Unit-4

AI for Customers

Using AI for Retention - Growing Customers Expectations, Retention and Churn, Many Unhappy Returns, Customer Sentiment, Customer Service, Predictive Customer Service.

Growing Customer Expectations :-

Just as "AI" is deemed anything computers can't do yet "meeting expectations" is a never-ending race.

As IBM reported about its consumer Expectations study : "Yesterday's "good enough" is today's "not even close".

Customer expectations are continuously evolving, driven largely by advancements in technology and shifts in societal norms.

Personalization: Customers expect personalized experiences tailored to their preferences and needs. This include personalized recommendations, customized communications, and products or services.

Instant Gratification:

With the rise of on-demand services and fast-paced lifestyles, customers expect quick responses, fast delivery times, and immediate access to information or assistance.

Omnichannel Experience:

Customers expect a seamless experience across different channels (eg: online, mobile app), where

they can switch b/w channels without losing content or QoS.

Transparency and Trust: Customers value transparency in pricing, policies, and data handling practices.

Proactive Support:

Rather than reactive customer service, customers appreciate proactive communication and support.

Emphasis on Sustainability: There is a growing expectation for businesses to demonstrate commitment to environmental and social responsibility.

Advanced Technology Integration:

Customers expect businesses to leverage advanced technologies such as AI, ML, and automation to enhance service efficiency, personalization, and overall customer experience.

Using AI for customer retention involves employing technology to analyze customer behaviors, preferences, and interactions to proactively prevent churn and enhance loyalty.

Predictive Analytics: AI algms can analyze historical data to predict which customers are at risk of churning.

Personalized Recommendations: AI algms can analyze customer preferences and behaviours to offer personalized product recommendations, content, or promotions.

Chatbots and Virtual Assistants:

AI powered chatbots can provide round-the-clock

customer support, addressing queries and issues promptly, which can enhance customer satisfaction and retention.

Sentiment Analysis: AI can analyze customer feedback, reviews, and social media sentiment to gauge customer satisfaction and sentiment trends.

Customer segmentation: AI can segment customers based on behavior, demographics & preferences.

Feedback Analysis:

AI can analyze feedback from surveys, reviews, and social media to identify recurring issues & areas of improvement.

Retention and Churn:-

Customer churn analysis helps you identify and focus on higher value customers, determine what actions typically precede a lost customer & safe and better understand what factors influence customer retention.

Statistical techniques involved include survival analysis as well as Markov chains with 4 stages:

→ Brand new customer
→ Returning customer
→ Inactive (lost) customer.
→ Reacquired customer

along with path analysis to understand how customers move from one state to another, to maximize profit.

→ Customer lifetime value
→ Cost of user acquisition
→ User Retention.

Retention and churn are crucial metrics in understanding customer loyalty and satisfaction:

Retention: Retention refers to the ability of a business to keep existing customers over a specified period.

High retention rates indicate satisfied customers who continue to use products or services, contributively to revenue and growth.

Churn: Churn (or attrition), is the opposite of retention it represents the rate at which customers stop doing business with a company over a given period.

High churn rates can signify dissatisfaction, competitive pressures, or other factors leading customers to switch to alternatives.

Strategies for Retention and Reducing Churn:

→ Customer experience optimization
→ Data-driven insights
→ Personalization
→ Continuous Engagement
→ Feedback Mechanisms
→ Value Proposition Reinforcement
→ Retention Programs.

Many Unhappy Returns:-

There are some customers you would prefer not to be customers. They represent a detrimen

to the bottom line, a -ve lifetime value.
Companies that set up their systems to sell more and more to people who buy more and more without factoring in the cost of returns are automating their own demise.
Clear returns turns heavy-duty analytics on the problem of people returning the items they've purchased.
Another customer segment came to light while working with clear returns: the Indulgers.
~~The company leverages clustering to balance its product mix~~
The company can alter the descriptions, images, and presentation of problem products to set the proper level of expectation in the eyes of their customers.

Customer Sentiment :-

All the ways we can collect data about behavior online, most companies seem to blithely ignore one set of metrics: their customers' feelings.
It also allows for segmentation by attitude.
Popup surveys on your website compare customer satisfaction results within & across industries.
The questions can be very specific and measure a visitor's likelihood of returning, buying, and recommending you to others.

"The real power of ML is that humans only find what they are looking for".

"Machine learning can surface interesting things on its own.

We can also review segments of people who did and did not take the surveys.
Instead of just measuring half a % of visitors, we can predict happiness and intercept you with an offer of a chat box, or pre-cache the next roll-over button or pop-up something that suggests behavior that leads to higher satisfaction.
Customer sentiment refers to the overall attitude or emotions that customers express towards a brand, product or service.
It is a critical aspect of understanding customer experience and satisfaction.

+ve sentiment:
In this, customers are likely satisfied with their interactions, products or services. It can lead to loyalty, advocacy, and repeat business.

-ve sentiment:
This indicates dissatisfaction or disappointment among customers. It can arise from issues such as poor customer service, product quality problems or unmet expectations.

Neutral sentiment:
It means customers neither express strong positivity nor negativity.

Importance of Monitoring Customer sentiment:
→ Customer experience improvement
→ Brand reputation
→ Early warning signs
→ Competitive Advantage.

Methods for measuring customer sentiment:

→ surveys and Feedback
→ Social Media Monitoring
→ sentiment Analysis Tools.

By actively monitoring and responding to customer sentiment, businesses can build stronger relationships, enhance customer satisfaction, and improve overall business performance.

Customer service:-

prompt, accurate, and considerate customer service is vital to keeping customer satisfaction high.

That means answering questions and solving problems. Interactive voice response systems and bots are rife with AI upgrades.

Call center support:

It all started with companies using customer data to route incoming telephone calls to the appropriate representative. Rules-based systems are fine for gross segmentation.

→ If the caller is not a customer but has called several times before route to sales.
→ If the customer is new, route to onboarding.
→ If the customer's payment is late, route the call to Accounts Receivable
→ If the call center is over capacity, route to the call-Back system.

But an AI system can take into account myriad facts about the caller as well as facts about the available customer service

representatives.

IVR systems are now using speech recognition, NLP, and tone analysis to determine whether the caller is calm, cool and collected (or bewitched, bothered and bewildered (or irate.

AI systems can coach a rep after each call, providing instant feedback and +ve reinforcement and offering suggestions of how to handle similar calls in the future.

Bots:

Bots have been in the spotlight for the past couple of years and can be found embedded in products, Twitter streams, and customer service applications. It is said that bots make up a little under or a little over half the traffic on the web.

In regular interaction with customers, bots are delegated to mundane tasks.

GIWYN — Gifts When You Need.

Bots are dealing with text and they can do NLP and sentiment analysis. They can also recognize and categorize entities like people, products, cities, and the like to help with segmentation.

Mark Zuckerberg has started a goal of creating a working version of Jarvis from Iron Man, bots are hard at work providing valuable services, one small step at a time.

In Application Bots:

Microsoft keeps adding bots to Skype. You can roll your own automation with IFTTT (If This Then That), have Hipmunk help you with

travel planning, have SkyScanner find you cheap flights, and have Stubhub find you cheap event tickets, in a conversational way.

Caption Bot: It can understand the content of any image and It'll try to describe it as well as any human.

Cardea: It is the personal medical aid. She will answer your health questions, help you understand your symptoms (and connect you directly with a doctor via the secure RingMD platform.

Invoice Ninja: Create and e-mail PDF invoices. It'll help you get paid on time.

Mica the Hipster Cat Bot: This provides restaurant and pub venue information and recommendations.

Movie Night: Chat with Movie Night to get show times and content and invite your friends to the latest movies.

Summarize: No time to read an entire web page? Just send a link to the Summarize bot to get an overview of the main points. Powered by Bing.

UPS Bot: It is tool to help you interact with UPS. It tracks your packages, find nearby UPS locations, calculate shipping rates, and find the UPS stock price.

Build Your Own Bot:

For each incoming message, our deep neural n/wor predict the case type and fields, the

appropriate answer along with a specific confidence rating.
Answers above the confidence threshold are automated, while the rest are served as intelligent prompts to agents.
The agent approves (or personalizes them, further training the model.
The digital genius system can prefill reason codes (case details, urgency, sentiment, and answer repetitive questions through the use of ML and AI.
Written in Python, ChatterBot is a ML chatbot available as a free open source project.
Recognizing that algms are more powerful when they have access to more data. Microsoft offers MS MARCO (Microsoft MAchine Reading COmprehension).
Customer service refers to the support and assistance provided to customers before, during, and after their purchase (or use of a product (or service.

Predictive Customer Service:-

Another project being tested at USAA tries to improve customer service. It involves an AI technology built by saffron, a division of Intel, using an approach designed to mimic the randomness of the connections made by the human brain.
predictive customer service leverages data analytics and AI to anticipate customer needs, behaviors, and issues before they occur.

By analyzing historical data and patterns, businesses can proactively address customer inquiries, predict potential problems, and deliver personalized support.

Predictive Analytics: Using algos and ML models, businesses can analyze large datasets to identify trends and patterns in customer behavior. This enables them to predict future actions & needs of customers.

Anticipatory Assistance: Predictive models can anticipate when a customer might need assistance & encounter an issue.

Personalized Recommendations: Based on customer data analysis, predictive models can suggest relevant products, services & solutions tailored to individual preferences and past interactions.

Churn Prediction: Predictive analytics can identify customers who are at risk of churning (leaving the service & product).

Optimized Resource Allocation: By predicting customer service demand and peak times, businesses can allocate resource effectively.

Automation and Chatbots: AI-powered chatbots can use predictive models to offer personalized responses and recommendations in real-time. They can handle routine inquiries, freeing up human agents to focus on more complex issues.

Benefits:

→ Enhanced Customer Experience → Cost Savings
→ Improved Efficiency → Increased Customer Retention