

8. Digital Transformation for Sustainable Growth Using AI in CRM (Customer Relations Management)

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The first definition of sustainable development comes from the Brundtland Report (1987) where it was described as "development which meets the needs of current generations without compromising the ability of future generations to meet their own needs".

The UN General Assembly in September 2015 adopted a global development vision called Transforming our World: The 2030 Agenda for Sustainable Development. **The 2030 Agenda is "a plan of action for people, planet, and prosperity"**. As part of this agenda, 17 new Sustainable Development Goals (SDGs) and 169 targets to stimulate global action over the next 15 years on issues critical to humanity and the planet have been identified by the global community. The concept of SDGs was born at the United Nations Conference on Sustainable Development, Rio + 20, in 2012.

In the September 2015 UN Summit, the Prime Minister of India pledged its commitment to the SDGs. The SDGs officially came into force from 1st January 2016. NITI Aayog has been assigned the role of developing national indicators, overseeing the implementation by ministries and coordinate with States for the achievement of development targets as enshrined in the SDGs.

The interlinkages and integrated nature of the Sustainable Development Goals are of crucial importance in ensuring that the purpose of the new Agenda is realized. Goals and targets will stimulate action over the next fifteen years in areas of critical importance for humanity and the planet.

The 2030 agenda now propose a holistic approach to develop strategies and calls for pursuing all dimensions of sustainable development in a balanced and integrated way. The new agenda goes beyond the traditional three dimensions of sustainable development and is grounded in 5 "Ps":

1. **People:** to end poverty and hunger, in all their forms and dimensions.
2. **Planet:** to protect the planet from degradation
3. **Prosperity:** ensure that all human beings can enjoy prosperous and fulfilling lives
4. **Peace:** Foster peaceful, just and inclusive societies which are free from fear and violence
5. **Partnership:** Mobilize the means required to implement this Agenda through a revitalized Global Partnership... with the participation of all countries, all stakeholders and all people.

Abstract:

8.1 AI - Driven Customer Relations Management (CRM):

Businesses constantly seek innovative ways to understand, engage, and retain customers. AI-powered customer Relationship Management (CRM) software facilitates this by blending artificial intelligence and customer relationship management. This breakthrough addition to sales software promises to transform how companies interact with their clientele.

Artificial intelligence (AI) has emerged as a corner stone to improve customer relations management. It helps marketers to build better products, deliver faster, more relevant contents to the customers, and audience's preference for more personalized customer experiences across all channels, It helps customers better understand their product and interacts with their brand associates.

It creates what types of messaging will resonate most effectively. . As more companies invest in AI-powered products, customers expect more transparency around how these technologies work and look for privacy.

AI is used in various ways, from improving website navigation to using computer vision to create more targeted ads.AI is integrated into many digital marketing tools marketers use daily. It can help them with things like social media management, graphic design, content creation, and keyword research.

AI in customer relations management enhances efficiency through data analysis, personalization, and automation. It optimizes ad targeting, predicts consumer behavior, and improves customer experience, ultimately leading to more effective and targeted marketing strategies.

AI in customer relations management empowers businesses by enhancing targeting, personalization, and automation. It optimizes ad placements, analyzes user behavior for tailored content, and streamlines customer interactions, ultimately boosting efficiency and ROI.

Artificial Intelligence (AI) plays a crucial role in enhancing customer relationship management (CRM) by providing businesses with advanced tools and capabilities to better understand, engage, and serve their customers. Here are some key aspects highlighting the importance of AI in CRM.

Data Analysis and Insights:

AI algorithms can process large volumes of customer data in real-time, extracting valuable insights and patterns that may be challenging for human analysts to discern. Analyzing customer behavior and preferences helps businesses understand their needs, allowing for more personalized and targeted marketing strategies.

Personalized Customer Experiences:

AI enables businesses to deliver highly personalized experiences by tailoring recommendations, content, and interactions based on individual customer preferences and past behavior. Personalization leads to improved customer satisfaction and loyalty, as customers feel more valued and understood.

Predictive Analytics:

AI-powered predictive analytics enables businesses to forecast customer behavior and trends. This helps in anticipating customer needs, identifying potential issues, and making data-driven decisions to enhance customer satisfaction.

Virtual Assistants and CRM:

AI-driven chat bots and virtual assistants provide instant, 24/7 customer support. They can answer queries, resolve issues, and guide customers through various processes, improving overall customer service efficiency.

Automation of routine and repetitive tasks frees up human agents to focus on more complex and high-value interactions.

Sentiment Analysis:

AI tools can analyze customer sentiments expressed in various channels such as social media, emails, and customer reviews. This helps businesses understand public perception, identify potential issues, and respond promptly to concerns.

Lead Scoring and Qualification:

AI algorithms can assess and score leads based on their behavior, interactions, and demographic data. This ensures that sales teams prioritize leads with a higher likelihood of conversion, optimizing the sales process.

Customer Segmentation:

AI assists in segmenting customers based on various criteria, allowing businesses to create targeted marketing campaigns for different customer groups. This ensures that marketing efforts are more relevant and effective.

Prediction and Retention:

AI helps in predicting customer churn by identifying patterns indicative of potential disengagement. This enables proactive measures to retain customers through targeted retention strategies, special offers, or personalized engagement.

Efficient Resource Allocation:

By automating repetitive tasks and streamlining processes, AI allows businesses to allocate resources more efficiently. This includes optimizing staffing levels, managing inventory, and implementing cost-effective marketing strategies.

In conclusion, the integration of AI in customer relationship management empowers businesses to deliver better customer experiences, improve operational efficiency, and gain a competitive edge in today's dynamic business landscape.

8.2 Scenario of CRM before and after the introduction of AI:

8.2.1 Before Introducing AI in CRM:

Manual Data Processing:

- Data analysis and processing are time-consuming, often done manually.
- Limited capacity to handle large volumes of customer data efficiently.

Generic Customer Interactions:

- Customer interactions are generic and not highly personalized.
- Limited ability to understand individual customer preferences and behaviors.

Reactive Customer Service:

- Customer service is mostly reactive, responding to issues as they arise.
- Limited capabilities to proactively address customer needs or predict potential problems.

Limited Automation:

- Minimal automation of routine tasks, leading to a heavier workload for human agents.
- Resource-intensive processes with the potential for errors and delays.

Traditional Marketing Strategies:

- Marketing strategies are based on broad demographics rather than individual customer insights.
- Limited ability to tailor marketing campaigns to specific customer segments.

8.2.2 After Introducing AI in CRM:

Automated Data Processing:

- AI-driven algorithms process and analyze large volumes of customer data in real-time.

- Quick extraction of valuable insights and patterns, facilitating data-driven decision-making.

Highly Personalized Customer Interactions:

- AI enables businesses to deliver personalized experiences based on individual customer preferences and behaviors.
- Targeted recommendations and content enhance customer engagement and satisfaction.

Proactive Customer Service:

- AI-powered systems can predict and address potential issues before they escalate.
- Chatbots and virtual assistants provide instant and proactive customer support, 24/7.

Efficient Automation:

- Automation of routine tasks frees up human resources for more complex and strategic activities.
- Increased efficiency and accuracy in data processing and customer interactions.

Advanced Marketing Strategies:

- AI allows for customer segmentation based on diverse criteria, enabling targeted marketing campaigns.
- Improved understanding of customer behavior facilitates more effective and personalized marketing efforts.

Predictive Analytics and Insights:

- AI facilitates predictive analytics for forecasting customer behavior and trends.
- Businesses can make informed decisions, anticipate customer needs, and enhance overall operational efficiency.

Enhanced Resource Allocation:

- Optimized resource allocation based on AI-driven insights.

- Improved staffing levels, inventory management, and cost-effective marketing strategies.

8.3 Churn Prediction and Retention:

- AI helps in predicting customer churn, allowing businesses to implement proactive retention strategies.
- Targeted interventions to retain customers through personalized approaches.

In summary, the introduction of AI in CRM has transformed business processes from manual and reactive to automated, proactive, and highly personalized one.

This evolution leads to improved customer experiences, increased operational efficiency, and a more competitive position in the market.

There are numerous customer relationship applications driven by Artificial Intelligence (AI) that businesses leverage to enhance customer interactions, improve efficiency, and deliver personalized experiences. Here are some key AI-driven applications in the realm of customer relations

1. Chat bots and Virtual Assistants:

- AI-powered chat bots and virtual assistants provide instant and automated responses to customer queries, facilitating 24/7 customer support.
- They assist in handling routine tasks, resolving common issues, and guiding customers through various processes.

2. Predictive Analytics:

- Predictive analytics applications leverage AI algorithms to forecast customer behavior and trends.
- Businesses can use predictive analytics to anticipate customer needs, identify potential issues, and optimize decision-making processes.

3. Personalization Engines:

- AI-driven personalization engines analyze customer data to tailor content, recommendations, and experiences based on individual preferences and behaviors.

- These engines enhance customer engagement by delivering relevant and personalized interactions.

4. Sentiment Analysis Tools:

- AI-powered sentiment analysis tools analyze customer sentiments expressed in various channels, such as social media, emails, and reviews.
- Businesses can gauge public perception, identify customer satisfaction levels, and respond promptly to concerns.

5. Customer Segmentation Platforms:

- AI helps in segmenting customers based on various criteria, allowing businesses to create targeted marketing campaigns for different customer groups.
- Segmentation platforms enhance the relevance and effectiveness of marketing efforts.

6. Lead Scoring Systems:

- AI-driven lead scoring systems assess and rank leads based on their behavior, interactions, and demographic data.
- Sales teams can prioritize leads with a higher likelihood of conversion, optimizing their efforts and improving sales efficiency.

7. Churn Prediction and Retention Tools:

- AI applications predict customer churn by analyzing patterns indicative of potential disengagement.
- Businesses can implement proactive retention strategies, such as personalized offers or targeted communication, to retain customers.

8. Voice Assistants and Speech Analytics:

- AI-powered voice assistants and speech analytics applications enable businesses to analyze customer interactions through voice channels.
- They help in understanding customer sentiments, extracting insights, and improving the overall quality of customer service.

9. Dynamic Pricing Engines:

- AI-driven dynamic pricing engines analyze market conditions, competitor pricing, and customer behavior to optimize pricing strategies.
- Businesses can adjust prices dynamically to maximize revenue and remain competitive.

10. Automated Email Campaigns:

- AI automates email campaigns by analyzing customer behavior and preferences to send personalized and targeted emails.
- Automated campaigns enhance customer engagement and increase the effectiveness of email marketing efforts.

11. Customer Service Automation:

- AI automates routine customer service tasks, reducing response times and improving efficiency.
- Automation in customer service leads to quicker issue resolution and a more seamless customer experience.

12. Social Media Monitoring and Engagement:

- AI-powered tools monitor social media channels for mentions and interactions.
- They facilitate real-time engagement, helping businesses respond promptly to customer inquiries and feedback on social platforms.

These AI-driven applications collectively contribute to a more intelligent and efficient customer relationship management ecosystem, enabling businesses to build stronger connections with their customers.

8.4 Examples for AI driven CRM:

Several companies have embraced AI-driven Customer Relationship Management (CRM) applications to enhance their customer interactions and streamline business processes. Here are examples of organizations leveraging AI in CRM.

1. Salesforce Einstein:

Salesforce, a leading CRM platform, incorporates AI capabilities through Salesforce Einstein. It uses machine learning to analyze customer data, predict trends, automate tasks, and provide personalized recommendations for sales and marketing teams.

2. HubSpot:

HubSpot integrates AI features into its CRM platform to improve customer engagement. HubSpot's AI-driven tools help automate tasks, provide insights into customer behavior, and enable personalized marketing campaigns.

3. Zoho CRM:

Zoho CRM utilizes AI functionalities to enhance customer interactions. It includes features like predictive sales analytics, lead scoring, and automation, allowing businesses to streamline their sales processes and improve decision-making.

4. Microsoft Dynamics 365 AI:

Microsoft's Dynamics 365 CRM platform integrates AI capabilities to offer predictive analytics, virtual agents, and sentiment analysis. These features help organizations gain insights into customer needs, automate routine tasks, and deliver personalized customer experiences.

5. Oracle Adaptive Intelligent Apps:

Oracle offers Adaptive Intelligent Apps within its CRM suite. These apps use machine learning to provide predictive analytics, customer segmentation, and personalized recommendations to improve marketing, sales, and service processes.

6. Fresh works CRM:

Fresh works CRM incorporates AI-driven features to automate tasks, analyze customer data, and enhance engagement. It includes predictive contact scoring, email tracking, and AI-based lead scoring to improve sales efficiency.

7. Pipe Drive:

Pipe drive integrates AI-driven features to optimize the sales process. It includes a virtual sales assistant, Sales Assistant X, which provides personalized recommendations, insights, and automates administrative tasks for sales professionals.

8. Zen desk Sunshine CRM:

Zen desk's Sunshine CRM platform integrates AI to improve customer service and support. It includes features like AI-powered analytics, automation, and chatbots to enhance customer interactions and streamline support processes.

9. SugarCRM:

SugarCRM incorporates AI capabilities through its Hint platform, which provides insights into customer behavior and preferences. It assists sales teams in building stronger relationships and making informed decisions.

10. SAP C/4HANA:

SAP C/4HANA is an integrated CRM suite that leverages AI to enhance customer experiences. It includes AI-driven features for marketing automation, sales intelligence, and customer service to improve engagement across the customer lifecycle.

These examples illustrate how various CRM platforms leverage AI to offer predictive analytics, automation, personalized customer experiences, and improved decision-making capabilities.

AI-driven CRM applications empower businesses to better understand, engage, and serve their customers in a more efficient and personalized manner.

8.5 Future Challenges in AI Driven CRM:

As AI continues to evolve in the realm of Customer Relationship Management (CRM), there are several challenges that organizations may face in the future.

Addressing these challenges will be crucial for maximizing the benefits of AI in CRM and ensuring its successful integration. Here are some potential future challenges

Capability and Transparency:

As AI systems become more complex, ensuring transparency and capability in decision-making processes becomes crucial.

Customers and regulators may demand clear explanations for AI-driven recommendations and decisions made within the CRM system.

Skill Gap and Talent Acquisition:

The demand for professionals skilled in AI, machine learning, and data science will likely outpace the supply.

Organizations may struggle to acquire and retain talent with the necessary expertise to develop, implement, and maintain AI-driven CRM systems.

Integration and Compatibility:

Integrating AI into existing CRM systems can be challenging. Organizations may face difficulties in ensuring seamless integration with legacy systems and ensuring compatibility with other technologies in use.

Bias and Fairness:

AI algorithms may inadvertently perpetuate biases present in historical data. Ensuring fairness and mitigating biases in AI-driven CRM systems is a continuous challenge, especially when it comes to making decisions that impact customer interactions.

Data Privacy and Ethics:

Increasing concerns about data privacy and ethical considerations in AI applications, especially in CRM, may lead to stricter regulations and requirements for handling customer data. Ensuring compliance with evolving data protection laws will be a persistent challenge.

Customer Trust and Acceptance:

Gaining and maintaining customer trust in AI-driven CRM applications is essential. Organizations need to communicate the benefits of AI while addressing concerns about privacy, security, and the potential for algorithmic bias.

Security Concerns:

AI-driven CRM systems, handling sensitive customer data, become attractive targets for cyber-attacks. Ensuring the security of AI models, algorithms, and the data they process will be an ongoing challenge.

Customization and Adaptability:

Ensuring that AI-driven CRM systems can be customized to meet the unique needs of different industries and businesses is crucial. The challenge lies in creating adaptable AI solutions that can evolve with changing customer preferences and industry dynamics.

Regulatory Compliance:

Keeping up with evolving regulatory frameworks related to AI applications, especially in industries heavily regulated for customer data protection (such as finance and healthcare), poses a challenge. Adapting to new compliance requirements will be essential.

Cost of Implementation and Maintenance:

Developing, implementing, and maintaining AI-driven CRM systems can be resource-intensive. Organizations may face challenges in managing the costs associated with the initial implementation and ongoing maintenance.

User Adoption and Change Management:

Ensuring that users, including sales, marketing, and customer service teams, embrace and effectively use AI-driven CRM tools can be challenging. Proper training and change management strategies will be necessary for successful adoption.

Dynamic Customer Expectations:

Meeting the evolving expectations of customers in a rapidly changing technological landscape is an ongoing challenge. AI-driven CRM systems must continuously adapt to provide value and meet customer demands effectively.

Addressing these challenges requires a holistic approach, involving collaboration between technology providers, businesses, regulators, and other stakeholders. Organizations need to stay agile, prioritize ethical considerations, and invest in continuous education and training to navigate the evolving landscape of AI-driven CRM.

8.6 Conclusion:

The aim of the above study was to analyze in terms of the awareness, effectiveness and loyalty of the consumers for 5 AI enabled tools (Product Recommender, Virtual Agent, Email Management, Speech Recognition and Visual Perception). The analysis of the research data showed that people

- a) Have awareness about the AI enabled tools that they are using in various company sites.
- b) The AI enabled tools are effective and possesses a positive result and using these tools repeatedly and are recommending these tools to others also.

Thus, researchers are agreeing with the industry and the academia to invest heavily on the research and development of AI for future business opportunities. Researchers also recommend that in future companies would be aggressively offering AI enabled services to consumers for better business volumes. Researchers also believe that in future AI will give a new dimension to the present business and the business will not be the same in near future. With the emergence of AI many businesses will find it difficult to exist and many new businesses will emerge. The researchers studied the general AI enabled tools, future scope of study could be considering specific AI tools, comparing between two similar tools. Other AI enabled tools like Internet of Things can also be studied and demographic impact and association can also study in future.

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