

Strategic Services Marketing
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Week – 04

Lecture - 19

Artificial Intelligence and Chatbot Integration in Services

Hello everyone. In the journey of service providers digital transformation, artificial intelligence and chatbots are playing crucial roles. So in this session, let's understand the importance of artificial intelligence and chatbot integration for services development and customer satisfaction. What is Artificial Intelligence? Artificial intelligence in services marketing refers to the application of advanced computing technologies that enable machines to perform tasks that traditionally required human intelligence. In the context of services marketing, AI encompasses a range of capabilities including machine learning, natural language processing and data analytics to enhance various aspects of marketing strategies and customer interactions. The evolution of AI in marketing can be traced to the advancement in technology, data processing capabilities, and the increasing need for businesses or service providers to derive actionable insights from vast datasets.

Initially AI in marketing was primarily focused on automating repetitive tasks, but over time it has evolved into a transformative force shaping the way businesses understand, reach and engage with their target audience. Let's understand the impact of artificial intelligence in detail. The first with respect to enhance customer insights. AI enables the analysis of large datasets to extract valuable insights into customer behaviours, preferences and even trends.

This deep understanding allows marketers to create more targeted and personalised campaigns. Second impact is with respect to automation of marketing processes. AI automates routine tasks such as data analysis, customer segmentation and even content personalisation. This automation improves efficiency allowing marketers or service providers for that matter to focus on strategic decision making and creativity. This particular image showcase how the process happens while going for automation using AI tools.

The data is collected, then segmented and accordingly workflow is designed so as to deliver the best of the best services to the customers. Third impact is with respect to personalisation and targeting. AI algorithms analyse customer data to deliver personalised experiences from product recommendations to even tailored content. This level of personalisation enhances customer engagement as well as satisfaction. As shown in this particular image, what does personalisation and targeting can do? We can have enhanced efficiency, improved targeting, hyper personalisation of services, improved customer experience, competitive edge that is coming because of all these things and ultimately getting better return on investments.

Next impact is because of chatbots and virtual assistants. AI powered chatbots and virtual assistants provide instant customer support, answering queries and guide users through processes and also offers a seamless and responsive interaction. But does chatbot and virtual assistants are same? No, there is a difference. Let's understand. Chatbots can be rule based or machine learning powered or rely on AI and natural language processing.

Whereas, virtual assistants rely on artificial emotional intelligence and NLU. Coming to intelligence level, chatbots are mostly not proficient in language processing. Whereas, virtual assistants can understand semantics of human language. Third difference is with respect to core functionality. Here chatbots assist businesses to improve customer support.

Whereas, virtual assistants help users perform everyday tasks. Coming to the next difference is with respect to channels. Chatbots are deployed on websites, applications and even messaging portals. Whereas, virtual assistants are integrated into devices they are part of. Finally, there is another difference that is due to interface.

Chatbots have conversational user interface. Whereas, virtual assistants can function without an interface as well. After understanding this difference, let's understand through a short video that what is a chatbot and what are the different types of chatbots and how they work. Have a look at this particular informative video. Do you ever lay awake at night wondering what exactly a chatbot is or how they work or even if bots will steal customer service representative's jobs? Well, you can rest easy because we're going to answer all your questions.

Interactions with automated bots jumped 81% in 2020. With customers using chatbots to do everything from checking if they have COVID-19 symptoms to finding the perfect lipstick color. But first, what is a chatbot? A chatbot enables businesses to put a layer of automation or self-service in front of customers in a friendly and familiar way. And with companies increasingly adding messaging channels to provide faster resolutions and always-on support, bots have quickly become a key component of any messaging

strategy. They ensure customers get instant responses when an agent is busy helping other customers or watching Bridgerton.

So how do chatbots work? And more importantly, what can you do with them? Bots use predefined conversation flows, natural language processing, and or machine learning to interpret customer or employee requests. A chatbot can work alongside a knowledge base. 60% of customers want to resolve as many issues as possible with a company's online resources. Chatbots can recommend the right help center articles to answer FAQs outside of a help center, like on the checkout page of your website. If Bob is wondering about an airline's cancellation policy before he books his flight to the Bermuda Triangle, a bot can serve him the right information.

With access to business and customer data, chatbots can deliver personalized responses and automate cross-sell and up-sell activities. A bot can tell Bob which flights are available on his new travel date and whether he's eligible for a discount if he upgrades to first class. A chatbot can also help customers complete tasks and convert customers within the conversation. Bob could reserve a window seat, buy his upgraded ticket, and request a double rum and coke for the flight right inside the chat. Flying makes Bob uneasy.

Does that mean chatbots are going to steal customer service jobs? Chatbots are most successful when they work together with human agents. Bots aren't meant to solve every issue. 56% of customers say bots are helpful for simple requests. And when bots take these kinds of repetitive cases off a support team's plate, agents can prioritize questions that need the human touch. Chatbots can also gather information, like a customer's order number or city, up front before an agent takes over.

So they have the context they need to provide quick, personalized service. This is also a huge time saver for agents. It's always important to have a way for customers to escalate a conversation to a real person. When a customer has a valid reason to speak to a human agent but there's no option to do so, it's a frustrating experience that can lead to negative CSAT or worse, churn. The takeaway? The most successful companies are ahead of the curve when it comes to adopting bots.

High-performing SMBs and midsize companies are three times more likely to use Zendesk's own AI-powered bot, and enterprise companies are four times more likely. When a business leverages and combines the strengths of both bots and humans, it can create the kinds of modern customer experiences that drive loyalty and improve the bottom line. Next impact is with respect to predictive analytics. AI's predictive capabilities help marketers forecast future trends, customer behaviors and market demands. This foresight enables proactive decision-making and campaign optimization.

For example, the typical process that follows in the predictive analysis is depicted in this particular image, pulling the extracted data about customers and their behavior, clean it, refine it and prepare it for analysis, identify what to predict which is denoted as a pick, and then try to predict, create some predictions and develop action plans based on those predictions. Next impact is with respect to improved ad targeting. AI algorithms analyze user behavior to optimize ad targeting, ensuring that advertisements are delivered to the most relevant and receptive audiences, thereby improving the return on investment or ROI. For example, how AI might improve digital marketing? AI improves digital marketing with respect to improved targeting, optimized ad spending, personalizing customer experiences, improving customer service, and enhancing content creation. Next impact is with respect to NLP, natural language processing.

NLP allows machines to understand and interpret human language, facilitating sentiment analysis, social media monitoring, and the extraction of insights from unstructured data sources. Natural language processing involves machine translation, information retrieval, sentiment analysis, information extraction, and even question answering as well. Now let's understand the importance of this AI for services. AI for services has threefold benefits. Number one, enhancing customer experience.

Number two, improving operational efficiency. And number three, personalization and targeted marketing. Under enhance customer experience, the first benefit is of giving personalized interactions. AI enables the delivery of highly personalized experiences by analyzing customer data and predicting preferences. This personalization enhances engagement and satisfaction.

Second benefit with respect to real-time assistance. AI-powered chat boards and virtual assistants provide instant and round-the-clock support, addressing customer queries and concerns promptly. And the third benefit deals with predictive customer service. AI predicts customer needs, allowing businesses to proactively address issues before they arise, contributing to a seamless customer experience. The second set of benefits are with respect to improved operational efficiency.

Let's understand. The first benefit here is automated tasks. AI automates repetitive and time-consuming tasks, freeing up human resources to focus on strategic and creative aspects of marketing. Second benefit deals with data analysis and insights. AI efficiently processes large volumes of data, providing actionable insights for decision-making, campaign optimization, and as well as for resource allocation. Third benefit is with respect to workflow optimization.

AI streamlines marketing workflows from lead generation to conversion by automating processes and ensuring a more efficient and streamlined operation. Third set of benefits deals with personalization and targeted marketing. First here is dynamic content

personalization. AI analyzes customer behavior to dynamically personalize content, whether its website recommendations, email campaigns, or targeted advertisements. Second benefit is with respect to segmentation and targeting.

AI algorithms identify distinct customer segments based on behavior, demographics, and even preferences. This enables targeted marketing efforts tailored to specific audience segments. And the third and final benefit is with respect to predictive analytics for marketing. Artificial intelligence predicts future customer behaviors and trends, allowing marketers to proactively adjust strategies for optimal results. Now let's understand how different organizations have successfully utilized or implemented AI in their services marketing.

The first case here is Amazon. Amazon implemented AI with respect to personalized recommendations and dynamic pricing. Under personalized recommendations, Amazon utilizes AI algorithms to analyze customer purchase history, browsing behavior, and preferences. The result is a highly effective recommendation system that suggests products tailored to individual users. Coming to dynamic pricing, Amazon employs AI-driven dynamic pricing strategies, adjusting product prices in real-time based on factors like demand, competitive pricing, and customer behavior. This ensures that competitive pricing is maintained and it also maximizes revenue.

Second case here we can discuss is with respect to AI at Netflix. Netflix uses AI for two purposes, content recommendation and predictive analytics. Under content recommendation, we can see Netflix leverages AI to analyze user viewing habits, ratings, and even preferences. The platform's recommendation system uses this data to suggest personalized content, increasing user engagement and retention. Coming to predictive analytics, Netflix uses AI to forecast user preferences for future content.

This influences content creation decisions, allowing the platform to invest in shows and movies with a higher likelihood of success. Third case here is Uber. Uber has their own AI labs. Uber implements AI with respect to two things or two domains, dynamic pricing and demand prediction and personalized rider experience. Under dynamic pricing and demand prediction, Uber employs AI to implement dynamic pricing based on factors such as demand, traffic conditions, and supply availability.

This ensures that pricing is responsive to real-time market dynamics, optimizing driver earnings and even taking care of user experience. Coming to personalized rider experience, AI-driven systems analyze user behavior, historical ride data, and location patterns to offer personalized suggestions for pickup points, drop-off locations, and even preferred routes. This enhances the overall convenience for riders. The next case is of Spotify. Let's have a look at this particular video to understand how Spotify implements AI in terms of recommending different kinds of music as per the customer's tests.

With 500 million monthly users, Spotify is the world's largest music streaming service. Spotify is the home of audio. It's known for its personalized playlists made with its recommendation algorithm. Think about users as this raw material. And then on top of the data layer, we're able to build shared models.

But relying so much on artificial intelligence has also drawn criticism from some industry experts worried about algorithmic bias. Here's how Spotify uses AI to personalize users' experiences on the platform. This is the tech behind Spotify. In the early 2000s, many people found music recommendations through top charts and early streaming platforms like Pandora and Last FM.

With the Last FM app from the App Store, you can listen to great bands. So when Spotify entered the scene in 2008, it's not so much that they were the first people to start using analytics to recommend music, but it was the way in which they combined various computational techniques in order to make their recommendations feel more lifelike. Thomas Hodgson studies algorithms and artificial intelligence with a focus on how new technology from music streaming companies impact artists. Bands who listen to Discover Weekly and Daily Mix, the way that they talk about them is in very human-like terms.

Discover Weekly, you magnificent. You've done it again. In 2014, Spotify acquired music analytics firm The Echo Nest, which blended machine learning and natural language processing to build a database of songs and artists. Spotify says this technology marked an important step in the evolution of its recommendation system. So how does that system work? It starts with a process called collaborative filtering. Collaborative filtering looks at the pattern across all of this data and tries to understand when do tracks happen to be playlisted together very often.

You can think of it as building a map of music and podcasts. That map looks something like this. Each point represents a different track in Spotify's catalog, and the location of each point is determined by collaborative filtering. Which means that these tracks go together according to the way users have playlisted them and listened to them. So if these two songs are frequently playlisted together, they will be close to each other in this map.

Whereas, if these songs are never playlisted together, they will be farther apart in the map. But recommendations based purely on collaborative filtering aren't perfect. For example, during the holidays, Mariah Carey's All I Want for Christmas is You might get playlisted more frequently with Silent Night. Even though this sounds like a pop song, and this sounds like a Christmas carol. If Spotify only generated recommendations based on proximity, then users who like Mariah Carey might get recommended Silent Night when they aren't interested in Christmas carols.

To prevent this, Spotify adds another layer of analysis called content-based filtering. This algorithm gathers metadata, like the release date and label, and executes a raw audio analysis. It uses metrics like danceability and loudness to describe the sonic characteristics of the track. These are the results for Uptown Funk, which sounds like this.

And has a danceability score of 0.856 on a scale of 0 to 1. The algorithm also dissects each track's temporal structure. Here's a visual representation of that for Antihero by Taylor Swift. These are the beats, the bars, and the sections. Content-based filtering also takes into account a track's cultural context, which means studying the lyrics and analyzing the adjectives used to describe the track in articles and blogs. These filtering techniques are not unique to Spotify, but industry experts say what sets the platform apart is the amount of user data it has and the products it creates from it.

Spotify says its content-based filtering technology has evolved over the years and now includes more advanced proprietary-facing features. But Hodgson says the danger with algorithms is that they could reinforce existing biases. This could mean that a particular catalog of music has more male artists than female artists. One of the dangers with machine learning is that as listeners start to engage with that catalog, those biases become magnified and that this creates what's called a kind of feedback loop. Spotify says its research teams evaluate and mitigate against potential algorithmic inequities and harms and strive for transparency about its impact.

Another criticism is that the algorithm isn't optimized for new artists because there's no user data. This is known as the cold start problem. Soltan says this is where human editors play a significant role in delivering recommendations. They're possibly some of the best people in the world and trying to understand new releases and culture and what's relevant. But Hodgson says the bigger concern is that certain metrics used in the platform's audio analysis might be culturally biased.

In other parts of the world, they have musical systems and musical cultures that are entirely different. Like this North Indian classical track, for example. Spotify's algorithm labels its key signature as E minor, which Hodgson says is inappropriate for this musical tradition. However, it's still the case that the music that is emerging from South Asia is being understood algorithmically under the Western equal temperament scale. Spotify says the audio analysis is one small part of the overall system, which takes into account many factors before making a recommendation.

Some industry experts also point to issues with how the system understands metadata for classical music. For example, the metadata for a Tchaikovsky track can include not just the name of the work and the artist, but also the movement, opus number and conductor. Spotify's algorithm isn't optimized for that. Apple Music, which has emerged

in recent years as a competitor to Spotify, released a new app in March that the company says is designed to solve this problem. Spotify says it doesn't comment on a competitor's marketing campaigns.

In February, the streaming service joined the recent buzz around generative AI. I'm X and from this moment on, I'm going to be your own personal AI DJ on Spotify. The DJ gives the algorithm a human voice and offers listeners additional context around a recommendation. Up next I know you've been on a summer song kick lately. Soltan says the company is also exploring reinforcement learning, a technique that would allow the recommendation system to learn automatically based on feedback.

It will help with the diversity of their recommendation. It will help with the longer term retention. And we're trying to push the state of the art in each of those, introducing new technologies, new capabilities and bringing new experiences. Next case is Bank of America. But this is where Chatbots comes into picture.

Bank of America has their own virtual assistant called Erica. So Bank of America introduced Erica, a virtual assistant powered by AI and Chatbot technology. Erica assists customers with various banking tasks, such as providing balanced information, analyzing spending patterns and offering financial advice. The Chatbot enhances customer engagement and streamlines the banking experience, making it more personalized and accessible. Have a look at this particular video that showcase the Erica, the Chatbot from Bank of America and how it works.

The next case or example for us is Domino's Chatbot for ordering. Domino's Pizza employs a chatbot on its online platform that allows customers to place orders through natural language interactions. Customers can customize their pizza, track orders and even get real time updates using the chatbot. This enhances the convenience of ordering and provides a seamless customer experience.

Next is an example from Air Asia. They have their own chatbot named Ava. Air Asia introduced Ava, a chatbot designed to assist customers with flight bookings, inquiries and travel related information. Ava interacts with users on the Air Asia website and provides instant responses to queries, improving customer service efficiency and delivering a more engaging experience for travelers. But recently, they have introduced another chatbot named as Bo. Have a look at this particular interesting video that showcase how Air Asia's Ask Bo can help customers to provide biggest and greatest experience in terms of service. Got questions about your upcoming travels? Hi, I'm Bo and I'm here to provide some assistance.

With my new Smart Search feature on Air Asia Super App, you can get answers to your queries within seconds. Information about your upcoming flights, departure airport,

boarding gate and more are now available at your fingertips. You can also get updates on baggage status, baggage collection and bag type numbers. If you're traveling abroad, I can keep you informed on the latest travel requirements. In event of any disruption or cancellation, you can skip the queue and easily request for flight conversation on your own.

I want to make your journey seamless and convenient every step of the way. To learn more about me, download Air Asia Super App today. With these cases, although it looks very successful for all the firms, but there are always challenges and considerations when it comes to AI-driven marketing in promotion of services. The first challenge is with respect to privacy and ethical concerns in AI-driven marketing. The first sub-element here is data privacy. As AI relies heavily on data, ensuring the privacy and security of customer information becomes paramount.

Concerns about unauthorized access, data breaches and misuse of personal data can impact customer trust. The second sub-element here under privacy and ethical concern is ethical use of AI. Marketers must navigate ethical considerations in the use of AI, including issues related to bias in algorithms, transparency in decision-making processes and the potential for AI to manipulate customer behavior. Striking a balance between personalized marketing and respecting user privacy is crucial.

Second set of challenges deals with integration challenges and adoption hurdles. First here is legacy systems compatibility. Many businesses, especially those with established infrastructures, face challenges integrating AI technologies with existing legacy systems. Compatibility issues can hinder seamless implementation and limit the effectiveness of AI-driven marketing strategies. The second here is skill gaps.

The successful adoption of AI in marketing requires a workforce with necessary skills. The shortage of professional well-versed in both marketing and AI can be a barrier to implementation. Third set of challenges are arising due to balancing automation with human touch. Remember that services are intangible in nature, and much of it depends on the human touch. First challenge here is maintaining personalization. While AI enables automation and efficiency, there is a risk of losing the human touch in customer interactions.

Balancing automation with maintaining a personalized and empathetic customer experience is crucial to prevent customers from feeling disconnected. Another challenge is customer trust and transparency. Customers may be skeptical about AI-driven marketing practices fearing a lack of transparency. Service providers or businesses need to communicate clearly about the use of AI, assuring customers that their data is handled responsibly. Businesses or service providers need to communicate clearly about the use

of AI, assuring customers that their data is handled responsibly, and that AI is employed to enhance, not replace, human engagement.

Now let's understand some best practices for implementing AI in services marketing. The first stage here is building a robust AI strategy, then ensuring data security and compliance, and then continuous monitoring and adaptation. Let's understand these practices in detail. First here is building a robust AI strategy. In order to build a robust AI strategy, the first step is to define clear objectives. Clearly outline the objectives and goals you aim to achieve through AI implementation in services.

Whether it's enhancing customer experience, improving operational efficiency, or increasing personalization, having a well-defined strategy is essential. Secondly, understand customer needs. We need to prioritize understanding customer needs and preferences. AI solutions should align and enhance the overall customer journey, providing value and addressing pain points. The second process or the second stage is with respect to ensuring data security and compliance.

In this, first, make sure that data privacy measures are identified. Implement robust data privacy measures to ensure the security of customer information. Adhere to data protection regulations and standards to build trust among customers regarding the responsible use of their data. Secondly, compliance with the regulations. Stay informed about data protection and privacy regulations relevant to your industry and region.

Ensure that your AI initiatives comply with these regulations to avoid legal complications. Finally, it's all about continuous monitoring and adaptation. First, have regular performance evaluation. Continuously monitor the performance of AI algorithms and systems. Regularly evaluate key performance indicators or KPIs to ensure that the AI is delivering the desired outcomes and meeting business objectives.

Secondly, adaptation to changing trends. Stay agile and adaptable to changes in customer behavior, market trends, and technology. AI strategies should evolve in response to shifting dynamics to remain effective and relevant. So, implementing these best practices fosters a strategic and responsible approach to incorporating AI into services marketing. By aligning AI initiatives with organizations' goals, prioritizing data security, and maintaining adaptability, service providers can maximize the benefits of AI while mitigating potential risks. So in this session, we tried to comprehend or understand the importance of AI or artificial intelligence and also chatbot integration for improving services performance. Thank you.