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Impact of Artificial Intelligence in Marketing: A Perspective of Marketing Professionals of Pakistan

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Abstract- The emergence of artificial intelligence (AI) has changed the dynamics of the business world. One of the significant applications of AI is in the marketing field that helps in improved performance. The present research is aimed to find out the impact of AI in marketing by including the perspective of marketing professionals of Pakistan. A comprehensive literature review was highlighted which provided a detailed understanding of AI and the use of AI in marketing. Secondly, the researcher used the qualitative research method which involved semi-structured interviews with different marketing professional belonging from different firms of Pakistan. A sample size of 10 is selected and the researcher interviewed ten marketing professionals. The findings of the study highlight the factors contributing in AI integration in marketing, benefits, and challenges of AI integration in marketing, pre and post AI marketing strategy of your company, ethical aspects and usage of AI in the marketing field. The research implies to integrate AI in the marketing functions to improve the performance of the business and thus, achieving profitability and competitive advantage.

I. Introduction

a) Research Background

Artificial Intelligence (AI) is a computer-assisted analytical course that attempts to form automated systems which can be referred to as intelligent. It can also be described as the human intelligence presented in the form of machines. AI is divided into two categories i.e., strong and Weak AI. The former, which is also known as artificial general intelligence, refers to a machine/system with logic, mindfulness, and sensory, and it has intelligence in more domains instead of a particular one. The latter, which is also known as artificial narrow intelligence, refers to machines which have intelligence in a particular domain. The applications of Artificial intelligence use technologies which includes natural language processing, speech recognition, machine learning, robotics, and computer vision. These technologies provide a number of opportunities for business. Machine learning is a method to get artificial intelligence and deep learning is considered one of the branched of machine learning and a method for understanding machine learning. The major emphasis of deep learning is on algorithms driven by the configuration and function performed by the human brain.

Like every other domain, marketing has also been significantly influenced by the introduction of new technologies and this effect will majorly grow in the upcoming years. It is evident that AI has boosted the performance of marketing in different ways. In near future, it is expected that AI will boost the impact, for e.g. Robots will be used as a substitute of salespeople, websites will be updated and reformatted automatically by eye-tracking data. Undoubtedly, the research on marketing will be shifted and become insignificant as the new trends in marketing will emerge due to the AI.

The field of marketing is and will be changing rapidly with the changes and advancement in AI. The pace of this change will also transform the overall landscape of marketing in academics, research, and business context. This will be a major challenge for the organizations to transform according to the changing landscape of marketing. The companies will have to train their employees constantly with the emergence of new technology. Working with AI is not perceived as science fiction but instead, it is viewed as a reality which will become a necessity for survival. The employees of marketing have to understand and learn to enhance and match their skills for AI and robots to be ready for the near future. The present environment is very interesting and challenging. The paper will examine the impact of AI on marketing by taking the perspectives of marketing professional of Karachi, Pakistan.

In order to provide this research a proper structure, this research is divided into five different chapters.

Chapter one: This purpose of this chapter is to provide a detailed introduction to the topic.

Chapter two: The purpose of the chapter is to provide the existing state of the art of the topic. The chapter first highlights the theory that is relevant to the research questions. The chapter then provides the empirical studies relevant to the research questions. Lastly, the chapter will show the theoretical model of the research.

Chapter three: The purpose of the chapter is to provide the materials and methods to conduct the topic. The chapter will consist of a research plan, design, approach, and strategies.

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Chapter four: This chapter is focused to provide the analysis of the data collected for the study.

Chapter five: The last chapter will be focused on drawing the conclusion from the findings of the research.

b) Problem Statement

The Artificial intelligence (AI) has its application in different processes in business within various functional areas and business functions. One of them is marketing, which is considered as the core of the business. The Artificial intelligence (AI) is changing the landscape of marketing and will completely transform in near future. Although marketing is the major business applications within AI today and early adopters are attempting to create value from it (Bughin et al. (2017), the literature on this aspect are scarce where both of the disciplines are combined (Wierenga, 2010). Wierenga (2010) also pointed out there are not a sufficient publication for AI in marketing and marketing in AI literature. According to Martínez-López & Casillas (2013), it has been reported that Scopus had less than 50 articles related to marketing and AI in business related journals. After that, the research related to the topic in Scopus has increased but it is still under 100. Martínez-López & Casillas (2013) stated that there is a need of more studies that show the impact of AI on marketing considering that there is a scarcity of the research in the literature and the potential of the combination in making marketing decisions. The research will be addressing this important issue by taking the perspective of marketing professional of Karachi, Pakistan.

c) Research Objectives

The research is aimed to research the following objectives:

- To find out the impact of Artificial intelligence on Marketing.
- To recommend solutions or strategies for the effective use of AI technologies in marketing.

d) Research Questions

The research will be addressing the following questions:

1. What is the impact of Artificial intelligence on Marketing ?
2. What is the recommendation for the effective use of AI technologies in marketing?
3. What are the different challenges inthe use of AI technologies in marketing ?

II. Literature Review

a) Artificial Intelligence (AI)

As stated by Demis Hassabis, who is the founder of Deepmind – the AI Company of Google, "Artificial intelligence is the art to make machines intelligent (Ahmed, 2015)." It is the most widely accepted definition and also a well-fitting since AI is a broader term used for a number of a variety of indicators. Under the AI, there are some subcategories including machine learning and deep learning which manufacture real-world apps of AI, including search suggestions, voice recognition, virtual assistants and image recognition.

The term, AI, refers to the computer-assisted analytical course that attempts to form automated systems which can be labeled as intelligent. It is the automated system that inputs data to conduct tasks of intelligent beings in a manner that increases the success rate. According to Guruduth Banavar, supervisor of AI research by IBM, there are a broader variety of various types of Artificial intelligence, therefore, it can be considered as a collection of technologies (Kaput, 2016). These technologies have various functions and come in a variety of prices, but the aim of all of them is almost the same which is to mimic human intelligence in technologies to make the functions intelligent.

The progressions made in AI and its executions in various domains have resulted in the advancement of AI technologies that is evident to be valuable and beneficial for marketing professionals. Since more emphasis is on digital marketing as compared to the traditional methods of marketing, the ample data is there for usage of AI technologies. AI technologies have the ability to help marketing managers in various functions including lead generation, market research, social media controlling and customization of consumer experiences (Sterne, 2017). AI technologies in the field of marketing can be broadly classified to customized AI systems for the customized usage and to vendor provided and software-as-a-service (SaaS) solutions which includes AI aspects. Customized and real AI technologies can be manufactured by the internal AI department of companies, outsource providers or it can either be a mix of both. The various vendor-provided solutions of AI also need customization for personal usage cases (Sterne, 2017). A majority of software houses and providers has given a lot in AI and technology organization such as IBM is giving their own marketing computerized solution with IBM Watson Campaign Automation. IBM Watson Campaign Automation has AI by default which is built in the solution.

Salesforce, which is considered as the leading provider of Customer Relationship Management (CRM) software has also begun to provide AI service along with the Salesforce Einstein, which is also executed in the solution (Sterne, 2017). Paul Roetzer, who is the CEO of Marketing Artificial Intelligence Institute, came up with the structure for AI in marketing which is commonly known as 5Ps of Marketing AI. The structure was formed for simplifying and visualizing the ground and it is in line with the research carried out with different AI companies

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and engineers on how marketing can take benefit from AI (Roetzer, 2017).

In today's world, AI is used to support marketing managers in various tasks and operations including digital marketing (buying), web development, SEO, external email marketing, lead generation, social media monitoring and A/B testing (Davenport, 2017).

b) AI in Marketing

The earlier concepts and principles have been examined to tackle the marketing related issue since a very long time (Wierenga & van Bruggen, 2000) but the major usage and implementation of AI in marketing have begun to arise in past few years (Wierenga, 2010). AI has been implemented in most of the companies in today's world but there is still not a high-level of implementation in different companies. Different marketers have shown their interest in adopting AI soon and around 98% of them are now preparing for executing it completely. Whereas, only 20% of the marketers have implemented one or more AI solutions in 2017 in the business (Bughin, McCarthy & Chui, 2017). The mismatch between the preparation and execution acts as a major pointer that it is not very late for the implementation of AI in marketing, opposing to the fact that how the major buzz about AI may result in believing of people that they need to implement it very soon. However, applications of AI in the field of marketing are quickly developing with a number of different software and services coming up for the companies to use for their brands. The researchers also predicted that 2018 and the coming years will be a turning point in the diffusion of AI in the field of marketing.

As marketing is the combination of qualitative as well as quantitative aspects, it provides a distinctive chance for AI to grow to the domains where it is not sufficient with only econometrics (Wierenga, 2010). The major AI applications in the field of marketing today include neural networks, case-based reasoning and expert system (Wierenga, 2010) and in a practical manner, AI has been used to enhance and upgrade the outdated methods of marketing (Hoanca & Forrest, 2015). Bughin, Hazan, Manyika & Woetzel (2017) stated that with the help of AI, companies can be successful in creating customized marketing campaigns by analyzing the data. AI will also help in improving yield management by presenting dynamic pricing and give excellent customer service. Marketing management needs the decision makers related to the market to solve the issues and lead marketing decisions (Wierenga & van Bruggen, 2000). The software which has been highly recognized in the marketing is marketing management support systems (MMSS)which allows the managers to make the decisions, analyze the data and information with the help of AI (Wierenga & van Bruggen, 2000). More precisely, it is a knowledge-driven tool which helps in the decision making through examining the information with the improvement of AI.

III. Methodology

In order to conduct this research, the researcher adopted a qualitative research method. Qualitative method is primarily exploratory research which is adapted to gain an understanding of the reasons, perspectives, and opinions to solve the research problem. Since the objective of the research is to include the perspective of the marketing professionals to know about the impact of AI in marketing, qualitative research is the best choice. For data collection, the research is including primary as well as secondary sources. The researcher collected primary data as a first time getting data to solve the research problem and this information was gathered from the interview method. In addition, different articles, journals, books, websites and blogs are included as a secondary data source.

The interviews are conducted with the marketing professionals of the companies in Pakistan. A sample size of 10 participants was selected and the interviews were conducted from 10 marketing professionals of Pakistan. The researcher used a purposive sampling method where the respondents are included in the research to serve a specific purpose. The basic criteria to include respondent for the study was that they must belong to the company where AI is implemented in the marketing function. The rationale behind this was that the marketers who are experiencing the AI implementation would be able to provide a better perspective on the impact of AI on marketing.

The interview method was used where the series of open-ended questions prepared for the respondents. However, the researcher was prepared to add additional questions in the interview depending on the context in order to follow the inductive research method, where there is no limitation of the existing theories. The research is cross-sectional in nature, therefore; a duration of one month is allocated to collect the data from the respondents.

IV. Data Analysis

In this section, the analysis from the collected data from the respondents of the research is presented. The interviews included ten marketing professionals from ten different organizations of Pakistan. The overview of the respondent profile is given in Table 1.

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Table 1: Profile of the respondents

Respondents	Name	City -Country	Industry	Position	Years of Experience
Respondent 1	Saleem Ashfaq	Karachi - Pakistan	Consumer Goods	Marketing Director	7 years
Respondent 2	Waqar Haider	Karachi - Pakistan	Consumer Goods	Head of Marketing	11 years
Respondent 3	Sumera Ali	Karachi - Pakistan	IT	Marketing Manager	3 years
Respondent 4	Saqlain Rizvi	Karachi - Pakistan	Consumer Services	Marketing Manager	4 years
Respondent 5	Fatima Mehmood	Karachi - Pakistan	IT	Marketing Executive	2 years
Respondent 6	Rija Bakhtiar	Karachi - Pakistan	IT	Marketing Director	7 years
Respondent 7	Saad Siddiqui	Karachi - Pakistan	IT	Marketing Specialist	3 years
Respondent 8	Ali Hassan	Karachi - Pakistan	Consumer Goods	Assistant Marketing Manager	2 years
Respondent 9	Umaima Ashfaq	Karachi - Pakistan	Consumer Goods	Marketing Manager	6 years
Respondent 10	Saba Tehniat	Karachi - Pakistan	Electronics	Marketing Head	9 years

a) *Interview Analysis*

This section provides a detailed analysis of the interview. The major questions of the interview are stated below that are analyzed in detail in this section:

- What are the influential factors in integrating AI in marketing?
- What are the major benefits of integrating AI in marketing?
- What are the major challenges of integrating AI in marketing?
- What are the ethical aspects of integrating AI in marketing?
- What are the uses of AI in the marketing functions of your company?
- What are the pre and post AI marketing strategy for your company?
- What is the impact on marketing volume and expenditure of the company pre and post-AI ?

i. *Influencing factors in integrating AI in Marketing*

According to the respondents, the major influencing factor in integrating AI in marketing is a competitive pressure. Many companies feel the pressure from the competing firms to integrate AI in marketing. "There is a sense of urgency among competing firms to integrate AI in the marketing process," said Sumera.

According to Saad Siddiqui, he has noticed that management of the company has begun to push to integrate AI in marketing and the media attention, competitive pressure and digital maturity are the reasons of their inclination towards the integration.

Regarding external and competitors' pressure, Ali Hassan spoke about it and the hype to integrate AI in marketing functions. He stated, "Firms are now talking about this important phenomenon and they are now using it in the marketing functions. The pressure from the competitors is the major factor as the company realized in order to differentiate themselves from other competing firms; they have to integrate AI in their marketing functions."

Pressure from the customers was not evident but from the experience, Umaima Ashfaq stated that the company knew that customers seek the firms with the best offerings and performance and thus, they felt the urge to integrate AI related software.

ii. *Benefits of integrating AI in Marketing*

When asked about the benefits of integrating AI in marketing, different responses were gathered from the respondents. According to Rija Bakhtiar, while integrating AI in marketing functions, the company believed that AI would be helpful in increasing efficiency and save time in the marketing functions and it is now evident that AI helped the company in improved marketing processes.

Saba Tehniat stated that the benefits of integrating AI-based software in our company helped in improving conversion rates, a better understanding of

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customer information and marketing decision more feasible. Most importantly, it helped in increasing the ROI.

Waqar Haider said that the benefits of AI integration are insights and marketing decisions.

Saqlain Rizvi highlighted the major benefit from AI adoption in marketing is the insights. The insights provided by the AI-based software can be used in different functions including pricing and new product development.

The major advantage of adopting AI-based software in marketing according to Saleem Ashfaq is that through AI, the company is able to provide the enhanced service and give more value to customers which lead to the maximum level of satisfaction from the customers. Other benefits include improved data analysis and effective handling of marketing processes.

iii. *A major challenge of AI integration in Marketing*

Technical compatibility is considered as the major challenge in AI integration according to the respondents. According to Waqar Haider, the company worked on making it easy to incorporate their system with the major CRM system in order to handle the compatibility issue. It is still the major challenge for us and the company has been working on it continuously to make the process better.

Fatima Mehmood stated that complex software and IT system also becomes a major challenge. Thus, it is important for the companies to work for compatibility issues.

Four respondents stated that the lack of technical skills in a team also posits the greatest challenge for overall marketing functions after the AI integration. According to Saad Siddiqui, the company must train their marketing team in order to prepare them before the adoption process of AI. Adoption of new technology in a company is indeed a process of change and it is highly important to understand the challenges beforehand and handle those challenges effectively. The companies should not be reluctant in embracing new technology in order to get a competitive advantage.

Respondents also argued that it is important to have data in place as it is the most important part of AI thus, according to them, data is also the biggest challenge.

iv. *Ethical Aspect of AI in Marketing*

According to the respondents, data is the major ethical aspect to take into account concerning the customers. According to Saleem Ashfaq, the company collects the data anonymously in order to solve this issue which means the data is not matched with the users who generate it. Ashfaq also stated that their major objective is to include an insignificant amount of personal data.

Saba Tehniat highlighted two different ethical aspects of AI in marketing. According to her, ethical issues should be considered as they are highly important but she believes that the companies do not consider those issues when they plan to adopt knowledge-driven AI software. The major aspect of ethics is the use of data in the marketing environment. Secondly, the decision regarding the choice of AI has become too complicated to understand, even for the development team. The may become the biggest challenge if a company does not consider the unethical choices made.

Umaima Ashfaq also stated that data is the major ethical aspect of AI in marketing and it needs to be considered in the overall process. She stated that the company already thought about the ethical aspect before even adopting the new system and the basic principle of the company was not to gather the personal data of customers. She further added that it is highly important to communicate the ethical queries to the customer. Thus, our company shares the detail to the customer that what type of data is going to be collected from them.

v. *Usage of AI in marketing functions*

According to the respondents, AI has made the marketing function more effective and it is used in almost all the important marketing functions. They stated that AI helps in developing the sales and marketing strategies that drive substantial improvements in business performance.

According to Rija Bakhtiar, AI has been used in all the marketing related activities which include pricing, promotion, distribution, and product planning and development. Ali Hassan stated that AI is dominantly used in the Digital platform, advertisement function, and customer relationship management.

Sumera stated that AI is majorly used in Digital marketing which includes content curation, email marketing, digital advertising, web design, Chatbots, and Predictive Analysis.

vi. *Pre and post AI marketing strategy*

Indeed, the execution of AI in marketing change the dynamics of overall business. Similarly, it also changes the strategies designed by the company. According to Sumera Ali, before adopting AI in marketing, the strategies were focused to increase marketing resources and extend product assortments. After the adaptation of AI, the business intelligence attracted the marketing managers and they got a deeper understanding related to the marketing, sales and operation trends. From the data, they developed the predictive models to notice the future strategies.

The response received by Fatima Mehmood is worth mentioning. She stated that AI has brought a 360-degree change in the marketing of the company. As customer service was the main priority and the strategies were designed to provide the best customer service, the organization made a decision to invest in AI

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in terms of customer service and they observed a noticeable improvement in customer service. It helped in improving responsiveness and efficiency. Moreover, the company is also making future investment decisions of AI. According to Ali Hassan, the market strategy was focused on long-term customer value and refocusing marketing efforts on new manners of communication before the implementation of AI. After the implementation of AI, the company started focusing on social media reach, personalization, collecting better data, SEO, payment processes and improvement in sales and all the strategies are focused towards them after the adaptation of AI.

vii. *Impact on marketing volume and expenditure of the company pre and post-AI*

The adaptation of AI in marketing has indeed increased the marketing expenditure of the company while acquiring but it has significantly reduced the marketing cost. As stated by Saba Tehniat, before the implementation of AI in marketing, the company faced a high cost of marketing and the team was focusing to decrease the marketing cost. After AI, it was easier to get the data to make different marketing decisions. It not only helped in reducing marketing cost but also helped in achieving the marketing objectives. According to Waqar Haider, our company has a major emphasis on the digital platform and our strategies were focused to provide the engaging content and improve the customer services. Before AI, a number of human resources were involved in the tasks of the digital platform for e.g. collecting real data. After the adaptation of AI, it helped in saving different cost and thus, improved the efficiencies and reaching the marketing objectives. According to Saleem Ashfaq, the acquisition of AI was costly but it has brought great benefits to the marketing of the company. It has made tasks easier and helped in saving significant marketing cost. In addition, it helped in providing a clear direction for the future of marketing and overall sales of the company.

V. Conclusion and Recommendations

The aim of the paper was to find out the impact of AI on marketing by including the perspective of marketing professionals of Pakistan. In order to reach the objective of the research and to answer the research questions, different steps were followed. At first, a comprehensive literature review was highlighted which provided a detailed understanding of AI and the use of AI in marketing by including the perspective of different researchers. Secondly, the researcher used the qualitative research method which involved semi-structured interviews with ten different marketing professional belonging from ten different firms of Pakistan.

The major findings of the research showed that the major influencing factors in integrating AI in marketing area 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 rates, a better understanding of customer information, making marketing decision 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, technical compatibility is considered as the major challenge in AI integration according to the respondents. Respondents also argued that it is important to have data in place as it is the most 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. On the question related to the usage of AI in the marketing of the company, respondents stated that AI has made the marketing function more effective and it is used in almost all the important marketing functions. They stated that AI helps in developing the sales and marketing strategies that drive substantial improvements in business performance.

The above findings highlight the importance of AI in the marketing of businesses. AI has transformed the landscape marketing and helps in updating the outdated methods of marketing. This will be a major challenge for the organizations to transform according to the changing landscape of marketing. The organizations need to prepare themselves for the future and train their employees constantly with the emergence of innovation. The research has positively contributed to the existing literature by filling the existing gaps present in the literature by taking the marketing professional's perspective on the impact of AI in marketing. This highlighted the importance of AI in marketing and the major benefits associated with the integration. In addition, major challenges, ethical aspects, and usages provided a guideline to the companies to adopt AI in marketing. It is recommended to the firms to follow the aspects and challenges while integrating AI in marketing.

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