# A study on Artificial Intelligence in Digital Marketing

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# **MASTER OF BUSINESS ADMINISTRATION**

Submitted by

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# **CERTIFICATE**

This is to certify that the Project Work entitled "A study on Artificial Intelligence in Digital Marketing" submitted by AGASTIN RAJ A (DA2052305010222) of MBA, Directorate of Distance Education, SRM Institute of Science and Technology, Kattankulathur, is a Bonafide Record of Project Work carried out by him in partial fulfilment of the requirement for the award of degree of Master of Business Administration.

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**DECLARATION** 

I hereby declare that the Project Work entitled "A STUDY ON ARTIFICIAL INTELLIGENCE IN DIGITAL MARKETING" submitted by me for partial fulfilment of the degree of Master of Business Administration, under the guidance of **Dr.Shanmuga Priya A**, SRMIST, DDE, KTR, Directorate of Distance Education, SRM Institute of Science and Technology is my original work and has not been submitted earlier to any other University/Institutions. The matter presented in this project report has not been submitted elsewhere for the award of any other degree/diploma. I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and the body of the project I further certify that I have not wilfully lifted up some other's work, Para, text, data, results, etc., reported in the journals, books, magazines, reports, dissertations, theses, etc., or available at web-sites and have not included them in

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# Abstract

This is a study conducted in the field of digital marketing with the usage of AI, the aim of the study was to seek out the impact that AI currently has on digital marketing and what it could look like in the future. The structure is split into five different sections, introduction, method, literature review, results, and conclusion. Introductions explains the fundamentals of AI, as well as the setting and process of the study. the idea part was crafted from various scientific articles found online and a few websites. The literature review goes deeper into different sorts of AI and how they work, it also separately explains the fundamentals of digital marketing and the way forms of AI can be used in digital marketing. within the result section the interview material is written down and discussed round the topics that are explained below. The references were picked with the date in mind, and that they go through some of the technical aspects of AI and Digital marketing and, also how it's used combined. Conclusion mentions that AI can greatly benefit the sector of digital marketing but requires for marketer's to be ready for change and wanting to learn new things.

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# CHAPTER – I

#### INTRODUCTION

Artificial Intelligence has been in the spotlight for some time now. It is a complex and broad subject. Defining Artificial Intelligence may be challenging to do because of its nature, but the author will characterize it as a human-made software in computer science for the intent of imitating human work. (McCarthy, J., 1998). A collection of sub-fields is included in Artificial Intelligence:

- Machine learning
- A neural network
- Deep learning
- Cognitive computing
- Computer vision
- Natural language processing

Machine learning automates the development of theoretical structures. Methods from neural networks, mathematics, operations analysis, and physics are used find different forms of data without letting the software know about certain structures or what to search for.

Neural network is a form of machine learning, that consists of coordinated neurons that process information by reacting to external inputs and transmitting information between units.

Deep learning utilizes massive neural networks with many layers of processing units to learn complex patterns in large amounts of data, taking advantage of advancements in computing power and advanced training techniques. Common implementations provide identification of photographs and expression.

Cognitive computation is an AI sub-field that attempts a normal, human-like computer communication. Through AI or cognitive processing, the final goal is to realistically simulate experiences from a computer, so that it can be understood through objects and voices and to create an accurate response related to humans.

Computer vision is for acknowledging what a picture or video material is displaying, it uses

pattern recognition and deep learning to create the process. We may capture images or videos in real time and display their surroundings while machines can process, analyze and comprehend objects.

# 1.2 Artificial Intelligence in Digital Marketing

Marketing, especially Digital Marketing, would be the area that will have the most leverage of Artificial Intelligence. Businesses have begun to keep up with current patterns slowly but surely in the last year. The author believes it is still relatively minimal and could be used to a greater extent. Since 1959, Artificial Intelligence has been around but before it was seen as too expensive and risky to engage in from the perspective of a corporation. Recently, marketers have gotten up to-date, and businesses are slowly starting to notice the great advantages it can offer to the company. This is a collection of properties that a Digital Marketer in business could use and is of great value:

- Creating and generating content
- Curation of data
- Email Marketing
- Digital advertising
- Web search
- Chat bots
- Predictive analysis

For quite some time now, content creation by methods that use Artificial Intelligence has been in use. Such methods are used by journalists to produce posts. The method analyses previous data and information and generates a copy of S an article to be published.

Curation of Data is widely used to make custom product suggestions that the consumer will find useful, such as the usual "people who buy X buy Y as well," as we see on Amazon continuously. The recommendation feature of Netflix will also provide you with reviews for movies and TV shows that you may find interesting.

In Email Marketing, previously mentioned machine learning will evaluate loads of product data to determine the optimal time to send, including the optimal frequency, the material that best suits that individual consumer, and what kind of titles and subjects they want to read.

In Digital advertising, for example, ad platforms from Facebook and Google already use machine learning or artificial intelligence to identify people more likely to take the required action of the advertiser. To do that, they evaluate data about the customer, such as their preferences, backgrounds, and other things to understand and identify the best audience for their product.

Artificial intelligence has made two major advances that have revolutionized Internet searches and search engine optimization (SEO): voice search and Google's algorithm, Rank Brain. To get much more relevant search results, Google's machine learning algorithm, Rank Brain, was developed. It interprets the voice searches of the user and provides the user with the best results depending on what it learned from the vocabulary and meaning of the user using the strength of AI.

Moving to Chat bots, Chat bots make the process of automating answers to frequently asked inquiries from potential buyers much simpler by offering them a way to find the product or service they are searching for.

There are several fields where predictive models can be implemented, and advertising is no exception. Such models allow the possibility of a particular prospect becoming a customer to be expected. Certain factors can also be predicted such as the quoted price needed to make a transaction, or which consumers are more likely to make more than one order. The trick here is to note that predictive models are just as strong as the information you provide when you build them. Therefore, if your information includes inconsistencies or a high level of randomness, it will not be able to make predictions that are right or reliable.

Thanks to the information which acts as a forward-thinking component, Predictive AI software can turn marketers from reactive to strategic planners.

#### 1.3 Applications of Artificial Intelligence in Digital Marketing:

Earlier Digital Marketers were reluctant regarding the usage of AI in Digital Marketing but with the growth of AI and its results of AI has proved that it will bring dynamic changes in the marketing world.

- **1.3.1 Generating Content:** Machines can now create content from scratch based on data fed in coding. These can be helpful to save time and resources. AI can write reports and news based on data and information. Automated Journalism is now used by many leading news giants like BBC news, The New York Times, Washington Posts and more. Also, Facebook uses AI to remove fake news.
- 1.3.2 Product Recommendation and Content Curation: Not just creating content but helping recommending products and services based on the user's search, interest and behavior. Artificial intelligence can rightfully understand the behavior of the targeted audience and what is better than finding the right products or services that you are already looking at. Netflix recommends you content based on your interest. Artificial Intelligence technology is commonly used to make personalized content recommendations that the user may find interesting, such as the if people buy X product, they might like Y product too, similar products just like Amazon.
- **1.3.3** Use of AI Chatbots: We are aware of automated responses used by businesses to solve customer queries and also used in data collection, keeping the audience updated about products and services. They can serve clients 24/7 and retain their data for future use. Also, the applications of chatbots are huge and the amalgamation of Chatbots with Artificial Intelligence and Machine is the new game changer.

Web Design Without the help of a programmer or a designer, you can still have your website through the use of Grid, that uses Artificial Intelligence to do the work for you based on the information provided like images, text, calls-to-action, etc. they can make the website look professional in much less time and at affordable price.

**1.3.4 Predictive Analysis:** Artificial Intelligence uses data to make probable future projections. Predictive analysis is just the use of data, statistical algorithms, and machine learning.

**1.3.5 Digital Advertising**: Digital Advertising is widely using Artificial Intelligence to ensure maximum success, it is being used across platforms like Facebook, Google, Instagram to provide the best possible experience. Analyzing user information like gender, age, interest, and other aspects to show them relevant ads. With the help of AI technology, marketers can spot micro trends and even predict trends. They can then make strategic decisions as a result; brands can reduce digital advertising waste and ensure that their spend delivers the best possible results.

**1.3.6 Online Search engine**: The way of searching content has changed and marketers will need to create and change content accordingly. New innovations include Voice Search and Google's algorithm and other AI advances. Other innovations include Amazon Echo, Apple's Siri, Microsoft's Cortana, and Google Home where they can perform searches just by voice command or pressing a button

#### 1.4 Research Problem

Modern marketing requires an in-depth grasp of customers' wants and interests, as well as the capacity to act swiftly and effectively on that knowledge. The majority of businesses who have not included AI in their marketing are unable to make real-time, data-driven decisions. (Camilleri, 2017). A huge amount of data is collected in the process for personalization, which enables businesses to better identify consumer behavior and interests across multiple platforms and touchpoints, and therefore better fit customer interest with the suitable content and increase sales (Dwivedi Y. K, 2020). Especially when consumers are engaged throughout their journey with ecommerce, from awareness, investigation, and assessment to buy, review, and consumption (Mangiaracina et al., 2009). Also, when it comes to personalisation in ecommerce, there is uncertainty over what defines personalization, and many suppliers claim to offer it. However, to each individual, personalization means something different and most importantly it should be based on solid design bedrock and an easy customer experience across all of the sellers' interconnections, beginning with a one-to-many approach and progressing to a one-to-one experience based on known information about an individual (Elizabeth, A. & Lukas, E., 2020). Wedel and Kannan (2016) concluded that effective digital marketers are increasingly expected to have expertise both in marketing management and the practical applications of artificial intelligence. This indicates that marketers that comprehend AI systems and the relevant methods of AI in the employed marketing tool are much more likely to conduct successful campaigns. This is due to the fact that they are aware of AI's

technological constraints. The research reveals that in some instances, the assumptions of marketers exceed AI competence. And based on the growing need to grasp both marketing and artificial intelligence, the research investigates their connected understanding for conducting successful marketing campaigns.

### 1.5 Scope and significance of the study

Because marketing is such a broad subject, the writers were forced to confine their focus to digital marketing. The writers' decision to focus on digital marketing and artificial intelligence was motivated by the quantity of coverage it gained in the media prior to the thesis writing process. The media coverage of this subject persisted throughout the thesis writing process. Additionally, the authors are interested in pursuing careers in the field of marketing in the near future. The authors' goal in writing the thesis is to get the most pertinent and valuable knowledge about Artificial intelligence's relationship to digital marketing. The arguments outlined above influenced the writers' decision to include digital marketing as one of their thesis's focal points. The author will focus on artificial intelligence, machine learning, big data, and digital marketing in particular. This will be accomplished with the goal of defining significant benefits. Furthermore, the authors will talk about the future of artificial intelligence in marketing and in business. For marketing professionals, the authors hope that this thesis will allow them to understand and deal with AI in an easier way. The writers of this thesis believe that by presenting their findings, they would inspire other marketers to learn more about digital marketing's rapidly evolving sector. Finally, the process of writing and investigating the thesis will help the authors advance their careers as they will gain a greater understanding of AI and digital marketing from a variety of perspectives and digital marketing breakthroughs that are taking place in 2022.

### 1.6 Key concepts.

Artificial Intelligence (AI) Artificial intelligence is the concept and development of computer systems that can do activities that would ordinarily need human intelligence. Visual recognition, voice recognition, making difficult decisions on challenging problems, and the ability to interpret languages are all examples. (Oxford University press, 2019).

Machine learning (ML) is the ability of a computer to learn from raw data instead of being given commands by humans. This means that machines can discover patterns and derive important information from the data they collect from their detectors. (Buller, Gifford, & Mills, 2018.)

Search engine optimization (SEO) is the procedure of filtering a website using on-page and offpage methods in order for it to be indexed and categorized effectively by search engines like Google, Bing, and others. It takes a lot of effort to get a successful and organic listing in a search engine results page. (Dodson, 2016)

# 1.7 OBJECTIVE OF THE STUDY:

#### PRIMARY OBJECTIVE:

A study on artificial intelligence in digital marketing.

# SECONDARY OBJECTIVE:

- ➤ This study aims to discover different methods and tools for Artificial Intelligence that is used in digital marketing.
- ➤ The research even tries to find out how Artificial Intelligence technology is developing and supporting digital marketers.
- ➤ The impact of Artificial Intelligence in digital marketing today.

#### 1.8 LIMITATIONS

There is a lack of previous research done precisely on the same topic as the author which might create partially biased views. Interviews are conducted by asking the participants about their own feelings and experience which might result in different opinions depending on their work knowledge and experience. Time constraints can be visible in the interviews which might result in varied answers. Some of the research questions can affect the interviewees on personal level more than an experience level which means that they results might vary depending on the person.

# 1.9 Real-World Examples of AI Marketing at Work

#### 1.9.1 Norwegian Airlines: Driving Real-Word Business Outcomes

Norwegian Airlines partnered with AdTheorent to use machine learning to drive flight bookings. Norwegian identified key markets based on flight locations, including Austin, Boston, Chicago, Denver, Florida, Los Angeles, New York, and San Francisco/Oakland. AdTheorent developed custom machine learning models to target users within the target DMAs who were deemed most likely to engage with the ad and then complete a booking. To track consumer actions after exposure to the brand campaign, AdTheorent placed pixels on the booking website, specifically the booking confirmation page. Leveraging that pixel data, AdTheorent's data science and execution teams used real-time feedback to optimize campaign delivery towards consumers most likely to purchase tickets on the booking site.

# 1.9.2 The Humane Society: Relationship Targeting on a Whole New Level

The Humane Society and Maddie's Project partnered with AdTheorent to encourage millions of pet lovers to find a home for the 2.4 million healthy pets currently available for adoption in shelters. The primary objective was to drive "intent to adopt" actions on site.

# 1.9.3 Toyota Prius Prime: Turbocharging Engagement with Cognitive Ads

Toyota, in collaboration with Watson Advertising, sought to reach and engage auto buyers interested in the Prius Prime. Since the Prius Prime is a technologically advanced car, Watson Ads provided a perfect vehicle to engage and educate this tech-savvy audience.

#### 1.9.4 Campbell's: AI Cooks Up Personalized Results

Campbell's collaborated with Watson Advertising on the first-ever consumer use of IBM Watson technology for advertising. Watson Ads lets consumers interact with the ad experience by allowing them to ask questions via voice or text and receive highly personalized information in response.

#### 1.9.5 Behr: Taking the Guesswork Out of Personalized Color Advice

Paint brand Behr came to IBM Watson Advertising looking to reach and engage consumers with personalized recommendations that make their interior paint color selection process easier. Since the process of selecting paint colors is a personal experience, IBM Watson Ads provided a perfect way for Behr to offer personalized paint color recommendations at scale, helping to take the indecision out of the interior painting process.

### 1.9.6 Best Western: The Right Place at the Right Time

Best Western was looking to reach and engage consumers in active travel planning mode around peak holiday weekends — some of the busiest travel periods of the year. So, IBM Watson Ads engaged in real-time conversations, offering tips, tricks, and inspiration for travelers on their upcoming destinations, allowing consumers to interact with Best Western via dynamic ads on weather.com and The Weather Channel app. They also used audience targeting to reach consumers that were most likely to be business or leisure travelers, urban millennials, or people who had recently traveled.

# 1.9.7 Vodafone: A New Twist on Ad Overlays

GumGum's AI-powered computer vision and targeting technologies helped Vodafone surround relevant iPhone X content with its messaging. By analyzing text and visual content across its network of premium sites, they were able to identify articles related to the iPhone X launch. Then, they helped Vodafone's media agency, Wavemaker, deliver in-image ads as overlays across all iPhone images on these relevant pages. While Vodafone's ads did not include words or imagery referencing the iPhone X, this roadblock strategy ensured that its service would be top of mind for consumers who were considering the new phone. And once the phone was available for pre-order and sale, they used the ads to drive conversions directly.

#### 1.9.8 IKEA: Voice-Enabled Interactive Ads That Learn

IKEA and media agency Wavemaker tapped Instreamatic to launch a new voice-enabled ad campaign that could take advantage of Instreamatic's AI-powered dialogue advertising platform. The campaign sought to promote IKEA's new line of bedding products. To do so, the IKEA campaign used audio ad creative that prompted listeners to interact in a conversation with the brand, browse a list of new products, and hear IKEA sing a lullaby — a catchy jingle — about the products selected. The ads were played on music apps in mid-roll positions, and on digital radio apps in the pre-roll position.

#### 1.10 Evaluate

- Understand the problem you are trying to solve and define a goal that results in a business outcome that addresses that problem.
- Evaluate your AI approach to ensure that it actually solves that problem.
- AI should not be a black box; understand what data is being applied and how that data is impacting the result.
- Evaluate the key data that the model is using to learn more about your inputs and the quality or reliability of the data.
- Evaluate new data sets that could be used to improve modeling.
- Trend the model scoring over time to understand how it is adapting to data. Is the change due to different inputs or improved results?

# **CHAPTER - II**

#### LITRATURE REVIEW

AI is the art, method, and engineering ability to create intellectual software, computers, and other machines, according to (McCarthy, J., 1998, p. 2). McCarthy explains "intelligence" as a computing element capable of achieving the goals of the world. But (McCarthy, J., 1998, p. 3) says that comparing human intellect to computer intelligence, does not further improve the relation humans have about being place in a software as there are many nuances in the minds of people. People tend to be irrational in their actions. Some of us are uncompromising and unpredictable. As a result, programming the human mind into a machine could not work for us. Nevertheless, AI's overall goal is to overcome issues and reach goals just as people in everyday situations would face them (McCarthy, J., 1998, p. 4)

# **Machine learning**

Machine learning as described by (Sterne, J. 2017, p.10) is designed to learn instead of following harsh guidelines, as its name suggests. What ML can achieve is advancing with new encounters and experiences.

According to (Chaffey, D. & Ellis-Chadwick, F. 2019), predictive models and algorithms with the ability to learn without explicit programming are created and applied. The computer models then make success predictions based on patterns from historical data. These are used to define rules to automate tasks such as targeting media or emails with the most relevant creative offer to the most valuable segments. These algorithms are of massive advantage to organizations, according to (Sterne, J. 2017, p. 8-9). The author states that a well-trained ML algorithm can do assignments on the same levels as a human, this creates the tough about it being a better option for the marketing department than some marketing staff.

(Sterne, J. 2017, p. 12-13) explains that ML searches and seeks to understand patterns. Understanding one pattern or trend helps ML apply its lessons to other organizational problems that occur. In addition, Sterne adds that ML's beauty is that it builds systems that build themselves. Machines are keen to change their views on the information they obtain instead of learning from data. Machines change the way different experiences are understood.

Machine learning is crucial in the current world we are living in, full of surprises and chaos, this gives the ability to use machine learning for learning (Alpaydin, E., 2016, p. 17).

These algorithms are of massive advantage to organizations, according to (Sterne, J. 2017, p. 8-9). The author states that a well-trained ML algorithm is capable performing tasks as well as individuals, leading to the belief that ML technologies are cheaper and more reliable assets to the marketing department than some marketing staff.

#### **Social Media Marketing**

According to (Chaffey, D. & Ellis-Chadwick, F. 2019) social media companies like Facebook, Instagram, LinkedIn, Pinterest, Snapchat, Twitter, and other social networks that have majority of the users, are often recognized as the most important by consumers and businesses. But social media is much more than that. There are different methods of social media and gathering information too. Included among these are customer communication and encouraging user generated content (UGC), such as client reviews and consumer feedback.

He also mentions that social media advertising is focused on how we can leverage consumer-to consumer (C2C) interactions to raise our brand's visibility by amplifying social media and eliminating negative references. To order to make efficient use of this for interaction, it is important to understand that social media entail participating to conversations and sharing ideas and information, mostly encouraged by social networks, but can occur elsewhere.

# **Email Marketing**

One of the most profitable channels for marketing is still to this day email marketing. A survey conducted recently has shown that one dollar spent on email marketing can give you the amount 40 € in (ROI) (Ward 2019). Pitch sales is clearly the solution you should get out from this. Several times emails are used to send newsletters or important information for a consumer, but this can still improve the ROI (Ryan, 2017, p.153-155.)

(Sterne, J. 2017, p. 191) explains that emails are designed for a variety of purposes, such as delivering a message of welcoming a new consumer, maintaining a current customer bond, or just using the channel for ad placing. AI greatly improves the chances of analysing the emails in the right way to get the most out of every single customer. Analysing different contents of the email to see what give the right reaction from a customer.

(Sterne, J. 2017, p.192) continues by adding that AI can determine the best timing for e-mail addressing, it can figure out what type of emails have a higher chance of being opened, it can suggest different subjects, figure out the structure of the email, it also saves the previous data of a certain type of consumer so it can measure and insert the right type for a certain group of

members. A marketing employee can succeed in these tasks just fine, but the amount of time saved by AI is significant for the ROI, making it a money saver.

#### **Search Engine Optimisation**

Ryan (2017, p. 63) says that search engines are the Pot of Gold for all marketers in charge of online related tasks. It can also be said that the Pot of Gold is enormous data files and different analytics available for marketeers in 2019. Text data is capable presenting crucial ways of the customer and can build up analyses with text analysis as a structure. (Sponder & Khan 2018, p.225). Although text analysis may not seem to be linked to the SEO-thisis simply not the case. Nowadays, customer feelings can be more deeply understood by text analytics marketers (Sponder & Khan 2018, p. 226). This kind of information is invaluable. The opportunity for marketers to be aware of terms such that consumers share content offers a chance to be put on the first page on each search engine. To receive a sentiment analysis, this requires ML technology, a text miner (Sponder & Khan 2018, p.227).

In a way you could imply that SEO is content, (Sterne, J. 2017, p. 150-151) explains that gathering legitimate online material is crucial for marketers. Google or Yaahoo! for example have the power in a situation where they believe it is misleading or not displaying correct information to be kicked off SERP or just list the page so deep that consumer never look for it.

#### **Research Method and Analysis**

Research method for this thesis is qualitative, because of the semi-structured interviews with open ended answers. The definition for, primary data is data that has been created by the author for the thesis. Secondary data is fetched and collected from various databases and sources from the internet or books, that has already been published or written by someone else. (Saunders et al. 2009).

#### **Chat bots**

Organizations have slowly but surely started to figure out the different benefits of a chat bot implementation into their business. From the point of view of user experience, they are superior in helping improve the down time of getting an answer to urgent questions and information searching. Chat bots can use natural language dialog to "orchestrate" processes across multiple applications. This improves the overall experience of a customer service situation because it is generic and gets the job done moving information faster and for some consumers, it can be crucial to the information, they need fast. On top of that they certainly provide a lower cost option for customer service in general. (Accenture, 2017).

#### **Marketing Practices & trends**

Internet social media and mobile devices have dramatically increased the interactions between firms and consumers, with the information encoded in rich media formats such as text, image, and video. It is imperative for firms to understand consumer perceptions and preferences and obtain brand positioning insights based on this rich media content. (Ma, L. & Sun, B., 2020)

According to (Ma, L. & Sun, B., 2020) when rich data is available for commercial use machine learning comes into the picture. It is efficiently used for personalization and targeting. They also state that driven by ML algorithms it can refine the process and help get more accurate and targeted methods with an improvement in efficiency.

(Ma, L. & Sun, B., 2020) also talk about the fact that the modern marketing environment is too complex for a human analyst to take full advantage off anymore. Especially when we talk about defined microsegments, this is something that requires automation at this point. If you are looking for a new method to be added into your digital marketing strategy machine learning is the way to go. ML methods deliver the needed real-time optimization we need when dealing with mobile devices.

When (Ma, L. & Sun, B., 2020) discuss the customer journey of today they mention that key factors for staying in touch with the current customer journey is by using deep learning, and reinforcement learning methods, these can help perfect it. It can help pinpoint the entire journey and will make it easier for the individual working with digital marketing to achieve the wanted results. In the end these features bring out the effectiveness of marketing to the level it should be at today.

"Meanwhile, advertising is increasingly digitized and personalized. Machine learning methods underlie many programmatic advertising tools and services, targeting users based on profile and behavioural history, with real-time bidding decisions made at millisecond timescale." (Ma, L. & Sun, B., 2020)

Moving to customer engagement (Ma, L. & Sun, B., 2020) argue that ML helps light interested in consumers by enhancing the ads delivered. Augmented reality is also used to enhance the overall shopping experience for the customer. Naturally, there is a cycle for when you buy things, after you buy something, you often get a follow-up asking how the shopping trip was, and for feedback, this is also done by ML. Then we have chat bots that are

used with speech recognition and natural language processing algorithms in many cases they tend to take care of the pre- and post-purchase situations. AI is changing all of this towards a more automated version.

Recommendations use sophisticated algorithms with ML and deep neural networks this helps finalize the perfect recommendations for a consumer. This would be considered an essential part of marketing. It fits a consumer with the right products by analysing data.

# **CHAPTER - III**

#### RESEARCH METHODOLOGY

Research can use the scientific method but need not do so. Research methodology is a way to systematically solve the research problem. The research methodology in the present study deals with research design, data collection methods, sampling methods, survey, analysis, and interpretations.

# 3.1 RESEARCH METHODOLOGY:

A research process consists of stages or steps that guide the project from its conception through the final analysis, recommendations and ultimate actions. The research process provides a systematic, planned approach to the research project and ensures that all aspects of the research project are consistent with each other.

# 3.2 Research Design

A research design is the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.

- A well-structured questionnaire is framed.
- Data is collected from the consumers of Chennai
- Findings are made and necessary suggestions and recommendations are given.

#### **Descriptive Research Design**

A descriptive research design was used. Survey design was adopted in this study. 51 questionnaires were distributed among the employees of organization. In this paper data has been collected through questionnaires. Dimension of employee commitment was measured with 5 items on a point liker scale ranging 5= Highly Satisfied, 4= Satisfied, 3= Neutral, 2=Dissatisfied, 1= Highly Dissatisfied.

#### 3.3 SAMPLING DESIGN

Sampling design is plan for obtaining a sample from the sampling frame, the must be consistent with relevant population. This allows the data obtained from the sample to used in making inference about the large population.

#### Sample size

1. Sample size - 95.

#### Sampling method

Under non – probability sampling convenience sampling method can be used.

# **SAMPLING TECHNIQUES:**

A structured questionnaire has been prepared to get the relevant information from the respondents. The questionnaire consists of a variety of questions presented to the respondents for their answers. PROBABILITY METHOD – Convenience sampling.

#### 3.4 Data collection methods:

Data collection is one of the most important aspects of research. Two types of data are Primary Data and Secondary Data.

- Primary Data
- Secondary Data
- **Primary Data** Primary data is gathered from direct observation or data personally collected. It refers to that data that is collected for a specific purpose from the field of enquiry and are original. For the project, primary data is collected from respondents using a questionnaire. A structured questionnaire must be designed with a series of close-ended and open-ended questions along with an appropriate rated scale.
- Secondary Data Secondary data is second-hand information about an event that has not been personally witnessed by the researchers. The use of secondary data saves time and money. The purpose is to increase the accuracy of the analysis. Here the secondary data was obtained from various journals, research papers, websites of the organization, etc.

Secondary consists of the basic understanding of AI, different levels, and concepts.

Furthermore, the digital marketing part of my literature review goes in on how companies are using different methods in marketing with AI implemented.

#### 3.5 MEASUREMENT SCALE AND TOOLS

Questionnaire was the main tool for collecting the data. Hence, pain has been taken to construct the questionnaire in a systematic way by converting adequate in and relevant questions to ensure in achieving the research objectives.

### **Data analysis Tools**

The data collected from the primary sourced were arranged sequentially and tabulated in the systematic.

#### **CHI – SQURE TEST:**

The test is non-parametric test. The symbol is a Greek Letter chi (K). The describes the magnitude of the discrepancy between theory and observation it is defined as  $[(O-E)^2/E]$ .

O = refers to the observed frequency

E = refers to the expected frequency.

First the expected frequency is calculated using the equations.

 $E = RT \times CT / N$ 

RT = Row total for the containing the cell.

CT = Column total for the column continuing the equations.

N = Total no of observations.

The difference between the observed and expected frequency is calculated and the value (O-E)<sup>2</sup> is obtained.

The value  $[(O-E)^2/E]$  is calculated and the value sigma gives the chi-square value and it range from zero to infinity. Then sigma value is compared with chi-square  $[x^2]$  table value at the level of significance for testing the hypothesis.

#### Skills for implementing AI in marketing.

The findings indicate that technical knowledge of AI is not always needed. Special skills are seen as secondary by the participants. They feel that using a technology does not automatically entail that the machine's design is implicated. Both sides appear to feel that AI systems are designed to be utilized with no prior AI knowledge or understanding. Consequently, this understanding, according to both participating groups, could very well be valuable. Results from the interviews also suggest that experience in artificial intelligence is important. The AI expert's stated that they gained AI skills through constant use of the technology. One respondent began programming from a young age and has improved his skills ever since. Additionally, using the AI technology in their marketing activities, enhances their learning of the technology which builds up proficiency. Therefore, it is not only important to take the course. AI technology depends on practical work that increases knowledge and experience, especially in marketing. The 37 participants claimed that they have experience in ML and social media marketing which has improved their marketing techniques and outcomes significantly. AI must be included into the strategy of businesses. Consequently, leveraging its advantages and remaining competitive. While it is crucial for consumers to understand the relationship between advertisements and data gathering, it is also essential that they understand how advertisements connect to data collection. The use of AI technology could mean a lot for the future of marketing, but the right rules should be formulated to control data gathered through using AI.

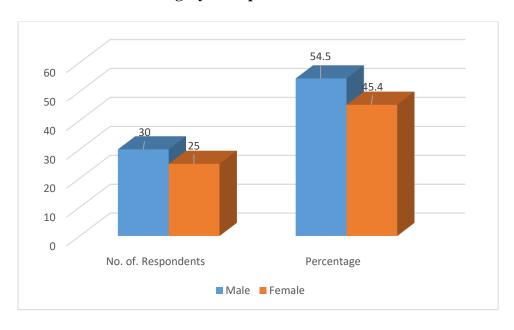
# **CHPATER - IV**

# **DATA ANALYSIS AND INTERPRETATION**

**Table 4.1: Gender category of respondents** 

Particulars	No. of. Respondents	Percentage
Male	30	54.5
Female	25	45.4
Total	55	100

**Chart 4.1: Gender category of respondents** 



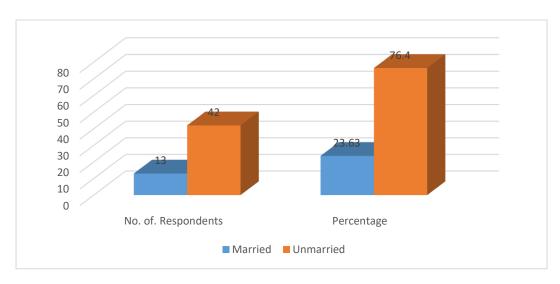
# INTERPRETATION:

From the above table shows that the gender category of respondents has 54.5% are male and 45.4% are female.

**Table 4.2: Marital status category of respondents** 

Particulars	No. of. Respondents	Percentage
Married	13	23.63
Unmarried	42	76.4
Total	55	100

**Chart 4.2: Marital status category of respondents** 

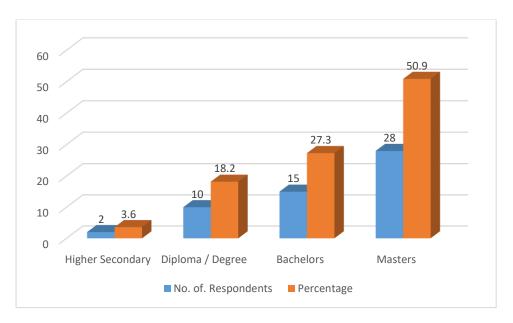


From the above table shows that the marital status category of respondents has 23.63% are married and 76.4% are unmarried.

Table 4.3: Responses regarding educational qualifications of employees

Particulars	No. of. Respondents	Percentage
Higher Secondary	2	3.6
Diploma / Degree	10	18.2
Bachelors	15	27.3
Masters	28	50.9
Total	55	100

Chart 4.3: Responses regarding educational qualifications of employees

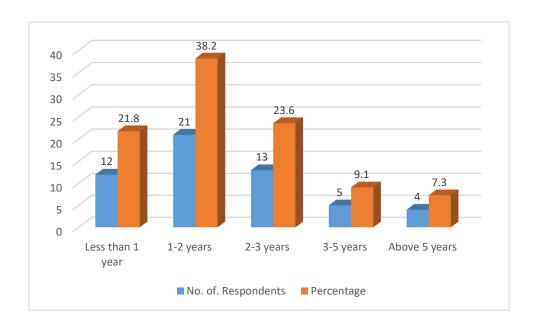


From the above table shows that the educational qualifications of respondents have 3.6% are Higher secondary, 18.2% are diploma/degree, 27.3% are Bachelors and 50.9% are masters.

Table 4.4: Responses regarding experience of employees

Particulars	No. of. Respondents	Percentage
Less than 1 year	12	21.8
1-2 years	21	38.2
2-3 years	13	23.6
3-5 years	5	9.1
Above 5 years	4	7.3
Total	55	100

Chart 4.4: Responses regarding experience of employees

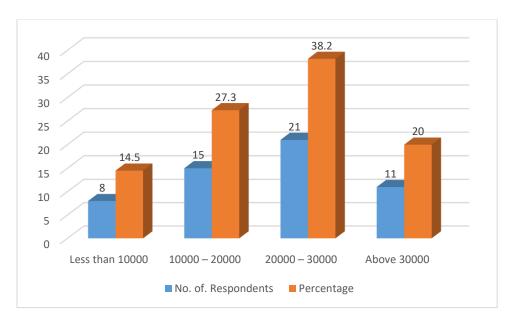


From the above table shows that the educational qualifications of respondents have 3.6% are Higher secondary, 18.2% are diploma/degree, 27.3% are Bachelors and 50.9% are masters.

Table 4.5: Responses based on salary

Particulars	No. of. Respondents	Percentage
Less than 10000	8	14.5
10000 – 20000	15	27.3
20000 - 30000	21	38.2
Above 30000	11	20
Total	55	100

**Chart 4.5: Responses based on salary** 

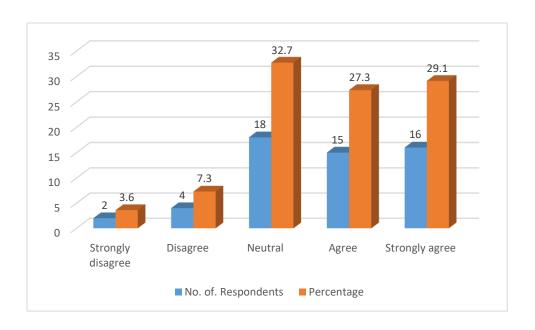


From the above table shows that the salary of respondents have 14.5% are less than 10000, 27.3% are 10000-20000, 38.2% are 20000-30000 and 20% are above 30000.

Table 4.6: The adaptation of AI in marketing increases the marketing expenditure of the company while acquiring but it significantly reduces the marketing cost.

Particulars	No. of. Respondents	Percentage
Strongly disagree	2	3.6
Disagree	4	7.3
Neutral	18	32.7
Agree	15	27.3
Strongly agree	16	29.1
Total	55	100

Chart 4.6: The adaptation of AI in marketing increases the marketing expenditure of the company while acquiring but it significantly reduces the marketing cost.

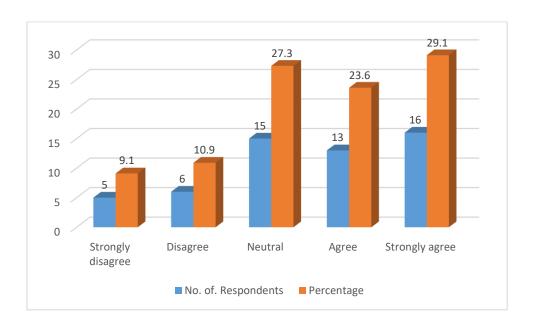


From the above table shows that the adaptation of AI in marketing increases the marketing expenditure of the company while acquiring but it significantly reduces the marketing cost of respondents have 3.6% of respondents strongly disagree, 7.3% of the respondents disagree, 32.7% of the respondent's neutral, 27.3% of the respondents agree and 29.1% of the respondents strongly agree.

Table 4.7: Artificial Intelligence has a direct effect on Digital Marketing.

Particulars	No. of. Respondents	Percentage
Strongly disagree	5	9.1
Disagree	6	10.9
Neutral	15	27.3
Agree	13	23.6
Strongly agree	16	29.1
Total	55	100

Chart 4.7: Artificial Intelligence has a direct effect on Digital Marketing.

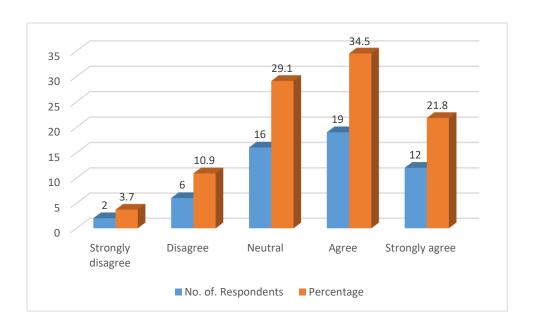


From the above table shows that Artificial Intelligence has a direct effect on Digital Marketing of respondents have 9.1% of respondents strongly disagree, 10.9% of the respondents disagree, 27.3% of the respondent's neutral, 23.6% of the respondents agree and 29.1% of the respondents strongly agree.

Table 4.8: Artificial intelligence can provide superior customer experiences and influence consumer behaviour to purchase goods and services

Particulars	No. of. Respondents	Percentage
Strongly disagree	2	3.7
Disagree	6	10.9
Neutral	16	29.1
Agree	19	34.5
Strongly agree	12	21.8
Total	55	100

Table 4.8: Artificial intelligence can provide superior customer experiences and influence consumer behaviour to purchase goods and services

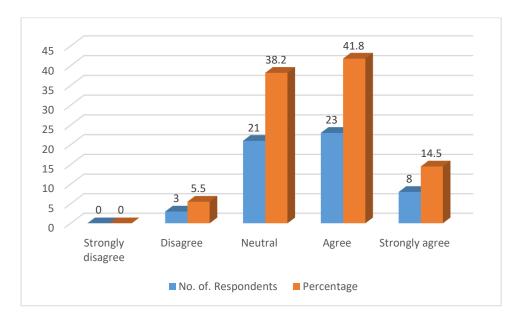


From the above table shows that the Artificial intelligence can provide superior customer experiences and influence consumer behaviour to purchase goods and services of respondents have 3.7% of respondents strongly disagree, 10.9% of the respondents disagree, 29.1% of the respondent's neutral, 34.5% of the respondents agree and 21.8% of the respondents strongly agree.

Table 4.9: Artificial intelligence in digital marketing improve service quality and operational efficiency.

Particulars	No. of. Respondents	Percentage
Strongly disagree	0	0
Disagree	3	5.5
Neutral	21	38.2
Agree	23	41.8
Strongly agree	8	14.5
Total	55	100

Chart 4.9: Artificial intelligence in digital marketing improve service quality and operational efficiency.

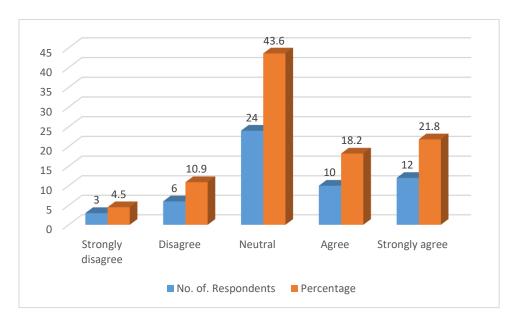


From the above table shows that the Artificial intelligence in digital marketing improve service quality and operational efficiency of respondents have 0% of respondents strongly disagree, 5.5% of the respondents disagree, 38.2% of the respondent's neutral, 41.8% of the respondents agree and 14.5% of the respondents strongly agree

Table 4.10: Artificial intelligence helps to build trust in digital platforms.

Particulars	No. of. Respondents	Percentage
Strongly disagree	3	4.5
Disagree	6	10.9
Neutral	24	43.6
Agree	10	18.2
Strongly agree	12	21.8
Total	55	100

Chart 4.10: Artificial intelligence helps to build trust in digital platforms.

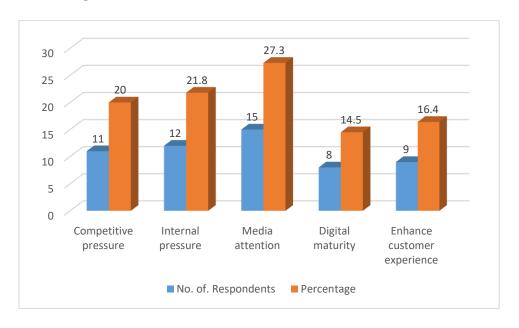


From the above table shows that the Artificial intelligence helps to build trust in digital platforms of respondents have 4.5% of respondents strongly disagree, 10.9% of the respondents disagree, 43.6% of the respondent's neutral, 18.2% of the respondents agree and 21.8% of the respondents strongly agree

Table 4.11: The major influencing factor in integrating artificial intelligence in digital marketing

Particulars	No. of. Respondents	Percentage
Competitive pressure	11	20
Internal pressure	12	21.8
Media attention	15	27.3
Digital maturity	8	14.5
Enhance customer	9	16.4
experience		
Total	55	100

Chart 4.11: The major influencing factor in integrating artificial intelligence in digital marketing

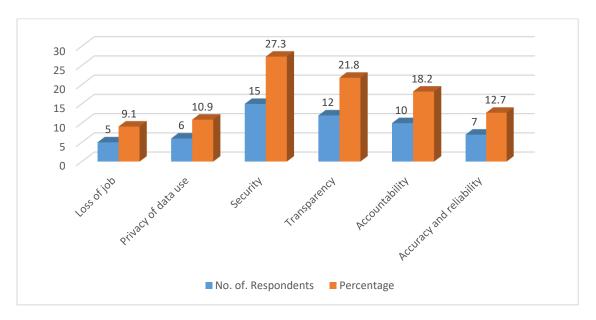


From the above table shows that the major influencing factor in integrating artificial intelligence in digital marketing of respondents have 20% of respondents says competitive pressure, 10.9% of the respondents says internal pressure, 27.3% of the respondent's says media attention, 14.5% of the respondents says digital maturity and 16.4% of the respondents says enhance customer experience.

Table 4.12: The ethical aspect of AI in marketing.

Particulars	No. of. Respondents	Percentage
Loss of job	5	9.1
Privacy of data use	6	10.9
Security	15	27.3
Transparency	12	21.8
Accountability	10	18.2
Accuracy and reliability	7	12.7
Total	55	100

Chart 4.12: The ethical aspect of AI in marketing.

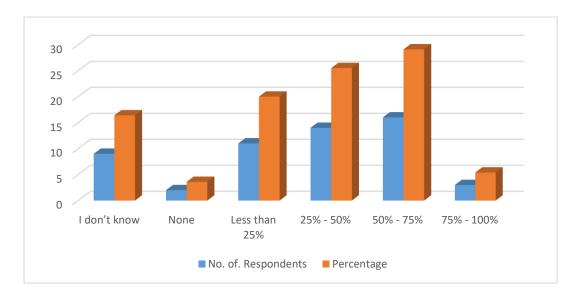


From the above table shows that the ethical aspect of AI in marketing of respondents have 9.1% of respondents says loss of job, 10.9% of the respondents says privacy of data use, 27.3% of the respondent's says security, 21.8% of the respondents says transparency, 18.2% of the respondents says accountability and 12.7% of the respondents says accuracy and reliability.

Table 4.13: Thinking about the marketing technology you use today, what percentage of those technologies use AI today

Particulars	No. of. Respondents	Percentage
I don't know	9	16.4
None	2	3.6
Less than 25%	11	20
25% - 50%	14	25.5
50% - 75%	16	29.1
75% - 100%	3	5.4
Total	55	100

Chart 4.13: Thinking about the marketing technology you use today, what percentage of those technologies use AI today

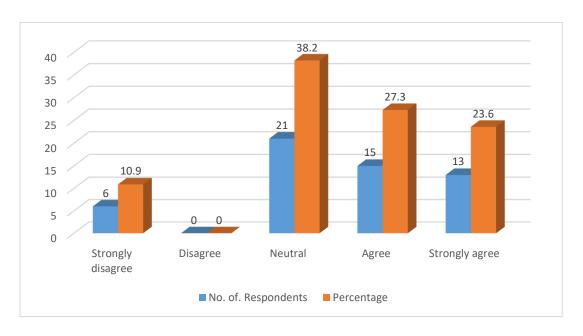


From the above table shows that thinking about the marketing technology you use today, what percentage of those technologies use AI today of respondents have 16.4% of respondents says I don't know, 3.6% of the respondents says none, 20% of the respondent's says less than 25%, 25.5% of the respondents says 25% - 50%, 29.1% of the respondents says 50%-75% and 5.4% of the respondents says 75%-100%.

Table 4.14: To learn about AI that can make better decisions on how to use AI in future.

Particulars	No. of. Respondents	Percentage
Strongly disagree	6	10.9
Disagree	0	0
Neutral	21	38.2
Agree	15	27.3
Strongly agree	13	23.6
Total	55	100

Chart 4.14: To learn about AI that can make better decisions on how to use AI in future.

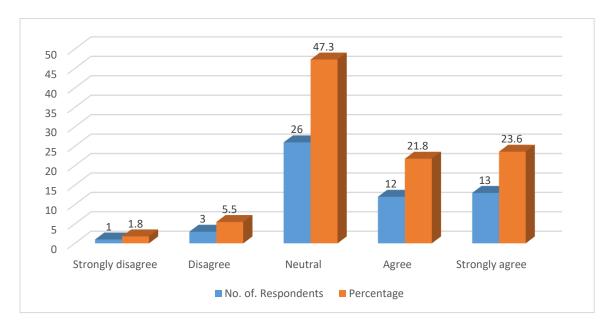


From the above table shows that the to learn about AI that can make better decisions on how to use AI in future of respondents have 10.9% of respondents says strongly disagree, 0% of the respondents says disagree, 38.2% of the respondent says neutral, 27.3% of the respondents says agree and 23.6% of the respondents says strongly agree.

Table 4.15: AI functions will be developed by the exhibition industry itself

Particulars	No. of. Respondents	Percentage
Strongly disagree	1	1.8
Disagree	3	5.5
Neutral	26	47.3
Agree	12	21.8
Strongly agree	13	23.6
Total	55	100

Chart 4.15: AI functions will be developed by the exhibition industry itself

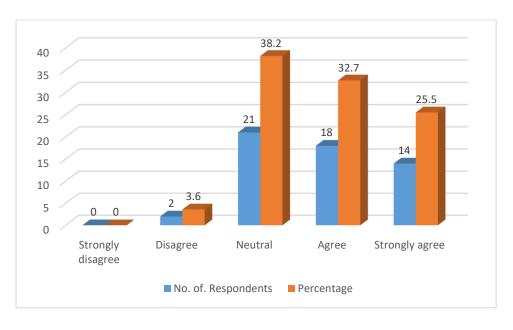


From the above table shows that the AI functions will be developed by the exhibition industry itself of respondents have 1.8% of respondents says strongly disagree, 5.5% of the respondents says disagree, 47.3% of the respondent says neutral, 21.8% of the respondents says agree and 23.6% of the respondents says strongly agree.

Table 4.16: Artificial Intelligence in digital marketing can have positive impacts on people's wellbeing.

Particulars	No. of. Respondents	Percentage
Strongly disagree	0	0
Disagree	2	3.6
Neutral	21	38.2
Agree	18	32.7
Strongly agree	14	25.5
Total	55	100

Chart 4.16: Artificial Intelligence in digital marketing can have positive impacts on people's wellbeing.

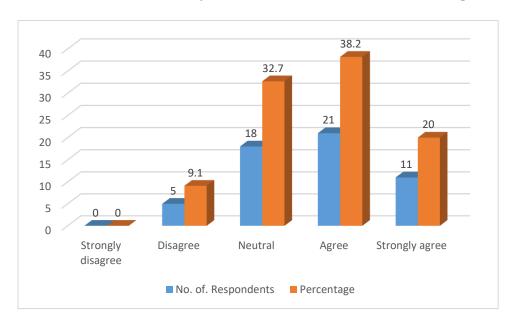


From the above table shows that the artificial Intelligence in digital marketing can have positive impacts on people's wellbeing of respondents have 0% of respondents says strongly disagree, 3.6% of the respondents says disagree, 38.2% of the respondent says neutral, 32.7% of the respondents says agree and 25.5% of the respondents says strongly agree.

Table 4.17: Much of society will benefit for future fall of AI in digital marketing.

Particulars	No. of. Respondents	Percentage
Strongly disagree	0	0
Disagree	5	9.1
Neutral	18	32.7
Agree	21	38.2
Strongly agree	11	20
Total	55	100

Chart 4.17: Much of society will benefit for future fall of AI in digital marketing.

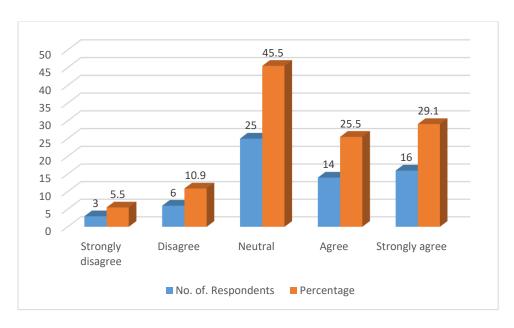


From the above table shows that the much of society will benefit for future fall of AI in digital marketing of respondents have 0% of respondents says strongly disagree, 9.1% of the respondents says disagree, 32.7% of the respondent says neutral, 38.2% of the respondents says agree and 20% of the respondents says strongly agree.

Table 4.18: The rise of artificial intelligence in digital marketing poses a threat to peoples job security.

Particulars	No. of. Respondents	Percentage
Strongly disagree	3	5.5
Disagree	6	10.9
Neutral	16	29.1
Agree	14	25.4
Strongly agree	16	29.1
Total	55	100

Chart 4.18: The rise of artificial intelligence in digital marketing poses a threat to peoples job security

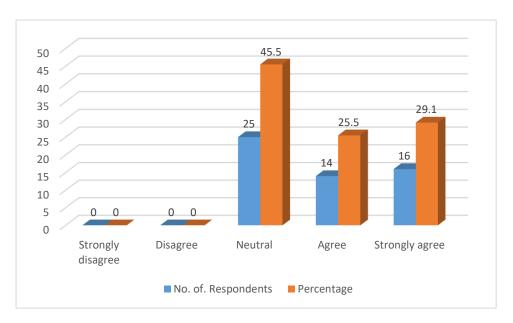


From the above table shows that The rise of artificial intelligence in digital marketing poses a threat to peoples job security of respondents have 5.5% of respondents says strongly disagree, 10.9% of the respondents says disagree, 29.1% of the respondent says neutral, 25.5% of the respondents says agree and 29.1% of the respondents says strongly agree.

Table 4.19: AI in digital marketing can help people feel happier.

Particulars	No. of. Respondents	Percentage
Strongly disagree	0	0
Disagree	0	0
Neutral	25	45.5
Agree	14	25.5
Strongly agree	16	29.1
Total	55	100

Chart 4.19: AI in digital marketing can help people feel happier.

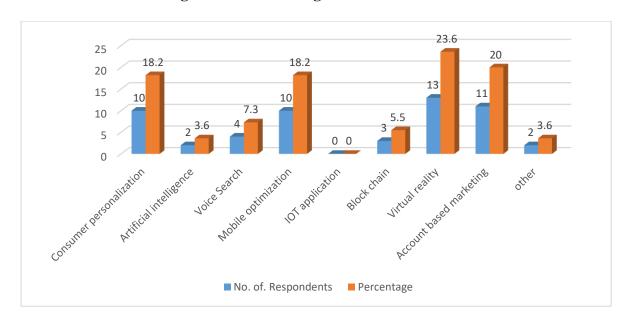


From the above table shows that the AI in digital marketing can help people feel happier of respondents have 0% of respondents says strongly disagree, 0% of the respondents says disagree, 45.5% of the respondent says neutral, 25.5% of the respondents says agree and 29.1% of the respondents says strongly agree.

Table 4.20: The next big tread in marketing.

Particulars	No. of. Respondents	Percentage
Consumer personalization	10	18.2
Artificial intelligence	2	3.6
Voice Search	4	7.3
Mobile optimization	10	18.2
IOT application	0	0
Block chain	3	5.5
Virtual reality	13	23.6
Account based marketing	11	20
other	02	3.6
Total	55	100

Chart 4.20: The next big tread in marketing.



From the above table shows that the next big tread in marketing of respondents have 18.2% of respondents says consumer personalization, 3.6% of the respondents says Artificial intelligence, 7.3% of the respondent says voice search, 18.2% of the respondents says mobile optimization, 0% of the respondents says IOT application, 5.5% of the respondents says block chain, 23.6% of the respondents says virtual reality, 20% of the respondents says account based marketing and 3.6% of the respondents says others.

#### **CHI SQUARE ANALYSIS:**

To determine the relationship between the Educational qualified and the AI helps to build trust in digital platforms.

# Null Hypothesis (h0):

There is no significant difference between the Educational qualified and the AI helps to build trust in digital platforms.

## Alternative hypothesis (h1):

There is significant difference between the Educational qualified and the AI helps to build trust in digital platforms.

#### **CROSSTABS**

/TABLES = Educational qualified and the AI helps to build trust in digital platforms. /FORMAT = AVALUE TABLES

/STATISTICS=CHISQ PH

/CELLS=COUNT EXPECTED

/COUNT ROUND CELL.

#### Crosstabs

Case	Case processing summary					
Case	Cases					
Valid	1	Missing		Total		
N	Percent	N	Percent	N	Percent	

Educational qualified and the	55	100.0%	0	0.0%	55	100.0%
AI helps to build trust in						
digital platforms.						

Ed	Educational qualified and the AI helps to build trust in digital platforms <b>Crosstabulation</b>							
	•			The AI helps to build trust in digital platforms.				
			strongly					
			disagre				strongly	
		T	е	disagree	neutral	agree	agree	Total
educatio	higher	Count	0	0	0	1	1	2
n	secondary	Expected	.1	.2	.9	.4	.4	2.0
		Count						
	diploma/degree	Count	0	0	5	2	3	10
		Expected	.5	1.1	4.4	1.8	2.2	10.0
		Count						
	bachelor	Count	0	1	3	6	5	15
		Expected	.8	1.6	6.5	2.7	3.3	15.0
		Count						
	masters	Count	3	5	16	1	3	28
		Expected	1.5	3.1	12.2	5.1	6.1	28.0
		Count						
Total		Count	3	6	24	10	12	55
		Expected	3.0	6.0	24.0	10.0	12.0	55.0
		Count						

Chi-Square Tests							
	Asymptotic						
			Significance (2-				
	Value	df	sided)				
Pearson Chi-Square	21.620 <sup>a</sup>	12	.042				
Likelihood Ratio	25.455	12	.013				
Linear-by-Linear Association	10.547	1	.001				
N of Valid Cases	55						

a. 16 cells (80.0%) have expected count less than 5. The minimum expected count is .11.

# **Interpretation:**

Table shows that the relationship association between Educational qualified and the AI helps to build trust in digital platforms. The calculated significant value is 0.042 which is less than 0.05, hence the alternate hypothesis got accepted, therefore there is a relationship between Educational qualified and the AI helps to build trust in digital platforms.

# **CHAPTER - V**

#### **5.1 FINDINGS**

The major findings of the research showed that the major influencing factors in integrating AI in marketing are competitive pressure, media attention, digital maturity and customers.

On the findings related to the benefits of integrating AI in marketing, different responses were gathered from the respondents. The major benefits according to the marketing professionals are increasing efficiency, time-saving in the marketing functions, improving conversion rather a better understanding of customer information, making marketing decisions more feasible, increasing the ROI, insights, enhanced service and customer satisfaction.

Other benefits include improved data analysis and effective handling of marketing processes. On a question related to the biggest challenge of AI integration in marketing, budget constrains, technical compatibility is considered as the major challenge in AI integration according to the respondents. Respondents also consider that is important to have data in place as it is the major important part of AI thus, according to them, data is also the biggest challenge.

According to the respondents, data is the major ethical aspect to take into account concerning the customers.

They consider that AI helps in developing the digital marketing that drive substitutional improvements in business performance.

#### **5.2 CONCLUSION:**

Conclusion includes the specified results of conducting survey with the industry experts that created a view of the impact of AI on digital marketing. It will also include an elaboration of what could have been done differently in a future study and which parts one should consider moving forward. The future of AI will be discussed with the fact that technology is constantly changing, and the answers are opinions that vary depending on the field and study.

# CHAPTER – VI

#### 6.1 Future of Artificial Intelligence in Digital Marketing:

In future, marketers can expect the following impacts from artificial intelligence on digital marketing

Smarter searches: As technology solutions become wiser and more perfect, it is essential to mention that the public's requirements become more sophisticated. People can find what they need quickly thanks to social media and fast search engines like Google. Artificial intelligence and big data can analyze these search models and assist marketers in identifying the key areas where they should concentrate their efforts.

Smarter Ads: Marketers are still looking to attract customers with smart advertisements today, but using artificial intelligence allows them to do so faster and more efficiently. Online ads are becoming smarter and more effective as a result of big data. For human solutions, artificial intelligence can delve deeper into data, social networks, Profiles as well as other online content.

Relying on Bots: A further area where artificial intelligence can play a vital role in the evolution is consumer care and retention. Conversation functions and other direct-to-consumer engagement will be handled by artificial intelligence bots very soon. Businesses will save time for employees and cut costs in this manner. The artificial intelligence bots will also have access to the entire internet's information and search history, allowing them to outperform humans.

Continuous Learning: Using artificial intelligence, it will not only reveal some hidden data, but it will also instruct them and integrate them in to the new promotion strategy, as well as optimize the messages to the most relevant users. Artificial intelligence solutions will become more intelligent as well as effective over time, promoting real-time decision making.

# **6.2 QUESTIONARIES**

1.	Gender	category	of res	pondents

- a. Male
- b. Female

# 2. Marital status category of respondents

- a. Married
- b. Unmarried

# 3. Responses regarding educational qualifications of employees

- a. Uneducated
- b. High School
- c. Higher Secondary
- d. Diploma / Degree

# 4. Responses regarding experience of employees

- a. Less than 1 year
- b. 1-2 years
- c. 2-3 years
- d. 3-5 years
- e. Above 5 years

# 5. Responses based on salary

- 1
a. Less than 10000
b. 10000 – 20000
c. 20000 – 30000
d. Above 30000
6. The adaptation of AI in marketing increases the marketing expenditure of the company
while acquiring but it significantly reduces the marketing cost.
a. Strongly disagree
b. Disagree
b. Disagree
c. neutral
d. Agree
u. Agree
E. disagree
7 Artificial Intelligence has a direct offect on Digital Marketing
7. Artificial Intelligence has a direct effect on Digital Marketing.
a. Strongly disagree
b. Disagree
c. neutral
d. Agree
E. disagree
8. Artificial intelligence can provide superior customer experiences and influence consumer
behaviour to purchase goods and services.
a. Strongly disagree
b. Disagree

c. neutral
d. Agree
E. disagree
9. Artificial intelligence in digital marketing improve service quality and operational
efficiency.
a. Strongly disagree
b. Disagree
c. neutral
d. Agree
E. disagree
10. Artificial intelligence helps to build trust in digital platforms.
a. Strongly disagree
b. Disagree
c. neutral
d. Agree
E. disagree
11. The major influencing factor in integrating artificial intelligence in digital marketing
a. Competitive pressure
b. Internal pressure
c. Media attention
d. Digital maturity
e. Enhance customer experience

12.	Ine	e ethical aspect of Al in marketing.
	a.	Loss of job
	b.	Privacy of data use
	c.	Security
	d.	Transparency
	e.	Accountability
	f.	Accuracy and reliability
13.	Thi	nking about the marketing technology you use today, what percentage of those
tec	hno	ologies use AI today
	a.	I don't know
	b.	None
	c.	Less than 25%
	d.	25% - 50%
	e.	50% - 75%
	f.	75% - 100%
14.	То	learn about AI that can make better decisions on how to use AI in future.
	a.	Strongly disagree
	b.	Disagree
	c.	neutral
	d.	Agree
	Ε.	disagree
15.	ΑI	functions will be developed by the exhibition industry itself
	a.	Strongly disagree
	b.	Disagree
	c.	neutral
	d.	Agree

E. disagree
16. The rise of artificial intelligence in digital marketing poses a threat to peoples job security.
a. Strongly disagree
b. Disagree
c. neutral
d. Agree
E. disagree
17. Artificial Intelligence in digital marketing can have positive impacts on people's wellbeing.
a. Strongly disagree
b. Disagree
c. neutral
d. Agree
E. disagree
18. Much of society will benefit for future fall of AI in digital marketing.
a. Strongly disagree
b. Disagree
c. neutral
d. Agree
E. disagree
19. AI in digital marketing can help people feel happier.
a. Strongly disagree
b. Disagree

- c. neutral
- d. Agree
- E. disagree

# 20. The next big tread in marketing.

- a. Consumer personalization
- b. Artificial intelligence
- c. Voice Search
- d. Mobile optimization
- e. IOT application
- f. Block chain
- g. Virtual reality
- h. Account based marketing
- i. Other

# **CHAPTER - VII**

#### **References:**

Accenture Interactive, 2016, Chatbots in Customer Service, Available from https://www.accenture.com/t00010101T000000\_\_w\_\_/brpt/\_acnmedia/PDF45/AccentureChatbots -Customer-Service.pdf (Accessed 5.12.2019)

Accenture Mobility, 2017, Embracing the Disruptive Power of Chatbots, Available from https://www.accenture.com/t20170503T135801Z\_\_w\_\_/cr-en/\_acnmedia/PDF47/Accenture-AtYour-Service-Embracing-Chatbots.pdf#zoom=50 (Accessed 5.12.2019)

Akerkar, R., 2019. Artificial Intelligence for Business, Cham: Springer.

Alpaydin, E., 2016. Machine learning: the new AI, Cambridge (Massachusetts): MIT Press.

Anh, T., 1970. Theseus: Artificial intelligence in e-commerce: Case Amazon. The URN resolver of The National Library of Finland. Available at: http://urn.fi/URN:NBN:fi:amk2019060314428 [Accessed May 6, 2021].

Arasu, B.S., Seelan, B.J.B. & Thamaraiselvan, N., 2020. A machine learning-based approach to enhancing social media marketing. Computers & Electrical Engineering. Available at: https://www.sciencedirect.com/science/article/pii/S0045790620305784 [Accessed May 5, 2021].

Braun, Virginia; Clarke, Victoria (2019). "Thematic analysis". Handbook of Research Methods in Health Social Sciences. Hoboken, New Jersey: Springer: 843–860

Chaffey, D. & Ellis-Chadwick, F. 2019. Digital marketing. Seventh edition. Pearson. Harlow.

Cremer, S. & Loebbecke, C., 2019. Artificial Intelligence Imagery Analysis Fostering Big Data Analytics. MDPI. Available at: https://www.mdpi.com/1999-5903/11/8/178 [Accessed May 5, 2021].

"Don't Discount Email Marketing", 2019, Journal of Financial Planning, vol. 32, no. 7, pp. 14.

Dumitriu, D. & Popescu, M.A.-M., 2020. Artificial Intelligence Solutions for Digital Marketing. Procedia Manufacturing, 46, pp.630–636.

Goodfellow, I., Bengio, Y. & Courville, A. 2016. Deep Learning. MIT Press. Cambridge

Greenwald, T. 2018, Artificial Intelligence (A Special Report) --- What Exactly Is Artificial Intelligence, Anyway? Everybody's talking about AI these days. Here's what all the fuss is about, Eastern edition edn, New York, N.Y.

Shankar, V., 2018. How Artificial Intelligence (AI) is Reshaping Retailing. Journal of Retailing, 94(4), pp.vi-xi.

Huang, J. & Depari, G.S. 2019, "Paid Advertisement on Facebook: An Evaluation Using a Data Mining Approach", Review of Integrative Business and Economics Research, vol. 8, no. 4, pp. 1.

Jarek, K. & Mazurek, G. 2019, "Marketing and Artificial Intelligence", Central European Business Review, vol. 8, no. 2, pp. 46-55.

Katsov, I. 2018. Introduction to Algorithmic Marketing: Artificial Intelligence for Marketing Operations.URL:https://algorithmicweb.files.wordpress.com/2018/07/algorithmicmarketingai-formarketing-operations-r1-7g.pdf. (Accessed 1.12.2019)

Lukosius, V. & Hyman, M.R. 2019, "MARKETING THEORY AND BIG DATA", The Journal of Developing Areas, vol. 53, no. 4, pp. 217-228.

McCarthy, J., 1998. [PDF] WHAT IS ARTIFICIAL INTELLIGENCE: Semantic Scholar. undefined. Available at: https://www.semanticscholar.org/paper/WHAT-IS-ARTIFICIALINTELLIGENCE-McCarthy/be67fbc3db47fdaa118fd6816b21968fb1cf547e (Accessed: 1.12.2019)

Mozeryte, G., 1970. Theseus: The Silent Giant of Marketing: How Artificial Intelligence is Revolutionising Digital Marketing. The URN resolver of The National Library of Finland. Available at: http://urn.fi/URN:NBN:fi:amk-2019052812728 [Accessed May 6, 2021].

Paradiso, C., C.P.I.A. 2016, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON DIGITAL MARKETING", Rough Notes, vol. 159, no. 10, pp. 16-17.

Rampton, J. 2016, Jun 04-last update, Artificial intelligence is changing SEO faster than you think [Homepage of AOL Inc], [Online].

Ryan, D. 2017. Understanding Digital Marketing: Marketing strategies for engaging the digital generation. Fourth edition. Kogan Page Limited. London.

SAS Institute Inc. (2019). Big Data: What it is and why it matters. URL: https://www.sas.com/en\_us/insights/big-data/what-is-big-data.html. (Accessed: 1.12.2019)

Saunders, M., Lewis, P., Thornhill, A., 2009, Research Methods for Business Students, 5 th edition, Harlow: Pearson Education Limited, New York Sponder, M. & Khan, G.F., 2018. Digital analytics for marketing, New York, NY: Routledge.

Statista 2019. Marketing related use of Al worldwide 2018, by region. URL: https://wwwstatistacom.ezproxy.haaga-helia.fi/statistics/915372/marketing-related-use-artificialintelligenceworld/. (Accessed 1.12 2019)