

A study on understanding future of Artificial Intelligence in the various functions of marketing

Dr.VaibhavPatil¹, Prof.Tushar Padale², Dr. Ganesh Waghmare³,Prof.Dhananjay Kulkarni⁴

¹Assistant Professor,Sri Balaji University Pune's Balaji Institute of Management and Human Resource Development, Pune,
(Maharashtra),India

(Email id: VAIBHAV0222@gmail.com, Whatsapp no. 9595029789)

²Assistant Professor,Sri Balaji University Pune's Balaji Institute of Management and Human Resource Development, Pune,
(Maharashtra), India

(Email id: tusharpadale3@gmail.com, Whatsapp no. 8149244594)

³Assistant Professor,Sri Balaji University Pune's Balaji Institute of Management and Human Resource Development, Pune,
(Maharashtra), India

(Email id: gntilu@gmail.com, Whatsapp no.9527919600)

⁴Assistant Professor,Sri Balaji University Pune's Balaji Institute of Management and Human Resource Development, Pune,
(Maharashtra), India

(Email id: dhananjaysatara@rediffmail.com, Whatsapp no. 9860736019)

Abstract-

Artificial intelligence (AI) refers to the ability of a computer or a computer-enabled robotic system to process information and produce outcomes in a manner similar to the thought process of humans in learning, decision making and solving problems. It is reported that by 2022 ArtificialIntelligence (AI) Industry will grow to \$ 3.9 trillion. Artificial intelligence is now used in almost all the industries especially in marketing field. NITI Aayog has developed National Strategy for Artificial Intelligence in India for economic growth. AI is data-driven decision-making so AI can predict customer behavior. AI integrates the data from different platforms. These platforms store all kinds of data related to the customers. Data collected by this platform is processed and analyzed to decide customer behaviors and patterns of purchase. Many AI developments helps marketer in preparing dynamic advertisement and send personalize marketing messages. Marketers will proactively plan marketing strategy for customers using AI. Some of the Arificial Intelligence (AI) tools used by the marketer to give unique and improved customer experience are advertising networks, email marketing, content generation, content curation, voice searching, user experience, web design, chat-boats, send time optimization, recommendation engines. It is recommended that marketing firms must take advantage of AI-driven tools and integrate the new processes,

tools, software, and skills at the earliest. Artificial intelligence and machine learning models helps in predicting customer spending habits. Due to artificial intelligence we can recommend right products to the right customer at the right it time which will increase product sales.

Keywords:Artificial Intelligence,Customer Engagement, Marketing Function, IOT.

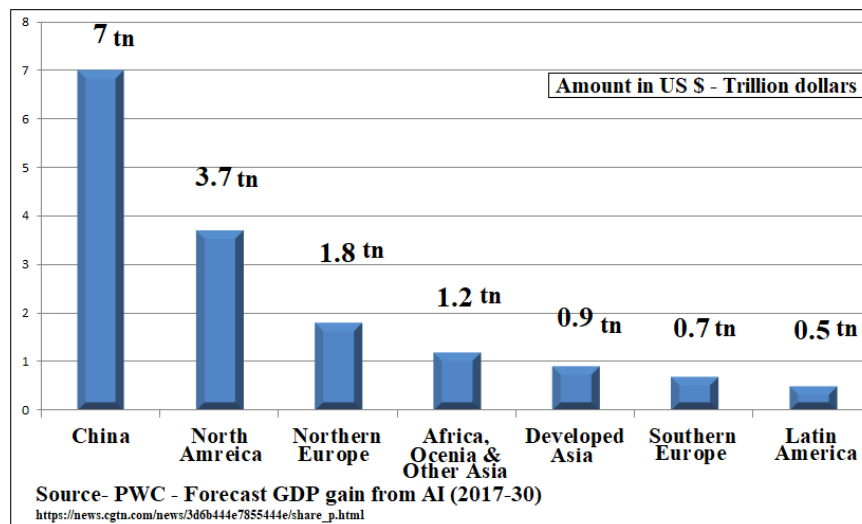
Introduction-

Artificial intelligence (AI) refers to the ability of a computer or a computer-enabled robotic system to process information and produce outcomes in a manner similar to the thought process of humans in learning, decision making and solving problems. By extension, the goal of AI systems is to tackle complex problems in ways similar to human logic and reasoning. Artificial intelligence is the science and engineering of making intelligent machines, especially intelligent computer programs. We can now build systems that are capable of improving their own performance by learning from data over time.

STATISTICS GLOBALLY FOR AI IN MARKETING

Year	Revenue – Market Globally	CAGR- Global
2017	\$ 705 bn	59%
2018	\$ 1,200 bn	63%
2019	\$1,900 bn	73%
2020	\$2,600 bn	79%
2021	\$3,300 bn	85%
2022	\$3,900 bn	

It is predicted that global market of Artificial intelligence will reach to \$ 3.9 trillion by 2022 from \$705 bn in the year 2017.



A study on understanding future of Artificial Intelligence in the various functions of marketing

Artificial intelligence will add significant amount to the GDP of the world between 2017-30.

China will gain maximum from artificial intelligence. China will gain 7tn to the GDP between 2017-30, followed by North America US \$ 3.7tn, followed by Northern Europe US \$1.8 tn, followed by Africa Ocenia & Other Asia US \$ 0.9 tn, followed by Southern Europe US\$ 0.7 tn, followed by latin America US \$ 0.5 \$.

Top 10 Countries by no of AI Artificial Intelligence Companies- June 2018		
Sr No	Countries	Number of companies
1	USA	2,028
2	China	1,011
3	UK	392
4	Canada	285
5	India	152
6	Israel	121
7	France	120
8	Germany	111
9	Sweden	55
10	Spain	53

In the Year 2018 USA had maximum 2028 Artificial intelligence companies in the world followed by China (1011), followed by UK (392), followed by Canada (285), followed by India (152)

Industries in which ai is being used

Industries in which AI (Artificial Intelligence is being used)				
	Company	Industry	Application	Country
1	BUILT Robotics	Construction	Robotic guidance	United States
2	Data Robot	Cross-industry tech	AI model development	United States
3	Invenia	Energy	Grid optimization	Canada
4	ComplyAdvantage	Finance & insurance	AML & KYC	United Kingdom
5	Benson Hill	Food & agriculture	Genomics platform	United States
6	Synapse Technology	Government & city planning	Checkpoint security	United States
7	Viz.ai	Healthcare	Stroke detection	United States
8	Lexion	Legal	Contract management	United States
9	DataProphet	Manufacturing	End-to-end solutions	South Africa
10	Synthesia Technologies	Media & entertainment	Deepfakes	United Kingdom
11	Razor Labs	Mining	Predictive maintenance	Israel
12	Caspar.AI	Real estate	Smart home applications	United States
13	AiFi	Retail & warehousing	Checkout-free solution	United States
14	Metawave	Telecom	Antenna design	United States
15	KONUX	Transportation	Railway maintenance	Germany

It can be seen from the above table that Artificial intelligence is now used in almost all the industries like construction, energy, finance, food, agriculture, healthcare, manufacturing, legal, mass media, entertainment, mining, real-estate, retail, warehousing, telecom and transportation

Why Artificial Intelligence (AI) is important

- Due to artificial intelligence we can recommend right products to the right customer at the right it time which will increase product sales
- A research done in North America and European business leader including 2500 employees reported that only 4% companies are able to get benefit from the data.
- Study done by demand metric in 2016 reported that 80% marketers agree that they benefit from personalized than non-personalized content.
- Accenture in their research done in 2017 reported that 40% consumers generally switch due to poor personalization and lack of trust.
- In few studies it was found that 43% probability increases if we personalize the content of the customer experience
- It was reported that probability of opening the mail increases by 26% if we personalized subject lines of the email
- In a study done by market o reported that 80% consumers will use brand promotions if they have previous personalized interaction
- No marketers are sending personalized content it in marketing communication at best possible time which will convert lead into sales.
- Artificial intelligence and machine learning models helps in predicting customer spending habits
- Artificial intelligence can decide best audience for particular brand using customer's interest choices and other characters
- Artificial intelligence can tell us the motivational influencing factors of the customer

Artificial Intelligence (AI) - statistics

- Global cognitive and AI systems are poised to grow at 37.3 percent CAGR from 2017–2022 to USD 77.6 billion in 2022.
- 70 percent of organizations in India will make use of AI by 2020
- Gartner also expects that at least 40 percent of new application development projects will have AI co-developers on their teams by 2022.
- As per Business insider 51% of the marketers use at least some form of artificial intelligence in business
- As per Gartner artificial intelligence will handle 85% of all customer service enquiries by 2020
- As per Adobe research 75% companies that have implemented artificial intelligence achieve 10% or more boost in sales
- As per Gartner research experts in the marketing field reported artificial intelligence will generate 2.3 million new employment opportunities
- As per Drift research 35% customers would be happy to use a chatbot to resolve a complaint or problem

A study on understanding future of Artificial Intelligence in the various functions of marketing

- According to gardener research 30% companies will be using artificial intelligence in at least one of their sales process by 2020
- According to drift research the benefit the people expect the most from artificial intelligence powered customer service are the 24 hour service and getting instant support
- According to Adam research 75% of organizations say using artificial intelligence has helped drive customer satisfaction by 10%
- According to Forrester research businesses using artificial intelligence to power data driven inside in marketing will grow to 1.2 trillion combined by 2020

Government Initiative in development of AI Artificial Intelligence in India-

NITI Aayog has developed National Strategy for Artificial Intelligence in India for economic growth.

It has 30 policy recommendations to invest in scientific research, encourages reskilling and training, accelerates the adoption of AI in the value chains, and promotes ethics, privacy, and security in AI.

Initiatives in 2017

For India's economic transformation Commerce and Industry Department, Government of India has formed AI Task Force.

Kiazala –used for citizen-connect to enable large-group communications and work management

Initiatives in 2018

NITI Aayog and ABB India working on how to incorporate latest developments in robotics and AI
UAE Minister for AI has signed a Memorandum of Understanding (MoU) with Invest India.

ICTAI, Bengaluru established in collaboration with Tata Institute of Fundamental Research (TIFR)

Initiatives in 2019

Interim Budget 2019 – announcement of national program for the development of AI

AI 4 All Global Hackathon launched by NITI Aayog for increasing awareness, development and resolve challenges.

Research methodology:-

- The research is descriptive in nature
- Secondary data is the data available in various research papers, articles, company websites and government documents are used to analyses the research topic

Data Analysis Tools

- Analysis of the secondary data is done using simple percentage analysis and simple statistical formulas.
- Logical analysis is used to present the data in simple form to understand.

Artificial Intelligence (AI) in Marketing

AI can find out and understand marketing trends. AI is data based decision-making so AI can predict customer buying behavior pattern. AI can search and analyses the data from different platforms. These platforms have all types of data related to the customers and buying decision. Data collected by this platform is collected and analyzed using AI tools to decide customer behaviors and patterns of buying decision. Automated system and customer profiles are prepared which helps in market segmentation and customer targeting in specific market. As system analyses more data it gets more accurate information for processing and system understands what marketing strategies should be prepared for different kinds of segments in the market. As marketers have buying decision history of customer's previous searches and preferences which can help customer using AI in purchasing decisions. Many Marketing and Advertisement organizations focusing on using AI tools and machine learning tools to find the right audience to prepare improved advertisement. AI is helping marketer to improve engagements with the customer and increase in conversion into sales. Many AI developments helps you in preparing dynamic advertisement and send personalize marketing messages. AI helps in recommending the right products to the right customers at the right time using suitable communication channel and to increase the sales

Data Collected for AI Processing in Marketing	
Sr No	Data Collected
1	Search
2	Comments
3	Blogs
4	Tweets
5	Likes
6	Videos
7	Conversations
8	Speech
9	Written texts
10	Images
11	Transaction records,
12	Basic customer demographics
13	Web-browsing history

In marketing field use Artificial Intelligence (AI) is growing. Kind of data collected from customers while using Artificial Intelligence (AI) is Searched Words by the customers, Comments written by the customers, blogs written or seen by the customers, tweets written by the customers, likes made by the customers, videos seen by the customers, conversation of customers, images share and liked by the customers, transaction record of the customers, demographics of the customers, web browsing history of the customers, etc.

Tools Used in the Artificial intelligence in Marketing					
1	Algorithms	11	Decision support systems.	21	Recommender systems
2	Aggregation	12	Deep learning	22	Robotic process
3	Audio/speech analytics	13	Deep Q&A systems	23	Robotics Intelligent agents
4	Automated communications	14	efficiency analyst	24	Sensors/ Internet of things
5	Automated data analyst	15	Image analytics	25	Social network analysis
6	Automated operations	16	machine learning	26	speech analysis
7	Automated research and information	17	Natural language processing	27	Virtual private assistants
8	Automated sales analyst	18	Predictive analytics	28	Visualization
9	Automation	19	predictive and risk modeling	29	voice search
10	computer vision	20	process automation	30	Automated operations and efficiency analyst"

Artificial Intelligence (AI) Tools used in the marketing are as follows algorithms, audio or speech analytics, automated communications, automated data analyst, automated operations, automated research and information, automation, computer vision, decision support system, deep learning, deep question and answer system, efficiency analysis, image analysis, machine learning, predictive analysis, predictive and risk modeling, process automation, recommender systems, robotics process, robotics intelligent agent, sensor, internet of things, social network analysis, speech analysis, virtual private assistants, visualization, voice search etc.

Data collected for the Customers in Artificial Intelligence (AI)	
1	No of Items viewed by customer,
2	Product order frequency
3	Customers buying & search history
4	Details of Pages customer browse
5	Tools customer often use
6	Customer past purchase behavior]
7	Customers demographic data
8	Customers location data,
9	Comparisons of customers
10	Simulated human conversation data
11	Geo-specific events
12	On-site interactions
13	Referral source
14	Psychographic factors
15	Purchase behaviors
16	Past communication
17	Generating lead 24x7

Purpose of AI in Marketing.		
1	Save manpower	Artificial Intelligence Save considerable amount of manpower in business
2	Online searching contents improved	Artificial Intelligence improve Online searching contents
3	save time	Artificial Intelligence Save considerable amount of time in business
4	search engine optimization	Artificial Intelligence also used in SEO - search engine optimization
5	save money	Artificial Intelligence Save considerable amount of money in business
6	content creation	Artificial Intelligence is used in content creation
7	To select the best channels for each marketing campaign	Artificial Intelligence is used in selecting the best channels for each marketing campaign to target specific leads.

HOW AI IN MARKETING WORKS

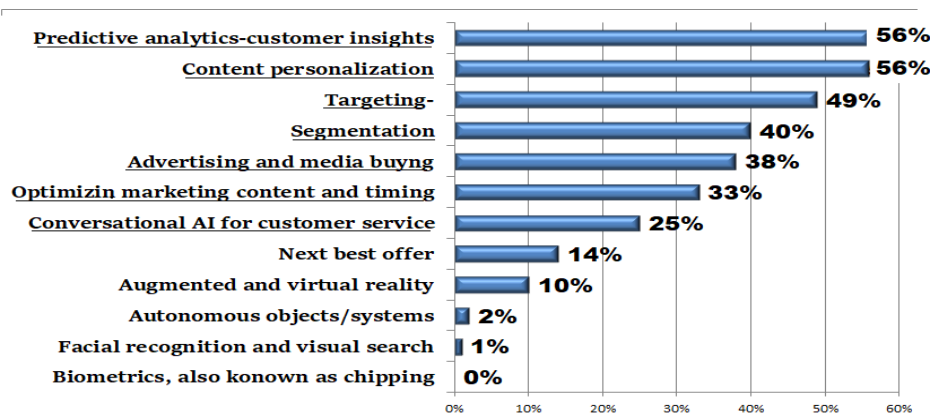
- AI can give information related to engagement activities liked by the customer so that we can choose best engagement activity for customer
- AI can customize and personalize marketing messages
- Artificial intelligence can perform repetitive task
- Self-service advisor used to scan and browse customers history and tell us different options
- AI Scheduling software can provide information regarding best times for posting promotion through each marketing channel to each individual customer
- AI helps in best content preparation and provide information when how and where to publish it and distribute it
- AI can predict personality characters of the customer better than people he knows.
- AI can select customers to send discounts who are in need of such discount to make purchases
- AI helps in deciding marketer which promotion is good and which promotion is bad
- AI can automate back-end or back office processes
- AI can give customer real-time real time alerts
- Like emails, browser push notification comma app push notification in app messages so that they can purchase product
- AI helps marketers to add high sentiment keywords in the messages so that it will lead to cells based on information like open and click rates matrix
- AI can tell marketer customers responses for the text message, images, emojis and gifs
- AI help e-commerce marketer to identify segments which are showing positive responses towards offers discounts and decrease in the price

A study on understanding future of Artificial Intelligence in the various functions of marketing

- AI based on the history of products viewed, product selected for purchase, short listed products can prepare right campaign content to target particular segment
- Send time optimization- Based on previous historical consumer behavior AI can tell us the right time for sending particular marketing campaign.
- AI can develop degree of predictability based on customers reactions and responses which is further improved with its transaction database
- AI can provide information regarding best way of delivering multi-channel communication when different customer segments are together.
- AI helps in new product development and content development based on customers history of browsing and purchase
- Based on customers purchase and search behaviour AI can provide opportunities for cross sell and upsell
- AI can solve general doubts and enquiries with the help of virtual agents to give high degree of personalization on electronic platforms
- Natural language processing helps in deciding the mood and intention of the customer from customers email and voice calls

HOW CUSTOMERS ARE BENEFITING DUE TO AI IN MARKETING

1. Most relevant and required ads can be sent to the customers
2. Realtime support can be provided to the customers
3. Voice command is available to the customer
4. Waiting time is reduced for the customer
5. customer support can be provided instantly throughout the day and night
6. Customers are getting polite reply and responses from the virtual AI technology
7. Relevant products only shown to the customers instead of irrelevant products.
8. Marketers will proactively plan marketing strategy for customers
9. Customers can purchase required product within very short period of time
10. Advertisement can be customized and personalized as per the customers
11. Complex purchase problems are solved, standard of living can be increased
12. Marketing campaign are created error free and more meaningful.

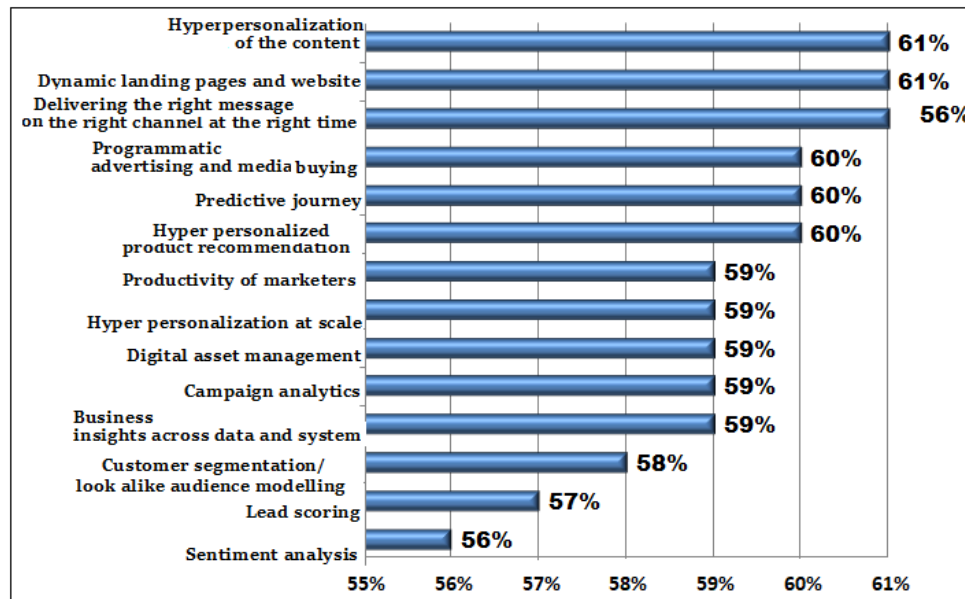


Source:- Published on Marketingcharts.com in march 2019 - Data Source- The CMO Survey

The COM Survey done in 2019 shows percentage of use of AI in the marketing functions.

Mostly AI is used in the marketing for content personalization 56%, followed by

Predictive analytics-customer insights 56%, followed by Targeting 49%, followed by Segmentation 40%, followed by Advertising and media buying 38%, followed by Advertising and media buying 38%.



(Source) - Salesforce 4th annual state of marketing insights and trains from 3500 global marketing leaders- (June -15, 2017)

According to the Salesforce 4th annual state of marketing Areas where artificial intelligence will have a substantial effect according to marketing leaders worldwide are as follows Delivering the right message on the right channel at the right time 61%, Dynamic landing pages and website 61%, Hyper personalization of the content 61%, Hyper personalized product recommendation 60%, Predictive journey 60% , Programmatic advertising and media buying 60%, Business insights across data and system 59%, Campaign analytics 59%, Digital asset management 59%, Hyper personalization at scale 59% ,productivity of marketers 59%, Customer segmentation/ look alike audience modeling 58%, Lead scoring 57%, Sentiment analysis 56%.

Marketing Function:-

1) ADVERTISING NETWORKS

Marketers have lots of data from CRM systems, marketing automation software, ad platforms, however marketers lack the time, energy, or capacity to process all of this data effectively that's why Artificial Intelligence is important. AI can analyze user data. AI incorporate machine learning to marketers ad platforms

Customer Benefit-

- Generate a personalized advertising copy
- Relevant advertisement can be shown to the customer
- Prompt searching of product
- Relevant searches are possible
- Ex- Facebook and Google ad platform

2)EMAIL MARKETING

- Machine learning can analyze millions of data points about a customer base
- Determine the best times to send customers emails.
- Make better connections with their audiences
- Personalize emails in email marketing campaigns

Customer Benefit:-

- Get the information of products at best times through emails.
 - Personalized content is received through emails.
- Ex-Boom train and Persado** use AI to make email marketing campaigns potent and persuasive and personalized content

3)CONTENT GENERATION

- AI can use “acquired data patterns” such as their educational profile, professional background, and emotional intelligence to generate personalized content.
- AI will generate more interest and clicks.
- AI helps in reaching and converting customers quickly.

Customer Benefit:-

- Good contents attract visitors to their websites.
 - If proper data supplied AI will write reports and generating news articles
 - Today in social media AI is used in automatic social media schedulers, automatic data tracking, notifications, organizers, and content calendars.
- Ex-Google, too,** is working on an AI that will be able to generate a best-selling book in no time. Wordsmith and Quill are already in use by the Associated Press and Forbes to create posts that drive clicks on their website
- Sports scores, stock updates, and weather forecasts are written by content generation using AI.

4)CONTENT CURATION

- AI can show customer more relevant, personalized content.
- AI can show customer interesting Content or recommend it.

- Examples
- Curata and List.ly enable markets to curate the most relevant content for each user.
- Amazon does this on a large scale using the “people who buy X also buy Y” recommendations
Ex-Netflix’s recommendation system uses AI to keep the user hooked to shows and movies they like

5) VOICE SEARCHING

- In the year 2019 42% of the worldwide population has used voice-searched.
- Ai gives customer ability to multitask, get instant answers to questions, and make their lives easier
- Ai make searching more accurate and leverage the data the user supplies to make personalized recommendations.
- Apple’s Siri, Microsoft’s Cortana, and Amazon’s Alexa and the Google Assistant is changing customers way of searching

6) USER EXPERIENCE (UX)

- Algorithms used in AI for good user experience
- AI uses data points including location, demographics, type of device, and style of interaction with the site
- AI tools like uizard and mockplus leverage AI to help marketers create better user experience.

Customer Benefit:-

- Marketer can personalize user experience on a website.
- Marketer can personalize offers and contents displayed on the website accordingly.
- In 2017, 33% of the marketers were experimenting with AI for real-time personalization

7) WEB DESIGN

Grid use AI to design websites based on information provided by the user.

Customer Benefit:-

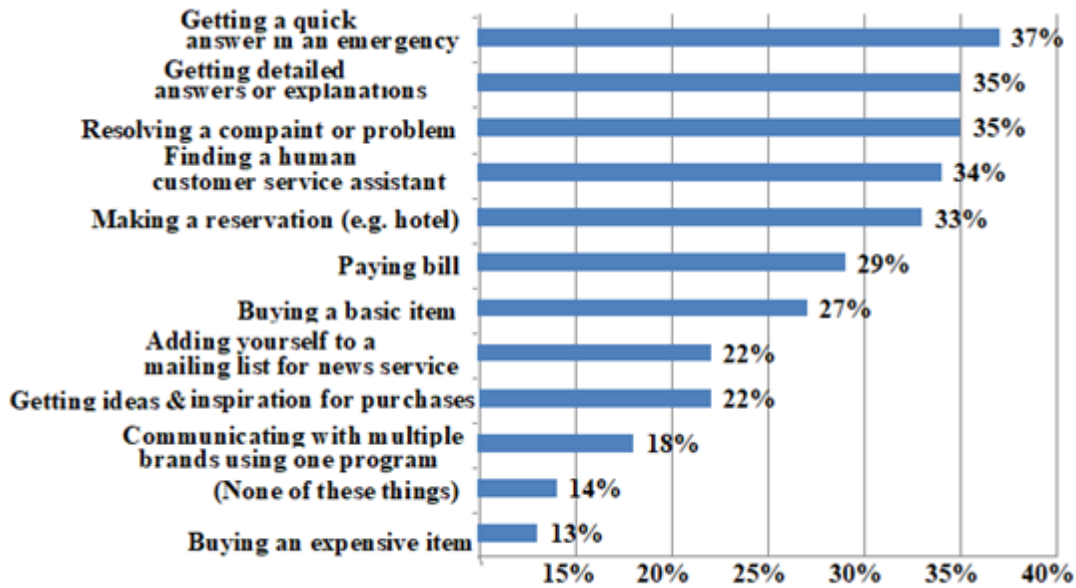
- AI use in web design improved the consumer’s experience and increased sales conversion rates in (63% cases)
- Excellent user experience keeps the user browsing the site longer and the higher the probability of conversion into sales
- A makes websites highly attractive and immensely profitable.
- Soon marketers will only need to supply AI with the text, images, and calls to action they want on their website to create a professional-looking website in minutes.

8) CHAT-BOATS

- Natural language processing and machine learning are used in Chat-boats
- Facebook bot tools and wit.ai are tools that help marketers train bots by feeding them example conversations

Customer Benefit:-

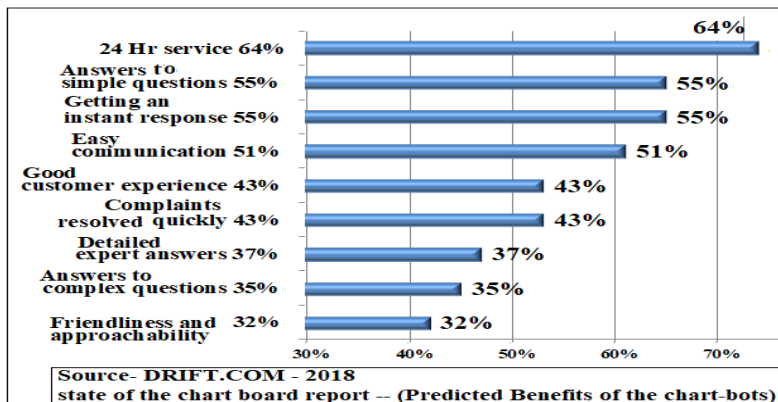
- chat boats help to sell their products and services passively—without needing to be available to respond to clients
- Chat-boats quality customer support available to clients 24-7
- Waiting time has reduced significantly.
- It ensures high degree of personalization across web or mobile platforms.
- It reduces manpower costs significantly.
- Food delivery provider’s platform can be used to render 24-hour live chat customer support based on FAQs pertaining to delivery tracking, order cancellation, refund process, etc.



Source - DRIFT.COM, 2018 State of chatbots report.

(Source drift.com)According to 2018 state of chatbots report predicted use of chatbots are as follows

The largest use of chatbots reported as a getting quick answer in an emergency 37%, followed by resolving a complaint or a problem 35%, followed by getting detailed answer or explanation 35%, followed by finding human customer service assistant 34%, followed by making a reservation 33%, followed by paying a bill 29% followed by buying a basic item 27%, followed by getting ideas and inspiration for purchases 22%, followed by adding yourself to mailing list aur news service 22%.



Source- DRIFT.COM - 2018 state of the chat board report -- (Predicted Benefits of the chart-bots)

(Source drift.com)According to 2018 state of chatbots report predicted benefits of chatbots are as follows - Major pretend use reported 24 hour service 64%, Getting an instant response 55%, Answers two simple questions 55%, Easy communication 51%, Complaints result quickly 43%, Good customer experience 43%, Detailed expert answers 37% Answers to complex questions 35%, Friendliness and approachability 32%,

9) SEND TIME OPTIMIZATION:

AI helps target the right audiences at the right time

Customer Benefit:-

- AI identifies customer segments that respond to a particular campaign at specific times based on historical behavior.
- AI can predict customers' reactions with high accuracy
- AI can predict the probable time in which customer can respond favorably to app push notification.
- AI can predict the time for customized marketing campaign, at which high conversion is possible.
- AI also can predict the most favorable time to offer discount, offers or decrease in price in which customer will respond positively.

.RECOMMENDATION ENGINES

Tools or Data Used by AI:-

AI sends recommendations based on the data like past browsing record, purchase history, or past viewing activity.

Customer Benefit:-

Customer show preferences and interest towards recommendations shown by AI which are relevant and correlated to past purchase behavior.

Ai suggest and recommend multiple cross-sell and upsell opportunities

Use of AI in Advertisement			
Sr.No	AI Tool used	Type of Data Collected	Benefit to the Marketer
1	Natural language processing (NLP)	1. Blog entries 2. Product reviews 3. Daily Tweets 4. Facebook posts 5. Whatsapp and FB status updates	1. Virtual assistant answer customer inquiries on its website's homepage Ex- Swedbank
2	Image Recognition	1. Pictures shared on social media 2. Image shared on social media	1. Understand consumer behavior 2. Selfies- reveal brands used 3. identify product and a potential social-media influencer. 4. Intelligent™ shelf-display platform. 5. scans shoppers faces to gauge their emotional reaction to the product. Ex - Cloverleaf, San Diego
3	Speech Recognition	1. Analyze the meaning of spoken words	1. It helps in Call center -to understand customer needs, improve call-agent performance, and boost customer satisfaction Ex- Sayint, call-center
4	Problem Solving and Reasoning	1. Understand insights hidden in user-generated content	1. Important detection of patterns in the data 2. Improve the ability to predict future behavior 3. Varying psychographics of their customer base to Identify the good customers
5	Personality characteristics	1. Analyze customers social-media comments and posts 2. Analyzing unstructured consumer-generated data	1. Can take future marketing decisions To predict which product customer will need where and when Ex- The North Face, jacket Company
6	Machine Learning	1. Detecting patterns in the available customer data 2. Can learn from its previous data and problem-solving experiences	1. Can reason and propose the best options for the consumer's stated needs. 2. Can predict customer lifetime value and possibility of purchase decision. Ex- The North Face, jacket Company
7	Natural language generation (NLG)	1. Can develop human-sounding, 2. Can prepare original content, 3. Can send personalized e-mails & news article	1. Use of AI for building advertising content. 2. To identify hundreds of segment and send personalized advertisement. Ex- Wordsmith, Saatchi LA -IBM Watson
8	Image generation	1. On the basis of text descriptions prepare images, videos, movies	1. Used in Advertisements
9	Speech generation	1. Creating voice suitable for advertisements	1. Voiceovers for advertisements ex- film company 20th Century Fox

COMPANIES USING AI IN THE MARKETING:-

- Google controls 40.7% of the U.S. digital ad market
- Facebook controls 19.7% of the U.S. digital ad market
- Stylist magazine has published three AI generated articles created by Articoolo in its special “Robots” edition.
- RankBrain, algorithm of Google learns from each user query and applies these learnings to each successive query.
- AI if provided with the right information customer can get a serviceable website within hours.
- Google’s deeplearning program helping pathologists detect cancer with higher accuracy.
- Big data can help prevent a heart attack every 40 seconds.
- Washington Post is experimenting with automated storytelling.
- USA Today company leveraged AI to maximize video engagement,
- Netflix continues to apply machine-learning techniques to personalize your recommendations deeply.
- Amazon uses AI to show only relevant products to buyers, based on previous purchases, searches, and views.
 - A media OTT app likeNetflix suggest type of movies based on usage pattern with in app Message or with an email
- Google had implemented a machine learning AI called RankBrain into their query-filtering process.
- In the year 2016, Wordsmith, an article-writing AI cranked out 1.5 billion pieces of content.
- "financial institutions and hospitals have started utilizing AI systems for fraud detection and diagnosis of diseases.
- Intelligent robots can be fed with information and sent for defusing bombs, thereby reducing risks to human life.
- aggregating information from research papers or medical journals for

CONCLUSION-

It is concluded that marketing firms must take advantage of AI-driven tools and integrate the new processes, tools, software, and skills at the earliest. With the increase in use of AI tools in marketing, marketers will soon have access to diverse and powerful tools that will assist them in creating and curating content that connects with prospects on a deeper level. These tools will also assist in fabricating marketing strategies and help brands deliver improved customer experiences. The technology will also give marketers an advantage by designing good marketing campaign and strategy quickly. Many AI developments helps marketer in preparing dynamic advertisement and send personalize marketing messages. Marketers will proactively plan marketing strategy for customers using AI. Some of the Artificial Intelligence (AI) tools used by the marketer to give unique and improved customer experience are advertising networks, email marketing, content generation, content curation, voice searching, user experience, web design, chat-boats, send time

optimization, recommendation engines. It is recommended that marketing firms must take advantage of AI-driven tools and integrate the new processes, tools, software, and skills at the earliest. Due to artificial intelligence we can recommend right products to the right customer at the right it time which will increase product sales. From all outlooks, it seems that 2020 will be an exciting year for AI, and businesses across disciplines, with major focus on marketing organizations, will benefit from AI-based tools. The global market for AI is on the rise, with revenues generated from AI expected to increase to \$3.9 trillion by 2022. Therefore, conclusively, I think the adoption of AI is what the marketing field needs to increase engagement and boost profits while reducing the direct costs of content research, creation, and promotion.

REFERENCES:-

1. Artificial Intelligence in Marketing Report. (2019, Dec. 09). Retrieved August 1, 2020, from www.iab.com: <https://www.iab.com/insights/iab-artificial-intelligence-in-marketing/#index-10>
2. Faggella, D. (2019,, November 24). Artificial Intelligence in India – Opportunities, Risks, and Future Potential. Retrieved August 5, 2020, from AI MARKET RESEARCH: <https://emerj.com/ai-market-research/artificial-intelligence-in-india/>
3. Government, N. A.-I. (2018, June). National Strategy for Artificial Intelligence. Retrieved August 2, 2020, from NitiAyog: https://niti.gov.in/writereaddata/files/document_publication/NationalStrategy-for-AI-Discussion-Paper.pdf
4. pwc. (2018, february). The macroeconomic impact of artificial intelligence impact of artificial intelligence. Retrieved August 1, 2020, from <https://www.pwc.co.uk/economic-services/assets/macroeconomic-impact-of-ai-technical-report-feb-18.pdf>
5. Rishi, R. (2017). Future of IoT. Retrieved August 1, 2020, from Government and Public Sector, Ernst & Young LLP. <http://ficci.in/spdocument/23092/Future-of-IoT.pdf>
6. Srivastava, S. K. (2018, 3). ARTIFICIAL INTELLIGENCE: WAY FORWARD FOR INDIA. Journal of Information Systems and Technology Management – Jistem USP, 15, 1-23.
7. Wisskirchen, G. (2017, April). Artificial Intelligence and Robotics and Their Impact on the Workplace. Retrieved August 1, 2020, from IBA Global Employment Institute.
8. pwc. (2018, february). The macroeconomic impact of artificial intelligence impact of artificial intelligence. Retrieved August 1, 2020, from <https://www.pwc.co.uk/economic-services/assets/macroeconomic-impact-of-ai-technical-report-feb-18.pdf>
9. Wisskirchen, G. (2017, April). Artificial Intelligence and Robotics and Their Impact on the Workplace. Retrieved August 1, 2020, from IBA Global Employment Institute.
10. <https://www.statista.com/statistics/894027/india-advertising-industry-market-value/>
11. al., N. S. (2017). Impact of Artificial Intelligence on Businesses: from Research, Innovation, Market. Journal of Business Research, 1-38
12. <https://www.inventiva.co.in/trends/anukriti/how-artificial-intelligence-can-transform-digital-marketing-in-india/>
13. https://www.researchgate.net/publication/328580914_Artificial_intelligence_Marketing
14. https://www.researchgate.net/publication/333671063_Marketing_and_Artificial_Intelligence

15. <https://pdfs.semanticscholar.org/57c4/986d2ee170cd4888e31543febc3547433f83.pdf>
16. <https://pdfs.semanticscholar.org/2e10/6c56d34d8301c521673ac7a7a80a02021772.pdf>
17. <https://www.ijltemas.in/DigitalLibrary/Vol.7Issue4/259-262.pdf>
18. <https://arxiv.org/ftp/arxiv/papers/1905/1905.02092.pdf>
19. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3405184
20. https://www.adma.com.au/sites/default/files/WP_Marketer_and_Machine.pdf