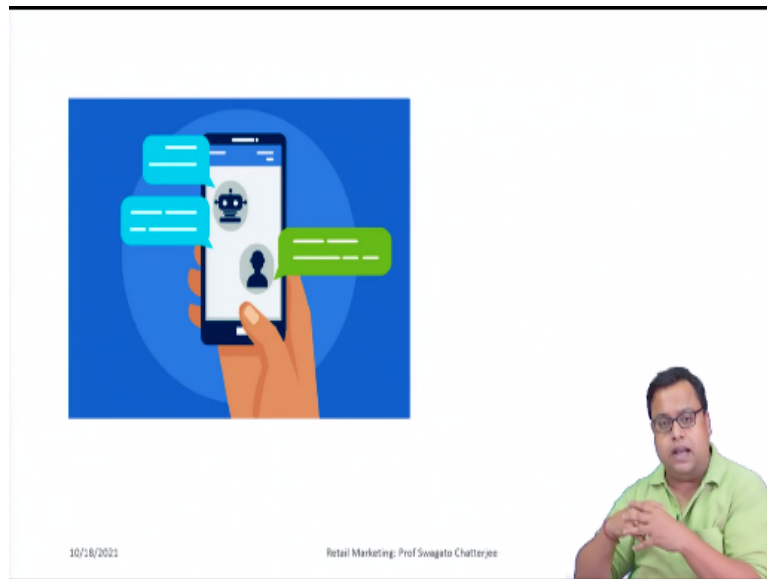
Now if I have robots instead of people who have who can communicate with the products and their positions and etc., using RFIDs or different kind of radio frequency waves or ultrasound waves or some other kind of waves, then light is not required, you do not require lamps.

The robot even in a dark absolutely dark condition in the night it will know at what coordinate x, y and z, at what particular coordinate which product is kept, in which corner of the shelf, and it can go and pick that product up, whether the light is glowing or not glowing it does not matter because he is not a human being.

The robot is basically a machine which only talks with the, with various products or various other tools using some signals. So as long as the signals are working you do not require light and those kinds of things are coming up. People, so that reduces the energy consumption like anything. That reduces the costs of having a warehouse like anything.

Also obviously the manpower cost are also coming down. And those technologies are coming up in the real world situation.

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What else? Another thing in the again in the consumer side but now I am moving from brick and mortar, both warehouse and brick and mortar store is in one side, another side I am talking about which is online. In the online generally the website is available. But you require services, you require to talk with the customer care representatives for your returns, for your let us say product complaints, to know track your deliveries.

There are lots of different reasons. Now we have got chatbots. You have seen in many retail stores, chatbots are coming up. Chatbots are what? Basically these are robots which do chats. So they chat and try to collect the primary information from you. They also sometimes give you solutions. They and does using natural language processing kind of technology.

They try to understand what you are saying and from there certain key information they track and guide you to a certain particular or even today's chatbots are not that good in whatever retail stores are using. But still this particular technology is there, it is coming up and slowly it is improving. So over time even there will be a time that will come with chatbots will replace all the customer care agents that are there.

So those times are coming up and only for very critical very ethical issues where normal robots cannot take a decision, human intervention will be required and that is

where customer care agents or customer care service managers, very specialized service managers will come into the picture.

That all the mundane activities will be done by the chatbots like canceling of the orders or rescheduling of your air ticket or changing the address of the delivery. These are some of the basic things which intelligence is not required, artificial intelligence; human intelligence is not required, artificial intelligence itself can do this kind of works for you. So those techniques are also coming up in real world situation.

So I have given some examples. What I will do what I will ask the audience the participants of this particular course is in the forum, why do you not write down some of the examples, more I would say futuristic examples that you have seen in the retail scenario. I will try to ask you give me four such examples two in brick and mortar two in online.

When I say brick and mortar and online it can be front end or back end as well like the black dark warehouse is the backend activity. On the other hand, this AR VR application is the front end activity. If you have certain examples of real cases, like you have seen for this particular product, or for this particular website, you have seen something new, which has not been covered in the futuristic.

Because future is changing. Everything is changing over time. So whatever examples I gave are probably two years old. There can be some very new things which have come up, which I am not aware about and you are aware about because you have bought from that particular store.

So if those kinds of examples you have, please write it down in the forum, so that we can learn from each other, we can get knowledge from each other that what kind of changes are coming up. That is all for me in this particular lecture. And I will see you in the next lecture. Thank you.

