## AI in Marketing

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### Week 4

Lecture 24 Personalization: Going Beyond Segmentation II

Welcome to this NPTEL online certification course on Artificial Intelligence and Marketing. Now we will talk about module 24. So, as you can see from this slide that we are discussing personalization and how to go beyond segmentation. So, these two modules 23 and 24 are dedicated to understand personalization. So, this is part 2 of that and this is module 24. Now, let us have a quick overview of this module.

So, in this module, firstly, we will discuss the global appetite for AI and the changing customer journey. Secondly, we take a deep dive into the changing customer journey, focusing lens on the retail sector. Thirdly, we will understand the customer journey orchestration. And lastly, then we will introduce a case study of Rujoom.

So, we will start with the first thing that is the global appetite for AI and the changing customer journey. The term AI is a misnomer. AI enables the marketing team to provide a personalized experience to a user without being too intrusive. AI is already following the marketers to optimize websites, personalizing them for different users. For example, serving them with tailored messages and designs that resonates with them based on their profile

and

needs.

The technology behemoths including Adobe, Verizone, Microsoft, Google and Facebook are driving this trend, one that will prove very lucrative. The PR and communication industry is quickly changing, making it harder for PR leaders to make an impact using traditional approaches. So, now these traditional approaches are going out. With content marketing trends and innovation, social media tools on the rise, PR experts should expect to see some major shifts over the coming few years. AI and other technological advancements like virtual and augmented reality mean that the pace of change will increase dramatically, bringing exciting new opportunities and challenges.

Marketing and advertising have been quick to adopt AI into their practices. But we have only touched the tip of a massive iceberg. As AI technology develops, reaching individuals at scale will be possible. So, we will be able to reach lots of individuals. And

we are not talking of embracing the fact that AI solutions will be taking on repetitive tasks like coverage reports, distributing releases and creating media lists.

AI will allow savvy PR pros to actively focus on creativity and strategy, skills that machines simply do not replicate. And this is yet. It may happen in future. Now we will look at the changing customer journey, a perspective from Paul Clark, CTO of Ocado. Paul Clark, who serves as the chief technology officer at Ocado, shared some fascinating insights about how the company is changing the way people shop for groceries and how technology, particularly artificial intelligence, play a pivotal role in this transformation.

Ocado is a global leader in online grocery retailing. Known for its massive automated warehouses, what sets them apart is their commitment to developing most of their technology in-house to power their entire e-commerce and logistics platform. As the CTO, Paul leads Ocado's technology, a division with a growing team of over 1300 engineers. The technology covers a wide range of areas including e-commerce, forecasting, routing systems, robotics, AI, simulation real-time control of automated warehouses. Ocado operates at the interaction, Ocado operates at the intersection of various cutting edge technologies such as internet of things, big data, cloud compute, cloud computing, robotics and AI.

They see innovation as the secret sauce that makes all these technologies work together seamlessly. Among these technologies, AI stands out as the most crucial one. It acts as a versatile tool that enhances other technologies. Paul likens AI to the one ring to rule them all. It can do exciting things like predicting what groceries customers want.

That is one. Personalized shopping experience. Enabling voice-based grocery shopping through platforms like Amazon Alexa. The goal at the front end of these operations is to predict and deliver groceries that customer want without them having to place orders. They achieve this by analyzing customers past orders and using AI to predict what they might need next. What they might need next? Considering factors like shopping habits and

AI is also essential for personalization, but Ocado is exploring other frontiers like voice interface. They envision a future where conversations with AI-driven systems happen not just in your kitchen but also in your car, smart appliances, chatbots and more. These conversations should seamlessly collect across different platforms, ensuring a smooth shopping experience. So, now you can talk to and shop across the platforms. It can be your your kitchen or it can be your car.

Ocado's approach to AI is a blend of in-house expertise and cloud-based services. They

partner with companies like Google and Amazon Web Services while also nurturing their own AI experts in various domains. Beyond customer interactions, AI plays a critical role in their supply chain, helping predict what customers will want based on factors like weather promotions and social media trends. In their automated warehouses, thousands of robots work together efficiently guided by AI-powered control systems. To maintain the health of these robots swarms, they rely on AI-driven monitoring and maintenance, sending data to the cloud for analysis.

In the final stages of their operations, AI helps optimize delivery routes. They use simulation techniques to plan routes and even create digital simulations of warehouses before they are built. Ocado's isn't just a typical retailer. It is a unique blend of retail plus technology and platform. So, this retailer is now three in one.

Retail plus tech plus platform. Their culture encourages taking risks, pursuing unconventional solutions and constantly striving for improvement. Powell also highlights a significant challenge faced by the UK in terms of a shortage of AI and data science talent. He believes that digital literacy should be instilled from a young age and continue into the workplace, emphasizing the need for lifelong learning. He suggests a shift in education, focusing on enduring skills like collaboration.

Now these skills are becoming enduring collaborations, creativity, problem solving and entrepreneurship. So, these are the skills that will be of help now. Rather than just examoriented learning, he envisions a future—where education prepares individuals for continuous learning and self-reinvention. In conclusion, Paul emphasizes the importance of embracing AI and navigating the transformation—it brings. He sees AI as a revolutionary force that will reshape industries and change how—people interact with technology.

It is not a matter of choice but of making the best use of these technological opportunities while maintaining a balance between regulation and innovation. Now we will try to understand what is customer journey orchestration. Customer journey orchestration is the coordination of customer experience in real time and in omnichannel environment to better understand customer needs and encourage further interaction with a brand. Companies can use that information to trigger campaigns or communication to deliver more value and more personalized customer experience. A customer journey orchestration strategy and toolset focus on a customer experience with a brand rather view of how that than a customer came to make a purchase.

This ultimately provides more focus on increasing a customer's lifetime value, ensuring a positive experience from customer touchpoint through post sales and support. So that is

the overall idea. Customer's lifetime value. Now why this concept is important? In most organizations, customer engagement involve a variety of teams such as marketing, sales, customer service and support.

Now that is a problem. However, customer experience across those teams is siloed and inconsistent because there are these various kinds of team involved. For example, individual customer experience are created by each team with very little insight as to what their interactions have historically been. This approach is losing favor with customers. Today customers are demanding an integrated experience with the brand as a whole rather than siloed experience with individual departments. So now customers are having experience with the brand and not with each of these individual departments.

A real world example of businesses working in siloed department is the customer who has been identified by a company as an ideal customer to purchase a software as a service tool. The customer's marketing experience involve engaging with various content and researching how the product might satisfy their needs. From there, the marketing department hands off this qualified lead to sales. So now this lead has gone to sales. The sales department's engagement with the prospect includes little insight into the campaign or communication they encountered during the marketing phase.

So now marketing department sends this to the sales department and the sales department do not know what were the promises made by by the marketing department. After the prospects make a purchase and uses the SaaS tool, they submit a support ticket to address an issue or request additional onboarding support. At the same time, the sales and marketing teams may continue to contact the customers with follow-up purchase opportunities, unaware that the customer has encountered an issue. So now on the one hand, this customer is being asked to purchase more while on the other hand, he is also facing problem. And then this affects a the overall experience.

A similar customer example that includes the customer journey orchestration process may look more like this. Multiple teams are aware of each customer's touch point and decisions made by the internal marketing and sales teams are more apt to trigger automation based on this cross-team knowledge. In this case, marketing may still have these customers enrolled in campaign for upsell or cross-sell opportunities. The sales may continue to engage with their primary point of contact for the same, but they proceed with greater awareness of the customer. If the customer opens a customer support ticket, sales and marketing would be aware of it and potentially pause any marketing and sales communication until the time that problem is resolved.

This way the customer does not receive unwelcome communication while experiencing

an issue with the product. When a customer's cross-channel behavior are tracked, logged and analyzed, businesses can better predict the next steps the customer may take and capitalize interactions in real time to deliver a better user experience through personalization. Now, let us look at how customer journey orchestration works. Customer journey orchestration platforms use AI and machine learning technologies. A machine learning model can analyze or listen to the customer behavior on a larger scale than an individual team or department can.

So, now we are looking at the bigger picture. Bigger and complete picture. The machine learning findings help the businesses make critical decision with confidence and speed. The predictive capabilities of AI serves up the right content at the right time to the right user based on the historical pattern of unique users. So, here also keep in mind that we are talking of every user being different and that will lead to personalization.

Customer journey orchestration is an advanced form of customer journey management, which is a process of optimizing the customer experience using technology to create unique interactions with prospects to move them through the marketing and sales funnel. The process is accomplished via a collection of tools that monitor and deliver unique interactions and is not usually done in real time. Both customer journey processes into customer journey analytics and customer journey mapping. provide insight Customer journey analytics data can be collected from a variety of tools and interaction stretch points, but are not always viewed in a single location. Customer journey mapping tools which visualize a customer's journey at every touch point with a brand can track across some hut not all channels.

Customer journey orchestration can listen to and optimize every engagement. Optimize every engagement on every channel used by a company. Data can also be viewed in one location. Now, what are the benefits of customer journey orchestration? The customer journey orchestration process benefits businesses and customers who get a personalized and dynamic experience with a brand.

And here are some examples. The first is closing customer service gaps. Customers get frustrated when they make multiple inquiries to customer service teams to resolve issues. Using customer journey orchestration tool, teams can improve first call resolution. When more information about the user is available to internal teams, it can be used to help address their needs and problems. The second is better communication across campaigns and

As companies move towards digital transformation and expand their digital footprints, they use more customer facing channels. Using tools that listen and track interactions

across social, web, mobile, live chat and support channels increases the ability to sync messaging and experiences across platforms. The third is empowered customers. With highly personalized experiences and real-time messaging, customers receive the most relevant information based on their needs. This type of customer engagement fosters strong and long-lasting relationships and create a more human experience.

The fourth is increased cross-team efficiency departments that can share customer information are able to work more efficiently and know when to push or pull back certain communications or campaigns. The fifth is insightful data. Teams can more confidently identify customer profiles, files or recognize strengths and customer interactions when they have access to full view of the customer journey and the channel they engage with. So, here we are talking of a 360 degree view of the customer.

A 360 degree view of the customer. This data can also be used to personalize the data experience at each step of their journey. Data also provides information about which steps in the process create friction or reduce customer loyalty. The sixth is improved performance and increased customer lifetime value. Improved customer experience yields loyal fans and increased retention and revenue rates leading to higher customer lifetime value. But with the benefits also come some challenges of customer journey orchestration.

Despite the advantages of customer journey orchestration, there are challenges that businesses should keep in mind. The first is cost. Startup cost to implement a customer journey orchestration strategy can be high and include platform or service fees and implementation. Clearly defined goals articulating the outcome of implementing a customer journey orchestration plan can be difficult. Given that each channel within a company potentially supports a different business goal.

Layering an orchestration platform on top of each department's individual goals requires creating a new set of goals that tie back to the revenue. The bigger challenge of defining goals is the need for cross-stream collaborations which requires good project management. The third is knowing where to begin. Many companies have an idea of an of the ideal flow a customer would go through with their brand.

But it is not always correct. Sometimes it takes implementing the orchestration platform to collect the right data to an accurate picture of the customer. While many organizations have numerous data and analytics tools at their disposal they only see a piece of that journey. And it is often not tied back to a specific user. Customer journey orchestration requires an accurate journey map to take advantage of the AI, machine learning and automation that comes with journey orchestration. Now let us look at a case study with

the Rujoom applying AI based customer journey orchestration for customer service.

In this case study the focus is on the application of AI based customer journey orchestration in the realm of customer service particularly with Rujoom. Let us begin by posing a question to you all. What do consumers prioritize when they come to receive? When it comes to receiving customer services? First is accuracy of information dissolution.

The second is speed and efficiency. The third is empathy. Fourth is supporting the customer where and when they want and the fifth is personalization. Which would you say? Most think speed and efficiency is the most important factor to customers when receiving customer service. After all no one likes waiting on hold. Being transferred from agent to agent, channel to channel or wasting time navigating a frequently asked questions page that never seems to answer your questions. However, when we ask consumers the above question, accuracy of information and resolution takes the cake at 42% of consumers rating.

This the number one priority of quality customer service. According to CCW digital research followed by speed and efficiency at 33% while the remaining three categories totaling the remaining 25%. And this makes sense when you think about it. If you were out to dinner would you rather get poor tasting food immediately after being seated or quality food and wait longer. Quality food of course. While speed of service is undoubtedly one of the most important factors in customer service particularly in customer

Consumers want a quality product whether that product is food in a restaurant or the resolution of a customer service inquiry. How can we resolve issues using personal AI engines? In customer service journeys, issue resolution can naturally have many options. However, the prediction of the correct resolution that would solve or answer a customer issue can also change in the course of the journey depending upon an endless number of factors. Where many customer service departments go wrong is when these endless number of factors that change the customer journey are not accounted for. Now with the emergence of resume personal AI engines with prediction capabilities, customer service departments are starting to enable optimization of resolution first and first time right rates tapping into that number one customer service demand customers are prioritizing that

This applies to both digital self-service channels as well as agent-based channels where average handling time can be significantly reduced. In the process, the solution gives accurate resolutions as efficiently as possible meeting customers top two demands.

Resume was designated by Gartner as a 2020 cool vendor in AI for customer analytics and has AT&T and Comcast as early adapters of its technology. Rujoom AI-based personal journey orchestration is an out-of-the-box solution for intuitive use by marketing and customer service teams requiring no data scientist resources from the service provider side. This applies to journey orchestration across any vertical and customer type.

Rujoom solution is more interesting these days as we are witnessing massive digital acceleration in customer service. But in order to sustain digital adoption rates, self-service channels must be resolution capable and not only route customer to the contact center. Digital channels that actually resolve more issues would make customer call less. Yuval Samesh, Resume CEO recently added. Rujoom offers an AI-based personal customer journey orchestration platform designed specifically for customer service journey bearing two disciplines.

The first is journey orchestration driving customer journey across channels and sessions from issue to resolution. This discipline is aimed at retrieving data and feeding information into back-end systems. The second is customer service issue resolution applying information collected to create decision workflows for resolving customer issues with the correct resolution. The result is a comprehensive resolution capable solution for service providers which can be deployed in a modular way for accelerating digital transformation and for enhancing call center team's excellence.

Yuval Samesh, Rujoom CEO. Getting digital channels go beyond finding the customer's intent. Unlike in many other customer service resolution where AI is directed to finding the customer's intent, Rujoom resolution AI fast forwards the journey to reduce resolution times and improve first time write rates. The platform drives customer service journey continuously from issue to resolution across channels for troubleshoot and resolve technical or commercial issues. The customer service operations team is selfsufficient in creating and operating customer service journeys. Applied to both self service and assisted channels as the user experience that is engagement with the customer agent is auto-generated and based templates. or on

Therefore, it is coding free and does not require developers. According to recent customer contact week digital market study, 97% of customer service leaders plan on or have already ramped up AI investment between slightly to extremely to resolve more issues via self-service since the pandemic. 94% say the same about using AI to route customers to the right agent. The pandemic has undoubtedly highlighted the exponentially increasing importance of AI to marketers, customer experience analysts and customer service leaders. It is time to take the next step with personal AI engines.

For example, if you consider a telecommunication company and you go to a website you know who you are when you log in.

They know who you are when you log in, check your account, whatever it might be. So, it is using that data to serve you up meaningful content. The company knows you are an iPhone user showing you iPhone accessories not Android accessories. So, it is using that data to serve you better content. Forbes communication council member and former marketing and CX leader at Verizon, Stacey Sherman told this, it is a combination of data you have the data you might need to get and create personas and journey maps for each

Rujoom's personal AI engines invoked per customer drive personal journey continuously and persistently from issue to resolution forming a cohesive single journey leveraging proactive customer engagement as needed. Reaching out to customer that have unresolved issues and replacing otherwise disjointed customer experience. For example, a customer using a self-service channel for troubleshooting a technical issue resulting in having to replace the device will be followed up by the same personal AI engine sending self-installed instructions upon receiving the alternative device. Only when the issue resolved the journey in Rujoom system is terminated. So, in order to conclude in this module, firstly we have discussed the global appetite for AI and the changing

Secondly, we have focused on the changing customer journey focusing lens on the retail sector. Thirdly, we understood the customer journey orchestration. Lastly, we have introduced a case study of Rojum in which we have explained Rujoom's approach to personalization and seamless issue resolution. And these are the 5 references from which the material for this module was taken. Thank you.