

AI in Marketing
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Week 3
Lec 20-Understanding Customer Journey-I

Welcome to this NPTEL online certification course on Artificial Intelligence in Marketing. And this is module 20, as you can see from this slide that we are in this chapter that is chapter 4 and we are in this chapter 4 connecting with customers and now we will talk about understanding customer journey in this two module 20 and 21 and we will start with module 20 and we will understand customer journey and that is the part one of it, in module 19 we have talked about till evaluation of alternatives and in this module we will talk about the last two steps in the consumer decision making process. The, one is purchase and the post purchase. Then we will talk about what is customer journey and see how does AI work throughout this journey and what are the capabilities of an effective customer journey. So, these are the four things that we will understand in this module. So let us start with understanding the role of AI in purchase decisions.

In executing a purchase intention, the consumers may make up to five sub decisions. One is brand type, dealer type, quality, timing of purchase and the payment of payment method. AI can alter the process of purchase completely. AI can deduct underlying patterns in shopping behaviors from the products consumers buy and the way in which they buy them.

So it is about buying and also how the way in which they buy them can, the AI can deduct underlying patterns. This could be a regular purchase of rice from a supermarket, sporadic purchases of wine from a liquor store and Friday night binges of ice cream at a local convenience store. So, for any kind of purchase, this AI can direct the underlying patterns in your shopping behavior. With the use of machine learning systems, AI can predict your regular habits. It knows you like cooking risotto every Monday night.

But also your more complex behaviors like occasional ice cream binge. So, when at what point in time on a Friday evening will you feel like eating an ice cream? On marketers' end, such analysis inform inventory management systems. However, at the consumers' end, the same information can be used to determine consumer related purchase decisions such as and facilitate automated purchase decision process for consumers. So which brand of rice does consumers usually buy? Where do they usually buy Flipkart or a big bazaar store? And how much rice or ice cream do they consume per day or per week? So that kind of information will be very useful for inventory management. When to purchase

based on the time of consumption? If on Monday a consumer cook risotto, he will need the ingredients that day and AI can help buy accordingly.

And how do consumers like to pay? So, this is a Google home. Hello welcome to Starbucks. What can I get for you? Okay, I have got a grand Americano, anything else? So, this is Starbucks, and this is how this interaction is happening. Retailers are increasingly turning to technologies such as artificial intelligence algorithms, messenger bots and even robots to gather data and improve the in-store experience for consumers aiding their purchase decisions. For example, Starbucks uses predictive analytics to process the consumer data in order to deliver personalized marketing messages to customers including recommendations when they are approaching their local stores and offers aimed at increasing their average spends.

So now you see that this is what the share of valid increasing their spends influencing the time of purchase payment and dealer choice for consumers. So, this is how Starbucks tells the consumer today is happy hour see you at 3 p.m. Starbucks now hi Phil you are near Starbucks Oxford Street currently 50% off on your favorite drink vanilla latte so it is just helping Phil in need recognition that is the external stimuli so you are there near the Starbucks and we are offering 50% off so you can come and have it at 50% lesser prices. AI also provides the salesperson with accurate prediction and intelligent recommendations through analyzing the past data and priorities leads that are likely to convert.

AI can also suggest customers the best option for purchasing based on their needs. AI allows customers to place order in many different forms such as voice command text and emails also an AI can optimize the chance of closing deals. So, it is not only about always putting that in your cart and then making payment you can also order via voice commands text and emails. In the transaction phase AI based services can partner and negotiate as part of the transaction and enable dynamic pricing changing pricing. AI provides consumers with real time supply and demand based and thus transparent pricing for their transactions.

For example a virtual cash register enables the shopper to virtually authorize the transaction with this technology the consumer journey proceeds seamlessly from pre transaction through the stages of the customer journey. For example, emerging mobility apps, for example Lyft based their pricing on real time information and provide dynamic and transparent pricing based on time traffic and location. So, this is how they are price they are telling you the price so you have given the place where you want to go from where you are so pick up and then they have shown that this is the price and it will go this way. Now let us look at how AI will help in post purchase decisions. It is related to

consumers behavior after acquiring and using the selected brands or products.

Marketers must monitor post purchase satisfaction. 1 post purchase actions 2 and post purchase product uses and disposal. So, these are the three things that marketers should continue to monitor. Post purchase satisfaction. Satisfaction is the function of the disclosures between expectations and the products perceived performance.

If performance falls short of expectations the consumer is disappointed if it is met the expectation the consumers are satisfied and if it exceeds the expectations the consumers are delighted. Consumers usually explain their satisfaction or dissatisfaction and their intentions to repurchase the brand through word of mouth. Therefore, marketers should solve any aroused problem and respond to all lead queries. AI can help companies to respond to all these lead queries. AI enabled chatbots assist marketers to connect with consumers after the process of purchase.

The software was developed by Autodesk. It relies on a virtual agent to respond 24 by 7 to all queries of the consumers. These virtual agents can learn from consumers behavior and modify services accordingly through deep learning which in turn helps marketers to connect with the consumers in a new way. So chatbot can assist a huge amount of information in seconds and serve millions of customers at the same time. So that is the whole advantage that it can have huge amount of information in seconds, and it can save serve millions of customers at the same time.

It is not one by one. Therefore, in the post purchase behavior stage AI can recognize any signs of dissatisfaction and take the appropriate action to satisfy its customers and reduce the post purchase negative actions. That is maybe may be the negative word of mouth. So this is how this customer service is happening is happening and it is it is happening 24 by 7 and across millions of customers at the same time. So hi I forgot my password can you help me log in customer service sure choose an option from the suggestion below send activation link I need your email address and then there it is where can I help you return the place return sure please enter the order number you can want to return the product thank you for your.

So all this kind kind of things are regular happening not only on Vodafone but Myntra and Amazon also. Post purchase use and disposal. Marketers should also monitor how buyers use and dispose of the products. AI based algorithm can guide consumers by enabling smart shopping as AI can inform consumers on post purchase decisions such as what they need to re-buy. AI can also inform consumption usage decisions based on what all consumers brought earlier and what and have not utilized.

So this is the pet store soon you will run out of dog food by now. So, it is telling this is this that you have a pet and you will run out of the of the pet food so you should order it now. The next thing that we will talk about in this module is what is customer journey. The term customer journey commonly refers to a process or sequence that a consumer goes through to access or use an offering of a company. A sequence that a consumer goes through to access and use.

Customer journey helps you tell the story of your customer's experience with your brands across all touch points. The story of your customer's experience with your brands across all touch points. Whether your customers interact with you through social media, email, live chat and other channels but this will give you a unified and integrated 360-degree view. Customer journey is different from traditional approaches such as service blueprinting because traditional approaches focus on corporate perspective and neglect the customer's view and customer journey concept places customer at its heart.

Making it a useful framework in assessing and evaluating the customer experience within any service context. So, this is the process model of customer journey and the journey is moving from left to right. So here it is the previous experience $t - n$ so we have the pre purchase stage, purchase stage and post purchase stage. Now after from this the consumer goes to purchase pre purchase stage includes the brand owned partners, customized customer owned, external social or external so they are behaviors, need recognition, consideration, search. The next step here is the purchase stage that is purchase touch points, brand owned, partner owned, customer owned or social or external.

And the third is post purchase touch points again brand owned and partner owned etcetera etcetera. So then then it moves to the post purchase and that is what this customer experience t is. How did customer journey came into existence? The traditional consumer journey has evolved dramatically over the years with e-commerce fundamentally changing the way in which consumers purchase the products. While we have often heard the phrase that consumer is the king it is truer now more than ever before with brands competing to win larger consumer shares customers can make a choice from thousands of brands for similar products. Around 20-30 years back the consumer journey would start by either identifying a need or seeing an ad on a billboard, newspaper or radio or TV.

Consumers would learn about the product and go to purchase it in the store. How it is no longer a single journey but rather an amalgamation of a small journeys that lead to the purchase. So, it is the different journeys that are made to come together seeing the ad, going to the store, making the purchase etcetera etcetera. The modern customer journey

is less linear than the traditional consumer journey of the pre digital age. Consumers are now much more likely to discover new brands during the search or consideration state stage of the journey.

So it is not linear but then it keeps on moving back and forth. For example someone who is considering buying an Apple iPhone may discover a whole host of alternatives while research researching on Google Amazon or a tech blog. What are the features of the customer journey? In the past consumers would usually narrow down their options at this stage of the journey but now there are many more digital paths to purchase that influence this conversion. Another unique feature of the digital consumer journey is that communications now go both ways. With just a couple of clicks consumers can find the answer to any questions about your industry, brand or products.

They can also read or share reviews, ratings and FAQs on websites. Social media or marketplace listings. Now we will try to understand what is the role of AI in the customer journey. Role of AI in pre purchase phase that is collecting information, selecting, advising, recommending and customizing. For example, a journey to purchase furniture.

Consumers can virtually furnish rooms with selected items and see how the furniture fits into their apartments. With the help of IKEA's Place app. So this is how you are they are looking at their apartment and the and how would how would the furniture look where it will fit and how it will look what colors to to buy. Automating facilitating purchase decisions such as dealer choice, product choice, transactions, quality of purchase and time of purchase. For example a journey to purchase furniture a virtual cash registers enable the shoppers to virtually authorize a transaction.

In the purchase journey of a furniture the necessity for physical interaction is limited to post purchase is limited to the post transaction fulfillment while the other stages can involve a virtual experience. Enabling maintaining and serving service servicing, upgrading and reaching consumptions, giving feedback and recommending additional consumptions. For example, a journey to purchase furniture with regard to furniture purchase the AI can suggest upgradations details or how to and when to dispose the furniture that you have brought and how to do that. The overarching role of AI throughout the customer journey. So, this is the AI powered customer journey.

Predicting your needs, Wednesday, speed is the new black check fashion website, cross device storytelling. So now we have come on a Thursday then shopping content. Thursday again smart VR, the rise of the chat bot, playing to our emotions for Friday. Then on Friday then you have dynamic pricing, automated assistance, machine learning, robotics, purchase at favorite fashion brand store. Then come Saturday post party selfies

on Facebook and then Sunday morning check a Facebook account.

So this is how this journey is happening. So, this is when it is consumer journey. Aware, consider, enjoy and buy. So, to help you understand how AI technologies power the consumer journey we have mapped out where these trends and the embedded AI technologies fit into the consumer journey of our hero Linda who is shopping for a party dress. Zenith believes the consumer journey is not linear but an endless loop. So, we have color coded the shopping experience according to our consumer journey loop.

Now what are the capabilities of effective customer journey? So, companies building the most effective journey master four interconnected capabilities. The first is automation, the second is proactive personalization, the third is contextual interaction and the fourth is journey innovation. Each of these make journey stickier, more likely to draw in and permanently capture customers. Although the capabilities all rely on sophisticated AI, they depend equally on creative design thinking and novel managerial approaches. So let us start with the first one automation.

Automation involves the digitization and streamlining of steps in the journey that were formally done manually. Consider the process of depositing a cheque. So here the spelling of cheque is in India so we this is what which used to require a trip to the bank or ATM. With digital automation you simply photograph the cheque with your smartphone and deposit it via an app. So now there is no need of going to bank or ATM.

By allowing consumers to execute formally complex journey processes quickly and easily automation creates the essential foundation for sticky journeys. This may seem self-evident but companies have only recently started to build robust automation platforms expressly designed to enhance the journey and consumers can readily see who does it well. Superior automation, while highly technical is something of an art turning complex backend operations into simple engaging increasingly app-based front-end experience. Automation Sonos streamlines setup with wireless speakers. For example, consider how Sonos the intelligent connected music system automates the setup.

The process used to involve threading wires throughout the house, hooking up speakers to a computer and creating separate online accounts with music providers. Sonos streamlines setup with wireless speakers just press a button to connect them and an app that adds music streaming sources with a few taps and allow consumers to select music control volume and choose what place in which room all from a mobile device. So, there can be different songs that can be played in different rooms. So, we are just doing all this with with our mobile device. The second is proactive personalization building on the autonomous capabilities.

Building on the automation capabilities companies should take information gleaned either from past interaction with the customer or from existing sources and use it to instantaneously customize the shopper experience. So, it is about the real time Amazon recommendation engine and intelligent reordering algorithm. It knows what printer ink you need are familiar examples but remembering customer preference is only the beginning. So now you have purchased a printer on the from Amazon and they know that what kind of printer ink you will need and later on as you keep on buying ink they also know they will also get to understand when you will need the ink. The personalization capability extends to optimizing the next steps in a customer journey.

At the moment a customer engages for example by responding to a message or launching an app the firm must analyze the customer's behavior and tailor its next interaction accordingly. Companies such as Pega and ClickFox offer applications that track customers across many channels blending data from multiple sources such as transaction and browsing histories, customer service interactions and product usage to create a single view of what customers are doing and what happens as a result. So this is use case specific data common examples ClickFox platform and these are journey datasets, predictive models, marketing decisions and dashboard business intelligence tool that are used. This allows real-time insights about their behavior in effect isolating moments when the company can influence the journey and permit customized messaging or functionality for example immediately putting a valued traveler on an upgrade list. The retailer Canis Kole reconfigures elements on its website according to a visitor's interaction with the site over time.

Some people see more product reviews while others see more images, videos and special offers. The company's algorithm constantly learns which content and configuration work best for each visitor and renders the site accordingly in real time. The third is contextual interaction. Another key capability involves using knowledge about where a customer is in the journey physically entering the hotel or virtually reading product reviews.

So these are the two stages different stages. To draw him forward into the next interaction the company wants him to pursue. This may mean changing the look of a screen that follows a key step or serving up a relevant message triggered by the customer's current context. Example an airline app may display a boarding pass as you enter the airport. Or a retail site may tell you the status of your recent order the moment you land on the home page. So this is as you enter you get the boarding pass and all the details where you have to move on.

More sophisticated versions enable a series of interactions that further shape and

strengthen the customer journey. Starwood Hotels has an app that texts a guest with her room number as she enters the hotel. Checks in with a thumbprint scan on her smartphone and she as she approaches her room turns her phone into a virtual key that opens the door. The app then sends well timed and personalized recommendations for the customers. So, all these human interface standing on the front decks and doing all those activities they are eliminated.

The fourth is journey innovation. Innovation, the last of the four required capabilities occurs through ongoing experimentation and active analysis of customer needs technologies and services in order to spot opportunities to extend the relationship with the customer. So that occurs through ongoing experimentation. The goal is to identify new sources of value for both the company and the customer. So here that is what we are trying to do identify new sources of value. Best practitioners design journey software to enable open ended testing.

They continually do A B testing to compare alternative versions of message copy and interface design to see which works better. As they prototype new services and analyze the results aiming not just to improve the customer journey but to expand it adding useful steps or features. A journey innovation may be as simple as Starwood's introducing a prompt for ordering room service after a guest uses a key remembering previous orders and using those as the initial options or it may be more sophisticated expanding the journey by integrating multiple services into a single straight through customer experience. Other examples of journey innovations are first Delta Airlines mobile app has become a travel management tool for almost every aspect of an airline trip from booking and boarding to reviewing in-flight entertainment to ordering an Uber cab upon landing. Graft has expanded its recipe app to become a pantry management tool generating a shopping list that seamlessly connects with the grocery delivery services P-Pod.

So you just that is a pantry management tool. So, it it connects with the grocery delivery service and then you keep on buying the grocery. Key to these expanded journeys is often their integration with other service providers integration with other service providers. So, it is not only only one service provider but a whole ecosystem is being built and integrated. Because this increases the value of the journey, handing carefully handing customers off to another form can actually enhance the journey's stickiness. So although the customer is moving from A company to B company but that is enhancing the journey's stickiness.

So to conclude in this module we have discussed the role of AI in purchase and post purchase decisions. Then we have explained what is customer journey. Further we have

focused on how AI works throughout the customer journey and finally we have understood the capabilities of an effective customer journey. And these are the five sources from which the material for this module was taken. Thank you.