

# Transforming Marketing with Artificial Intelligence

Piyush Jain<sup>1</sup>, Keshav Aggarwal<sup>2</sup>

<sup>1</sup>B. Tech Student, Department of Production and Industrial Engineering, Delhi Technological University, Delhi, India

<sup>2</sup>B. Tech Graduate, Department of Production and Industrial Engineering, Delhi Technological University, Delhi India

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**Abstract** - Marketing has become complex in the last one decade with the introduction of Artificial Intelligence. Artificial Intelligence Marketing is a technique of optimally utilizing technology to enhance customer's experience. In recent times it becomes really important for the companies to recognize and understand customer needs and their expectations in terms of products as well as services. With the help of AI, Marketers can process the huge amount of data, carry out individualized sales and fulfil customer expectations. Besides this, the perception they get about the customer and their requirements in a shorter time frame help them to boost campaign performance and Return on investment (ROI) rapidly. In this paper, authors have reviewed the whole concept of using Artificial Intelligence in marketing. It provides comprehensive details of the benefits of implementing AI in marketing, how AI is reshaping marketing, need of AI in marketing which is illustrated with real world examples from different businesses. This paper also entails a section dedicated to implementation of different AIM strategies. Authors have thoroughly studied the implications of AIM technology throughout the customer life cycle. At last, there is a detailed sector-wise and region-wise analysis. After reading this paper, the reader would be well-informed about the modern marketing methods. The reader would have a complete overview of the present-day Artificial Intelligence Marketing strategies and the reader would have a holistic view of the AIM sector.

**Key Words:** Artificial Intelligence, Marketing, Artificial Intelligence Marketing, Business Forecasting, AIM, Marketing Strategy, Personalization

## 1. INTRODUCTION

To begin with, marketing is a technique for communicating, creating, exchanging and delivering offerings that have value for clients, partners, customers or consumers. Initially, it seems really difficult to relate the field of Artificial Intelligence with various marketing strategies as one has to think out of the box to study or explore this field. It is even harder to imagine any field that has not been impacted by AI. The development of Artificial Intelligence has altered the dynamics of marketing across the world.

### 1.1 What is Artificial Intelligence Marketing?

Artificial Intelligence Marketing (AIM) is an approach of optimally utilizing technology and customer data to enhance the customer's experience. The various techniques used to accomplish such a task are Big Data Analytics, machine learning and gaining insights of our targeted sector of customers. Such operations have made it apparent to call this aeon as "The Ai Marketing Era" which obligates radical transformation in former pattern in which the marketers interact with their customers, formulate the strategies to accomplish their objectives.

According to a survey conducted by Weber Firm, it has become evident that consumers across the globe are in the view that impact of AI on society is positive rather than negative. Furthermore a report : AI- Ready or Not ,II carried out by KRC Research, commissioned by Weber Shandwick in June 2016 polling 150 CMOs (Chief Marketing Officers) in the UK ,China and the USA has arrived at the judgement that around 55% of the CMOs believe that AI will pose a substantial influence on marketing as well as communications and relations with the customers better than social media. Marketing currently serve as the 4th largest use case of AI concerning resources spent, and the 6th largest industry adopter of AI technology, with around 2.55% of the total industry having invested in it.[1]

### 1.2 Benefits of Artificial Intelligence Marketing (AIM)

Evaluation of some ways that can help marketers to shape marketing strategies and their outcomes with the use of AI in the future [Refer figure 1]:



Fig - 1: Benefits to Customers and Marketers [2]

- **Profound Hunting:** With the rapid growth of technology, customers can find whatever they are looking for at any time with the help of rapid-fire search engines (Google, Yahoo etc.). What Artificial Intelligence does is help marketers in analyzing customers' search patterns and determining the key areas to which they must focus their efforts.
- **Genius Advertisements:** With the availability of plentiful data, marketers can create smarter and more effective online advertisements. AI solutions can deeply evaluate a customer's keyword searches and social profiles and aid in creating personalized advertisements.
- **Filtered Content:** Audience analytics can help marketers to understand customers on an individual basis. AI can be used to filter the potential buyers and create customized content which would be ideal and relevant to the potential customers groups.
- **AI Bots:** Customer retention is as important as the generation of new customers. AI serves as a major driver for customer retention. AI Bots are used to run chat functions and direct-to-consumer engagement. Through this marketer can cut their extra expenditures and save time.
- **Progressive Learning:** AI can not only use access to hidden insights but also can be taught to integrate formerly hidden insights into latest campaigns. With passage of time these AI solutions will become even smarter and more effective in eliminating trash data and promoting real-time decision-making.

### 1.3 How is Artificial Intelligence (AI) reshaping marketing?

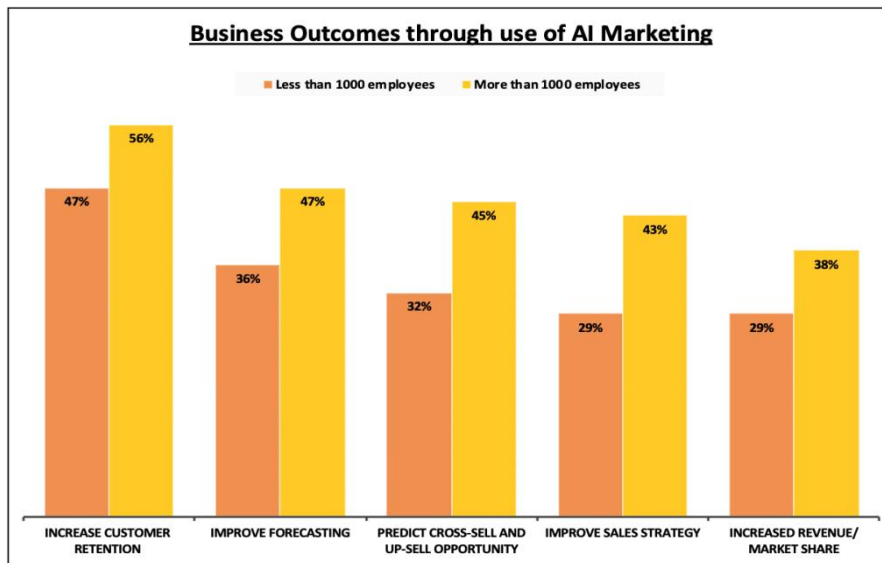
It has become customary to perform large- scale data analysis in the marketing sector. Elements like Artificial intelligence, machine learning is making their mark on corporate operations. After increased use of these trailblazing techniques marketing teams have wide scope to convey massive value to AI's potential data. Artificial Intelligence is the ability of machines to execute intellectual tasks that one can relate with human minds such as problem solving, learning, exercising creativity, reasoning, perceiving and interacting with the environment.

The emergence of AI-powered marketing solutions is reducing the responsibility of marketers and assigning tasks to machines. Graph 1, displays statistics related to end results achieved through the implementation of AI Marketing. Graph 2 highlights AI Adoption in different sectors and fields.

**Reaping Rewards:** Companies have to focus on three major areas to exploit the benefits of AI, which are Marketing and Commercial Talent Management, Data Strategy, Data Expertise. Over time the processing power and data harvesting advances and AI-powered systems become smarter. But the level of effectiveness of these systems depends on how well the organizations can interpret answers and work on them to construct their future commercial strategies.

**Customer Segmentation:** The job of marketers is to furnish the Right information to the Right individual at the Right point of time, to complete this marketer prefer customer segmentation. Most organizations prefer clustering their customers on certain factors which are similar at that time. AI helps marketers to distinguish their customers and discover what motivates them. This information helps marketers in creating a long-lasting relationship with their customers. [5]

**Emerging Trends:** Artificial Intelligence is enterprising three megatrends in marketing: personalization, forecasting and automation. Marketing leaders mainly need to focus on these three areas to develop beneficial capabilities. Automation is a process of making decisions by the use of machines or helping human-decision makers by providing recommendations. Product recommendation and dynamic pricing are examples of automation. Forecasting is the development of models for future scenarios by finding some patterns in historical (previous) recorded data. These forecasting systems keep on learning and inculcating from new data, this implies they are not static. Personalization refers to usage of results or outcomes developed, which are tailored according to different customer segments. With the usage of comprehensive customer information, these systems analyze every potential customer and cluster them according to some common factors.



Graph - 1: Business outcomes with use of AI Marketing [3]

	Service operation	Product and /or Service Development	Marketing and Sales	Supply Chain Management	Manufacturing	Risk	Human Resources	Strategy and corporate finance
Telecom	75	45	38	26	22	23	17	15
High Tech	48	59	34	23	20	17	21	17
Financial Services	49	26	33	7	6	40	9	14
Professional Services	38	34	36	19	11	15	16	11
Electric Power and Natural Gas	46	41	15	14	19	14	15	14
Healthcare Systems	46	28	17	21	9	19	18	13
Automotive and Assembly	27	39	15	11	49	2	8	6
Travel, Transport and Logistics	51	34	32	18	4	4	2	3
Retail	23	13	52	38	7	9	8	0
Pharma and Medical Products	31	31	27	13	28	3	6	4

Graph - 2: AI Adoption in different sectors and fields (all values in percentage) [4]

### 1.4 Need for Artificial Intelligence in marketing

Of 100 senior marketers from various industries 55 percent of the enterprises are executing or considering using AI in marketing practices, according to a study by Smart Insights [6]. So, why is this shift from traditional marketing to AI marketing occurring?

Marketers can process huge amount of marketing data, from various platforms such as web, social media and emails in a comparatively faster time. Besides this, the perception they get about the customer and their requirements in a shorter time frame help them to boost campaign performance and Return on investment (ROI) rapidly. As a result, marketers can shift their time and focus to other equally or more important tasks. Another factor which necessitates AI to be implemented in marketing practices is that in recent times it becomes really important for the companies to recognize and understand customer needs and their expectations in terms of products as well as services. This helps marketers to identify who their target audience is and thereby creating a personal experience for users. With implementation of AI, marketers are capable of understanding customers' behavior and generate customer insights and enhance the four C's: Customer Targeting and Lifetime Value, Customer Engagement, Customer Experience and Customer Loyalty.[7]

## 2. CORE ELEMENTS OF ARTIFICIAL INTELLIGENCE MARKETING

Figure 2 explains the sequence for execution of core elements from gathering data to producing powerful solutions. AI Marketing include few key elements which make it as powerful as it is today. These elements function in series as they are explained below:

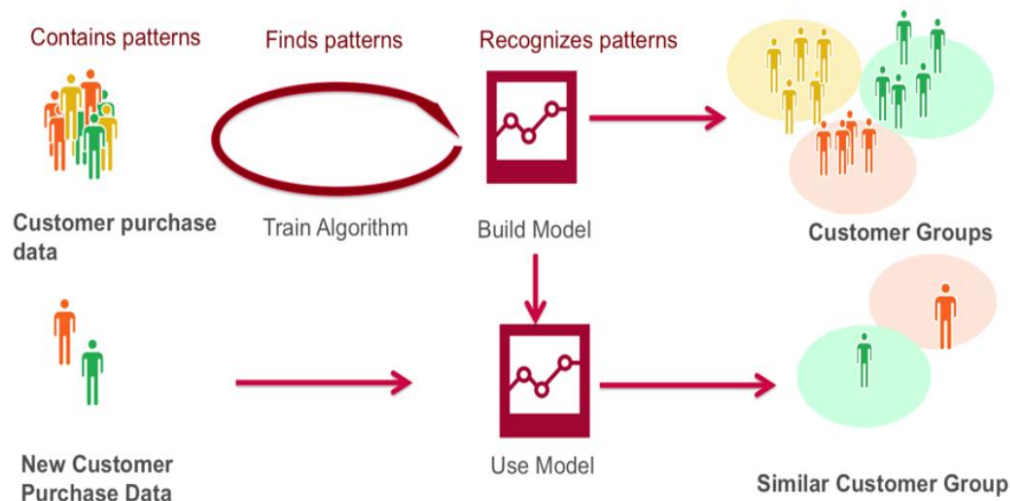


Fig - 2: Core elements used in series in AI Marketing [8]

**Big Data** can be considered the basic concept of collecting a huge amount of data of customers' purchase patterns as well as new customers' purchase preferences. It can also be referred as marketer's competence to aggregate and segregate extensive data sets with minimal manual work. Such altered data can be used by the marketing teams for ensuring that the right message is being delivered to the right person at the appropriate time via a channel of choice.

**Machine Learning** in general can be referred to as building and utilizing models based on recognized patterns. Machine learning platform comes into the picture when marketers try to retrieve significant information from huge data repositories. This can help in recognizing and understanding trends or common instances and successfully anticipate the insights and reactions, helping marketers in understanding the major factor and probability of certain actions repeating.

**Powerful Solutions** the end result, provided by artificial intelligence marketing truly conceive the world in a similar manner a human would. The platforms provided by AI can recognize the significant concept and themes across huge data sets astonishingly fast. While considering the technical aspects AI solutions also interpret communication, feelings and desires like a human which make this platform widely accepted.

## 3. LITERATURE REVIEW

Thomas Davenport [9] in his research paper proposed a structure for comprehending the effect of AI specifically on the influence of AI on marketing strategies as well as customers' behavior. He concluded: AI's short- and moderate-term impact may be more limited and if AI augments (rather than replace) human managers it will be more effective.

Neha Soni [10] elucidates the impact of AI on business – from innovation, research, market deployment to future shift in business models. She explains the two major factors responsible for making AI the core technology for extreme automation. Furthermore, she describes the concept of "AI Divide" or "The dark side of AI".

Muhammad Zafeer Shahid [11] did a qualitative research by interviewing marketing professionals from different firms to analyze the parameters that contribute in integration of AI with marketing. His findings highlighted benefits of amalgamating AI in marketing whereas technical compatibility was most challenging.

Gijs Overgoor [12] elaborated how Cross – Industry Standard Process for Data Mining (CRISP – DM) structure can be used for developing AI Solutions to Marketing problems. He illustrated this idea with an interesting case study of Automatic Scoring Images for Digital Marketing.

N. Ramya [13] in her research reviewed different factors influencing consumer buying behavior. Brands have an opportunity to develop strategy and personalized marketing message by recognizing and comprehending the factors that have impact on their customers.

Nausherwan Raunaque [14] study focuses on the factors which online buyers take into consideration while shopping online. His findings include and how their security and privacy concerns about online marketing influences their online buying behavior.

Dr. Md. Tabrez Quasim [15] presents different types of forecasting and AI techniques that are useful in business forecasting. In his research he examined some present approaches of AI that seemed to be beneficial and promising for business forecasting.

Albert Annor-Antwi [16] states that AI when integrated with other technologies ML, Big data, Data Analytics would yield more accurate results than any other forecasting method. He elaborated shortcomings of AI, being costly and cybercrime threats to AI- powered forecasting.

Naresh K. Malhotra [17] in his study amalgamates both academic as well as practitioner outlook in order to examine the issues and emerging trends that will shape the role of marketing research.

The objective of the research by Dhanushanthini Ajanthan [18] is to examine and identify the effect on brand equity who's major dimensions are: Brand loyalty, brand awareness, brand image and perceived quality of social media marketing.

Neil A. Morgan [19], in his research not only unveils the important challenges to marketing strategy research but also uncovers numerous opportunities for generating highly pertinent modern and creative theories.

Anyuan Shen [20] did an investigative research of customers' lived experiences of commercialized recommendation. According to him, researchers may discover a new standpoint – the customer's outlook – with a view to analyse theories of personalized marketing.

Jerry Vesanen [21] through his research paper makes the meaning of personalization clear to maximum extent. Findings reveal that personalization is not yet widely applied as it is not clearly understood by majority of marketers as it has different meanings for different businesses.

Ki Youn Kim [22] did a study with aim to qualitatively recognize topologies and characteristics of the big data marketing strategy. She focused on impacts of Big Data Analytics in business perspective, with execution of Q methodology.

Alexandra Amado [23] evaluated the implementation of Big Data in Marketing, with the goal to spot trends in these fields. His findings exhibited that theirs is and increasing interest for Big Data in marketing over the years. Hence it is necessary to expand efforts in regard with the business so that Big Data can flourish in the Marketing sphere.

Stefan Lessmann [24] research focuses on empirical targeting models. Author argue adduce about standard practices to thrive such models do not gauge sufficiently for business objectives.

Ayse Bengi Ozcelik [25] elaborates about psychological interpretation or behavior of recipients in the effectiveness of online ads customized using behavioral targeting.

Aman Abid [26] tested the impact of different content characteristics and cues on followers' online expression and understood the moderating consequences of content curation. He evaluated role of marketer generated content in building online relationships.

Samira Khodabandehlou [27] developed a framework for customer churn prediction, which included six stages for precise prediction and averting customer churn in business. Author found that the discount, reception of returned items, prize, number of items and distribution time came best predictor variables apart from frequency and monetary (RFM) variables.

Jean Paul Simon [28] provided an outline of the key trends in the domain of Artificial Intelligence and a global overview about regions along with companies. Author says that legal, ethical, socio-economic aspects (ELSE) can turn into barriers to deployment of AI technologies and explains how demand seems to be uncertain for AI on both sides i.e. business and consumer.

Thanos Skouras [29] lay out a collation as well as assessment of reception of pricing by disciplines of economics and marketing. The major reasons for differences in both approaches are dissimilar historical origin, key concerns and doctrinal evolution.

#### **4. WAYS IN WHICH AI CAN BE IMPLEMENTED IN MARKETING**

The various ways in which Artificial intelligence can be used in marketing (refer figure 3) are explained below [31]:

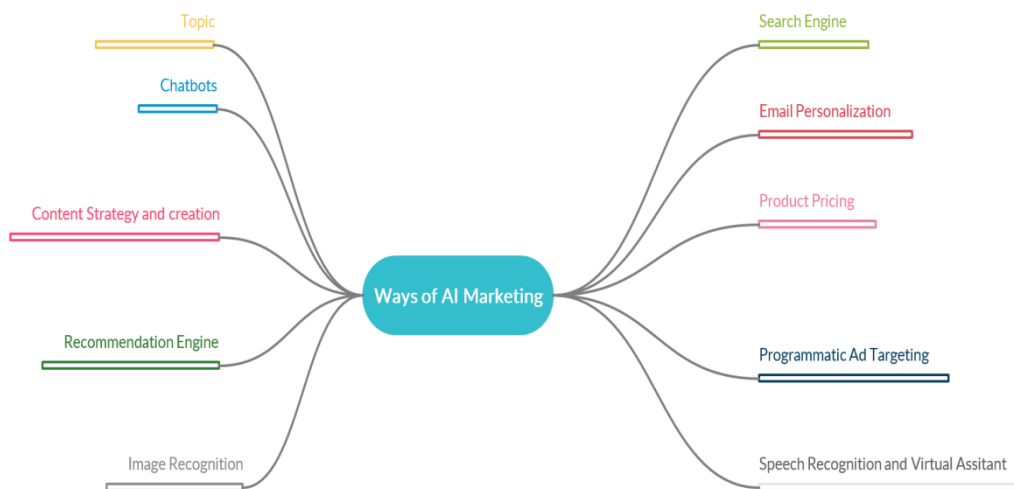


Fig – 3: Ways in which AI can be implemented in Marketing [30]

#### 4.1 AI enhanced Ad- Targeting

Automatic process of purchasing and selling advertisements is known as programmatic advertisements. The marketers approach advertisers and publishers which in turn connects to ad inventory. Advertisers charge wages from marketers in return for advertisements. Artificial intelligence technologies use algorithms which are developed for customer behavior analyses. Customer cookie data is also gathered to help marketers in taking informative decisions and utilizing this data for real-time campaign optimizations. Targeted customers or audiences which show great chances of conversions are displayed particular advertisements in a certain interval of time. The advertisements viewed by customers differ according to their past searches and actions.

#### 4.2 Websites Personalization

Artificial Intelligence ability is far from building websites from the basics, it helps marketers in improving the visitor experience with smart personalization of companies' websites. Graph 3 exhibits various benefits of website personalization. Such intelligent AI algorithms can be used for personalization in two ways:

- Push Notifications- With usage of behavioural personalization algorithms, specific push notifications can be flashed or sent on targeted customer devices.
- Website Experience- After complete analyses of data elements relating to a particular customer which includes demographics, locality, interaction with website, device, etc. AI displays the finest content as well as offers for that user.

Out of the marketers surveyed 33% of them implement AI to provide customized websites, according to THE 2017 Real – Time Personalization Survey conducted by Evergage. Out of the same set of marketers (mentioned above), 63% stated that they observed enhanced customer rates and 61% noted enriched customer experience.

#### 4.3 AI powered content creation

Artificial intelligence powered tools like wordsmith have the ability to convert data into logical text. These automatic content generation mechanisms save marketers time. This AI content generation tools are so intelligent that readers cannot discern between text written by machines and text written by a human. 20% of all business content is formulated by machines by 2018, according to Gartner predictions. Content with basic formats as well as rule sets like profit and loss summary, real- time stock insights, sports game recaps, hotel descriptions can be generated using machines.

What are the main benefits you see from personalization for your organization? - Top 10



Graph – 3: Benefits of personalized websites [32]

#### 4.4 Chatbots

Intelligent chatbots are providing majestic customer support in different sectors like fashion, healthcare, insurance etc. Chatbots can even create personalized content for humans by accessing huge amounts of customer-centered data. They can comprehend position or environment specific requests to understand patterns, identify problems and guide users for what’s causing that certain issue. Chatbots are not limited to customer service only. [33]

#### 4.5 Email Content Creation

Earlier was the time when marketing teams required to spend hours assembling and scheduling weekly emails for various customer sections. Even after usage of smart subscriber segmentation marketers were not able to deliver personalized email to every single customer. After AI Marketing comes into picture these all steps are carried out by machines with less manual work. 80% of marketers are of the view that personalized content or email are more effective than non-personalized content (study by Demand Metric).

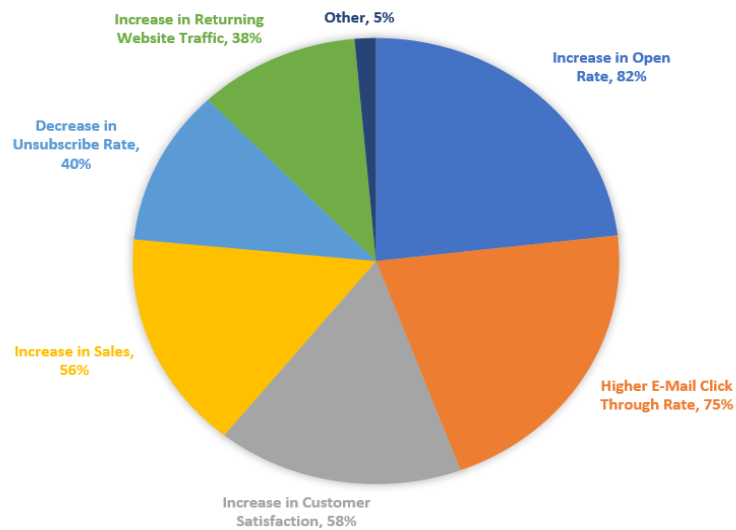
After mapping the subscriber’s email browsing data and website experience AI-powered dynamic emails can be created. Compilation of dynamic emails can be done based on various factors such as user’s wish list, previous website experience, time spent on webpage or some external factors like most popular ongoing trends or content, interests of analogous visitors etc. Graph 4 can be referred to for understanding the benefits reaped from AI powered Email content curation.

#### 4.6 Churn Predictions

Marketers with use of AI-powered algorithms can recognize disengaged customers who are about to leave or churn from their brand or product for a competitor. Such tool can perform the task of gathering data, constructing predictive models and testing and validating models on actual customers. Churn predictions help marketers in analyzing omnichannel events and find out about depreciating customers participation. The information collected can also depict the stage of churning of a particular customer. There can be two types of churning customers: quick- churn customers who tend to abandon product shortly and late – churn customers who have long lasting relationships with a product or brand. Late – churn customers have scope of being incentivized to keep using the product, on-contrary it is difficult to re-engage quick – churn customers. Machine learning algorithms are required to be modified or even built from ground according to different products or brands for finding churn predictions.

#### 4.7 Dynamic pricing and customer insights

Duration that is required in order to crux complete data and compare them with the customer's behavior pattern will be much greater if the task is done by humans, whereas AI can do the same task on the fly and could smartly provide marketing insights. Dynamic Yield aids brands like Sephora, Armani, Under Armour make actionable customer segments with applications on machine learning algorithms. Marketers can use these algorithms to avert the stock that has short supply from being advertised to shoppers who undoubtedly return products. With the help of dynamic pricing marketers can optimize their sales when demand is high.[35]



**Graph - 4:** Benefits realized by use AI powered Email Content Curation [34]

#### 4.8 Automatic speech and image recognition

Nowadays, computers can be considered having vision just like humans and it can be referred to as computer vision. This vision can be used in attaining high - level understanding from digital image or image. Computer vision employs machine learning algorithms and pattern recognition to acquire veridicality of human visual systems. Computer vision is now extended to voice recognition also, which makes them recognize the user's voice and interpret their words they speak. Marketers can use image recognition for better synchronization between store visits and online content. Image recognition has enhanced customer experience, like if a google photos user types dog in his search bar, the application will display all the pictures of dog in his phone or even it recognizes human faces and allow to segregate their photographs.

#### 4.9 Business Forecasting

Future of a business depends on various complex and correlated factors and forces which are sometimes difficult to measure. Major hurdle for marketers is how to predict the exact future of a business or a product which applies intricate sets of inputs. However, there are some machine learning processes which allow marketers to collate inbound communication against traditional metrics in order to perceive answer for complexed strategy questions. With the coming up of AI Marketing, questions about if a prospect is ready for discussion or not does not exist, as data provides explanations.

### 5. APPLYING ARTIFICIAL INTELLIGENCE ACROSS CUSTOMER LIFECYCLE

Analyzing and predicting consumer journey is troublesome for marketers. Consumers convey their opinion in the form of blogs, Tweets, "likes," videos, search, comments and conversations and through various channels. In figure 4 customer interaction and value are displayed over a period of time along with the role of machine learning, propensity modelling, AI application during different stages. Customer experience is a competitive driver of growth when successful and the greatest source of risk when failing. [37]

Machine Learning comprehends the analysis of historical data from various business interactions with audiences and their responses. This data helps in identification of the success factors of a person's communications, including targeting, offers, copy and frequency. Algorithms for Machine Learning generate insights via predictive analytics, and it depends on marketers to take actions according to those insights or set certain directives for AI to act on them.



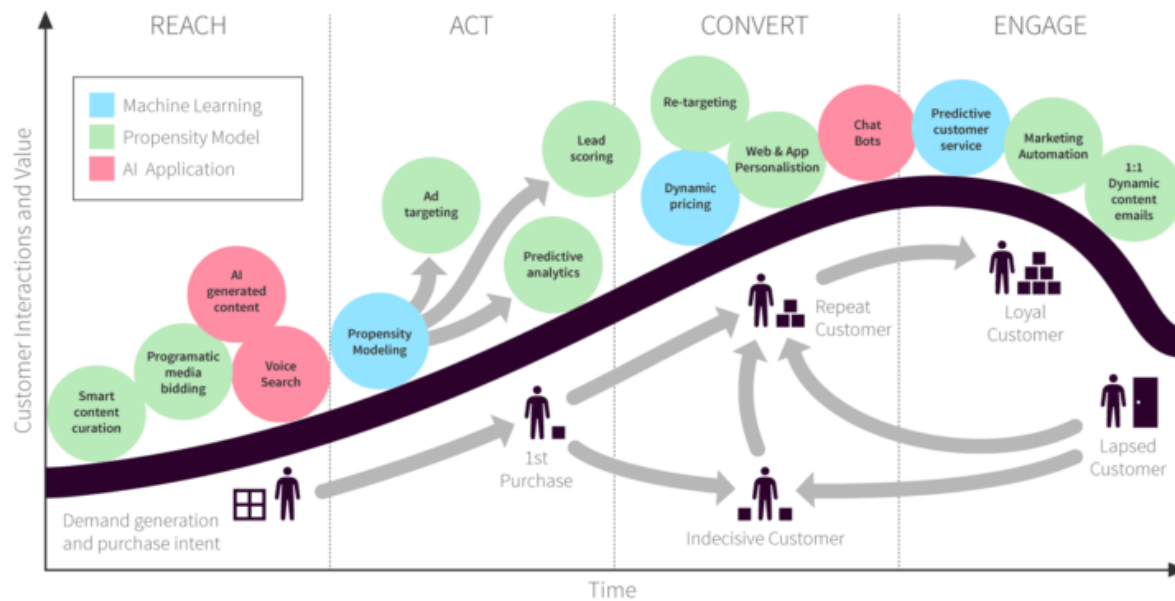


Fig - 4: Customer Journey [36]

Estimation of the possibility of subjects executing specific types of behavior (e.g. purchasing of a product) by taking into account independent covariates and confounding variables that affect such behavior is known as propensity modelling. This conceivability is considered as a probability which is defined as propensity score. [38]

The four major stages of customer lifecycle are explained as follows:

### 1. Reach

For marketers, sometimes it is challenging to track when a need is triggered among customers as it eventuates at category level rather than the brand level. A key marketing scheme is when consumers initiate deliberate possible offerings to match up to their requirements, to inculcate the brand into customers' consideration set. Marketers job comprises of expanding visibility of the brand and intensifying crucial grounds for consideration. [39]

### 2. Act

After customers pen down their brand preferences, marketers pitch to implant certainty in the offerings as well as to coax them that they are making best choices. AI help in accomplishing these objectives by predictive analysis, lead scoring, learning from consumers behavior and providing real time insights. Marketers can also employ emotional AI to perceive consumers' feelings about their brand publicly.

### 3. Convert

After consumers deduce the worth of their preferred brand and the amount, they are willing to spend, marketers shift their focus from decision process to action process. They achieve this task by strengthening brand's value juxtaposed with its competitors. The purchase process of the consumers can be completely transformed with help of AI. Marketers implement intelligent purchasing systems for their consumers and can also regulate the "sweet spot" for pricing known as dynamic pricing.

### 4. Engage

During this stage, consumers are in a position to evaluate their interest and satisfaction with a particular brand and can scrutinize whether to repurchase from that brand i.e. engaging with name of brand. The post purchase services are on of deciding factors and marketers using AI enable chatbots for better customer service. Marketers can segment their most valuable customers or loyal customers, and they can further focus in customer- relationship management campaign.

## 6. REAL WORLD EXAMPLES OF ARTIFICIAL INTELLIGENCE MARKETING APPLICATION

Possibilities with AI are limitless for marketers. The following are some examples of how brands are implementing AI as an integral part of their marketing strategy:

- **Norwegian Air**, an airline company tried figuring out key markets based on various criteria like flight location. They developed a custom ML model to target users within their designated market areas (DMAs), who accounted

for customers which are most likely to engage with their airline and complete booking. The campaign overreached Norwegian Air's targets, delivering a "cost per booking" CPA that was 170% lower than the CPA goal. The company's secondary goal is to aware key markets about "World's Best Long-Haul, Low Cost Airline." was also accomplished by this strategy.

- **Starbucks** used predictive analytics by using loyalty cards and user mobile applications to gather and analyze consumer data. This strategic plan of application of AI and big data was presented in 2016. Starbucks delivered personalized marketing messages to customers including recommendations. Their mobile application allowed users to place an order directly from phone via speech commands. This implementation of AI helped the company in increasing annual revenue by 11% from year 2018 in contrast to 2017. [40]
- **Wowcher**, a leading e-commerce company, ramped up its social media in the year 2018 with the usage of AI-powered copy- writing technology. This tool was having the advantage of studying and analyzing emoticons as a part of speech and writing patterns. After this analysis AI engine developed an emoji based social writing which resonated with most users. Wowcher achieved a 31% reduction in cost per lead, as well as a higher Relevance Score as a consequence of this technology. [41]
- **Nestle or Unilever** used AI technology to harmonize insights from a pool of references like songs and popular media content in public domains for trends in food consumption. Unilever discovered a relationship between breakfast and ice cream. Additional research displayed that brands such as Dunkin Donuts are so far serving ice cream in their breakfast menu and sweet products were becoming popular in breakfast in the US. They considered this as an opportunity and they came up with a variety of cereal flavored ice cream or "Breakfast for Desserts" which became an industry standard. [42]
- **Alibaba**, a retail giant, launched "FashionAI" outfitter in Hong Kong. Its aim was to streamline the customers' fashion retail experience with implementation of AI and using smart garment labels. These labels recognize when the product is grabbed and smart mirrors recommends correlated items along with the garment's description. The subsequent idea of Alibaba is to show a list or virtual wardrobe of all the garments tried or touched by a user during his/her store visit. The employment of new technology by Alibaba is a need of hour in times of consumers' ever-changing expectation. As per a survey conducted 46% of respondents were of the opinion that their encounter with technology instils additional credence in a specific brand showing a trust and positive response. [43]
- **Nike** launched a program wherein customers were provided with the flexibility to design their sneakers in their own way at the store, in 2017. The technology permits users to design the pattern to be printed on plain Nike shoes, according to their own choice. This is a great gimmick to increase sales of the company and furthermore it helped in collecting huge amounts of information relating to customers' predilection about sneakers. With this information and machine learning algorithms Nike developed designs for future products and also delivered personal product recommendations or messages to users.
- **Amazon** pioneered personal recommendation in early stages of AI Marketing. They developed new algorithms for dynamic pricing of products and in recent years they have launched checkout- free physical stores in San Francisco, Chicago, Seattle which works on AI-powered sensors and detect automatically which item a customer has picked up and charges them automatically of amazon go application.[44]
- **Netflix** provides personalized recommendations to every user with implementation of AI based on what the user likes and what user watches. It analyses customer reactions to different shows, documentaries, films and then after looking into billions of records suggests the best one. Most of the shows watched by users are discovered with this AI based recommendation system. [45]

## 7. REGIONAL ANALYSIS (ADOPTION RATE)

AI is populated on such a big scale that the total revenue for this technology is expected to increase from 7.4 billion US Dollars in 2018 to 89.85 billion in 2025 [46]. Across the globe marketers have discovered two major uses of AI Marketing which are task automation and data analysis. With increase in essence of customer data for marketers and marketing strategies, most of global marketing professionals are shifting or planning to shift for use of AI Marketing.

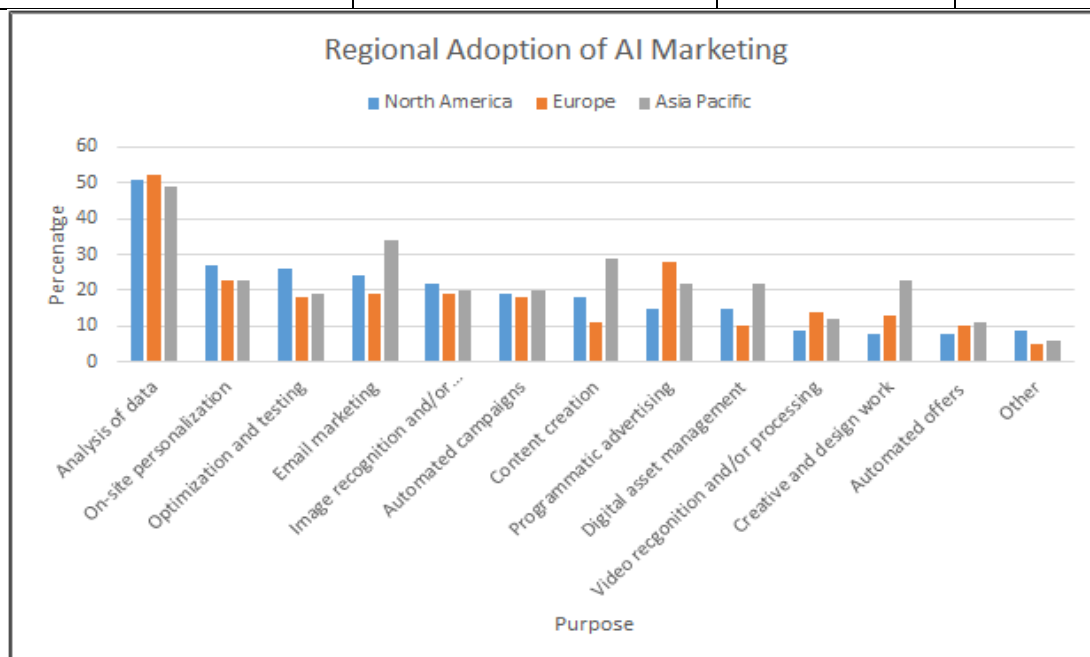
Since the use of AI technology in marketing is still in its infancy, it comes as no bombshell that many industry professionals are not yet unreservedly convinced of AI's influence on marketing, and as such are not yet comfortable with automating anything other than select stages of their campaigns.[47]

Marketers require a detailed overview of evaluation as well as data and algorithm usage related to AI-run processes. Some of the industry doesn't seem to be ready to seize control over their work in favor of artificial intelligence.

Below mentioned are data of AI Marketing used across different regions across the globe. 51% of marketers are already using AI, while 27% of them are planning to incorporate it within their digital marketing strategy [48]. The global market for AI Marketing is estimated to grow at a significant rate between the forecast period of 2018 - 2023. Table 1 and graph 5 shows the execution of AI Marketing for various purposes in different regions across the globe.

**Table - 1:** Regional Adoption of AI Marketing (all values in percentage) [49]

Purpose	North America	Europe	Asia Pacific
Analysis of data	51	52	49
On-site personalization	27	23	23
Optimization and testing	26	18	19
Email marketing	24	19	34
Image recognition	22	19	20
Automated campaigns	19	18	20
Content creation	18	11	29
Programmatic advertising	15	28	22
Digital asset management	15	10	22
Video recognition	9	14	12
Creative and design work	8	13	23
Automated offers	8	10	11
Other	9	5	6



**Graph - 5:** Regional Adoption of AI Marketing [49]

## 8. CONCLUSIONS

AI Marketing is new playbook for Marketers which is making them shift from marketing automation to marketing personalization. The need for customization, reactive design and dynamic engagement have been long talked about and introduction of AI has served as catalyst to initiate this required marketing transition. There has been a growth in scope of AI with regard to its application in marketing. This marketing aeon can be considered both interesting as well as challenging and frightening. With the advent of artificial intelligence marketing, automated and traditional marketing techniques took a backseat and things like personalization, speech and image recognitions, chatbots, churn predictions, dynamic pricing and customer insights came into the vision. Availability of wide range of data has made it possible for the marketers to carry out individualized sales and marketing and fulfil customer expectations to the maximum extent.

Currently, AIM is in its infant stage and with its fast pace, it is expected to reshape marketing strategies and business models. Some market research topics may become insignificant as these roles will be taken over by machines and advanced jobs will be created, which will require high potential and knowledge. In near future AIM is likely to substantially change both marketing strategies as well as customer behavior. AIM will surely explode up with a lot more surprises in the coming future.

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