The use of Artificial Intelligence in the context of Business to Consumers Firms in Pakistan

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Abstract

Artificial Intelligence (AI) is a growing discipline in the Business field that is making inroads into the corporate world. Because of the concept's intricacy, it's critical to grasp what AI is and how it may be implemented into a company's marketing processes. The study's main aim was to use the information and insights congregated from marketing managers in the retail industry to gain a holistic view of the current and future aptitudes of artificial intelligence in marketing to provide recommendations to business -to- consumers firms in Pakistan. The core data in this study was gathered by using qualitative approaches, including in-depth interviews. Thematic analysis approaches were used to analyze the major data, and five key themes were identified for further investigation. According to the findings, businesses that use technology in their business strategy have an advantage over other firms that continue to work in traditional ways. Furthermore, humans are incapable of predicting, analyzing, and personalizing one-to-one marketing messages to consumers at scale and with precision. Companies should not be afraid of technology, but rather embrace it across the board, keeping ethical and data privacy concerns in mind.
Keywords: *Artificial Intelligence, Machine learning, Marketing Strategies, Business to consumer firms*

Introduction

Research Background

The evolution of technology has proven to be bourgeoning at an incredible pace. Among this revolutionary growth, the field of Artificial Intelligence (AI) is indeed commendable and a game-changer for the entire marketing landscape. Alford (2019) construes that the entire paradigm of business concerning marketing has transformed flagrantly, all because of the innovation of Artificial Intelligence.

This innovative technology has provided aid to many marketers and analysts to utilize large data sets following their goals and acquire maximum market penetration and desired calls for action from customers. In simpler words, it has allowed us to get a closer glimpse of the 'black box, or what can be referred to as the mind of the consumer. It is no longer a tough job for marketers to gauge their customers by guessing about the vulnerable yet volatile behavior of customers, rather this innovative technology, namely, Artificial Intelligence, has even comprehended these marketing strategists to understand and learn about the changing behaviors and purchasing behavior of their keen customers in a better way creating a win-win situation. As mentioned above, this influential pace of technology has managed to imprint its mark in almost every facet of life. May it be the service industry or the fast-moving consumer industry, or retail, the evolution of artificial intelligence has given a boost and brought about a change in the entire corporate roadmap of doing business, it has shifted the industrial landscape of how firms operate especially concerning their entire selling function.

Research Objectives

The main objective of this article is to encourage and promote B2C firms to opt for AI while formulating their marketing strategies. Simultaneously, the scholar will also focus on the challenges being faced by the firms while implementing artificial intelligence. In addition to that, the researcher will also highlight the most likely pitfalls and dangers while implementing artificial Intelligence and marketing overall.

Therefore, the following research objective is developed:

RO: *To explore the role, challenges, future, and decision-making process tackled by the managers in the context of Artificial intelligence in business to consumer firms in Pakistan*

C) Research Questions

RQ1: *What makes the role of marketing managers in an AI-packed environment most seminal?*
RQ2: *What are the challenges being faced by the firms while implementing artificial intelligence?*
RQ3: *What is the future of AI in marketing in the context of Business consumer firms in Pakistan?*

Literature Review

Artificial intelligence

Artificial intelligence (AI) is derived from IT, and words like robotization and automation are commonly used to describe it. It's the same way whether it comes to the algorithm or machine learning application. An example of artificial intelligence (AI) is the development of computer systems that can-do tasks that need human cognition. (Jarek & Mazurek, 2019). Artificial intelligence (AI) is capable of replicating human cognitive skills such as the ability to solve problems and learn (Syam & Sharma, 2018).

Machine Learning

Machine learning (ML) expanded the boundaries of artificial intelligence. Due to these advancements, machine learning has completely altered the methods formerly employed by artificial intelligence. Using machine learning, computers can now learn from their built-in data by connecting disparate pieces of information. Through the use of these abilities, ML was able to draw conclusions and build generalizations based on the findings of

earlier investigations (McIlwraith et al., 2017). ML comes in a variety of forms (Jarek & Mazurek, 2019). In terms of machine learning, deep learning is the next step up because it is based on learning algorithms that don't require any physical control. Through the use of deep learning and big data, it is possible to decode and provide the result of a new piece of information immediately and promptly (Alpaydin, 2016). A machine learning and deep learning application that concentrates on speech recognition are called natural language processing (NLP). The capacity to work with large amounts of information (text samples) that serve as a basis for context, vocabulary, grammar, and semantic meaning has come from years of study in this area (Jarek & Mazurek, 2019).

Deep Learning (DL)

The earliest attempts at deep learning were made in the early 1900s, but it was not expected to be fully effective until much later. With the rise of graphics processing units, deep learning has made a comeback on the cutting edge of AI progress (GPUs). With the need for a technique that can look into the almost incredible information-generation processes generated by constant innovation, deep learning has been unrivaled and presented as one of the artificial intelligence's most important uses. (Ma et al., 2019)

Natural language processing

According to Chowdhary (2020), Natural language processing (NLP) is the automated manipulation of text and dialogue in the natural language of an artificial intelligence system. Spam email identification, for example, has shed light on mail categories in a way that is made possible thanks to NLP.

AI-assistants

Not only will the role of marketing managers be reshaped from within the company, but AI assistants are also expected to have a significant impact on the way companies connect with their customers (Dawar, 2018; Marinchak et al., 2018). Soon, companies like Amazon, Alexa, and Google Assistant will be able to predict what combination of pricing, performance, and features the customer prefers and will be able to better meet the consumer's demands than they can themselves, according to Dawar (2018) and Marinchak et al. (2018) Businesses' ability to attract, satisfy, and retain customers may suffer as a result (Dawar, 2018).

The role of Artificial intelligence in Marketing

Artificial intelligence (AI) is a hot issue in today's society. Marketers are hyping his new technology, which they claim will upend a slew of sectors. A virtual assistant like Siri, which can be used for facial recognition and language translation, is an example of artificial intelligence in daily life. We don't even realize in our daily lives how many businesses across a wide range of industries are using artificial intelligence in their operations.

Economic and organizational benefits from AI implementation include improved productivity as well as increased innovation potential. However, as AI advances, more jobs will be eliminated and a greater demand for versatile workers will arise. As a result of artificial intelligence (AI), internet searches and the overall user experience have been profoundly altered. This machine learning-based system called Rank Brain was developed by Google as part of their AI research in 2015. It aids in the processing of search results. Artificial intelligence (AI) is being used by Amazon and other major e-commerce sites in their search engines, making customer searches more intelligent.

The role of marketing and marketing managers in AI

Social, economic, and political trends are forcing marketing to re-examine its goals, assumptions, and practices over the past 50 years (Webster & Lusch, 2013). Scholars say the increasing complexities in marketing are due to changing consumer demographics, emerging technologies, and growing amounts of data (Bolton et al., 2014), changing business models (Ehret et al., 2013), and the constant need to develop powerful value propositions (Bolton et al., 2014; Wirtz et al., 2014). (Bolton et al., 2014; Payne & Frow, 2014).
Scholars disagree on the importance of marketing activities to a company's performance. It has been found that the marketing department has a strong influence on the firm's performance and (Wirtz et al.,2014) argue that marketing departments are required to meet customers' needs in an increasingly complex market

Role of Artificial Intelligence in Business to Consumers Firms

Artificial Intelligence has managed to influence almost every facet of life, particularly in the arena of business. Among these one tends to be the dimension of marketing, the core of all business processes respectively (Squaire, 2019). Marketing has been effectively influenced by the advent of Artificial Intelligence (AI), whereby deep learning an emerging technology of the AI umbrella has been of great significance to the business-to-consumer firms by collaborating with digitalization effectively. This has been done through the process of collecting data that can be inferred as 'big data and is collected from various sources such as social media, search engines, and e-marketplaces respectively (Hargrave, 2020). Usually, the data is in an unstructured form but is gathered in bulks, which allows the marketers, more likely in B2C firms to get an idea of the consumer mind, thus enhancing their customer engagement with the brand. Additionally, deep learning has also allowed us to develop a keen knowledge of different purchase patterns and how to gauge the attention of customers better (Uzialko, 2019). IBM recently commented that it was able to train and nurture its salesforce much more effectively through the development of AI (Power, 2017). Keeping the fast-paced and dynamically evolving market in mind the B2C market, the advent of AI technology has boosted the firms' potential to gauge their customers, attract them and also strengthen the bonds of the customer pool with time, allowing the business to flourish influentially.

Marketing Strategies

According to Brodrechtova (2008), To get an edge over their rivals, companies utilize marketing as a strategy to fulfill and surpass the needs and expectations of their customers and potential customers, marketing strategies are guidelines for allocating resources in response to environmental conditions, and they achieve their goal by fulfilling and exceeding customers' demands. A company's marketing strategy, according to Moghaddam and Foroughi (2012), refers to the techniques it uses to adapt to the market, and external, and internal forces to achieve its goals in the target market.

Research Methodology

This section starts with an argument about our understanding of the reality and nature of social entities (constructionist) as well as what we study as adequate knowledge (interpretivism). This endures with thoughts of our pre-understandings and how they have impacted this study, the research approach (inductive), our choice of research strategy (qualitative), and our preferred research method (semi-structured interviews).

Constructionism

The main objective of this research is to accomplish a deeper comprehension of how social actors are affected by Artificial intelligence. Without any doubt, it is exploratory since

the connection of marketing, strategies, challenges, and AI, to our information, has not been systematically studied. Moreover, artificial intelligence is a complex concept with various areas of applications, thus its significance shifts with the central social actor. Meanwhile, this study builds on the acquaintance of interviewees, it exposes the understanding of their social authenticities. With this prejudice in mind, we do not attempt towards simplifying the discoveries of this study, but as an alternative bring valid insights into exploring the strategies and challenges in dealing with artificial intelligence. In the context of business-to-consumer firms in Pakistan similarly the role of marketing managers using artificial intelligence in the organization. All the above taken into consideration, this study takes upon a constructionist stance.

Research approach

A researcher's chosen means of bridging theory with empirical evidence is known as a research strategy (Harrison et al., 2017). The research approach used in this work is inductive, in line with philosophical convictions. The researcher explores its objects without first anchoring the study in a pre-existing theory and then formulates a theory based on the gathered data using the inductive technique. The major reason for utilizing this approach was to fill a knowledge gap in the field and develop a theory related to the issue under investigation at the moment. As a result, this research is exploratory and best approached using an inductive strategy.

There's a risk of not knowing how generalizable a theory is when using an inductive approach because it's built on empiricism specific to a period or group of people (Harrison et al., 2017) However, scholars do not wish to generalize the results of this study, but rather to transfer them to contexts with similar characteristics, as specified by (Bryman 2016). There is also the risk that the existing knowledge and information acquired before beginning the investigation would impact the conclusions. This is outlined by (Harrison et al., 2017).

Research strategy

This study's research subject and philosophical assumptions are best served by qualitative data gathering. However, qualitative methods may also be used to get a deeper knowledge of a subject by interpreting qualitative data. Focus is placed on comprehension and interpretation in qualitative research (Bryman 2016; Kornbluh, 2015). Obtaining qualitative data raises the issue of subjectivity, which has an impact on the findings based on what the researcher considers to be significant and irrelevant information (Bryman & Bell, 2011). Qualitative research is often criticized for being difficult to reproduce because of its subjective character. It is also difficult to generalize because of the study's context-specificity.

Research design

The objective of this study is to keep the holistic and important features of real-life events such as organizational and management procedures which is why Yin (2009) recommends using a case study approach. For a case study to be relevant, the research topic must attempt to describe present conditions, such as "how" and "why" certain social phenomena work, and this description must be complete. A case study proved to be the most relevant research technique when attempting to understand the social phenomenon of how the use of AI capabilities influences marketing managers' role and helps to formulate marketing strategies and the challenges they faced.

Case studies might comprise a single case or a collection of instances (Yin, 2009). Since data was collected from different marketing managers from diverse companies, this is a

multi-case study. Having more than one example instead of just one improves the evidence, resulting in more thorough research (Herriott & Firestone, 1983, referred to Yin, 2009). More often than not, multiple-case designs are selected over single-case designs since the latter is more brittle and niche. Replicability is improved and considerable analytic gains can be gained by using several instances of the research (Yin, 2009). Eisenhardt (1989) also states that while doing case research, it is better to have a team of investigators since it improves the study's creative potential. This is because the investigators may have different thoughts and views on the same problem stating that the convergence of data from multiple researchers increases confidence in the results as well as the likelihood of unexpected findings.

Research method

Semi-structured interviews were utilized in this qualitative study, a cross between structured and unstructured interview methods. In semi-structured interviews, the researcher uses a list of fairly specific subjects, but the interviewee has a lot of freedom in answering the questions (Bryman & Bell, 2017; Patel & Davison, 2011). Using exploratory open-ended questions allows interview participants to answer any way they choose, allowing for unexpected or unusual responses (Bryman & Bell, 2011; Saunders et al., 2012). Thus, the interview might have been replaced with a completely unstructured one, which is much more informal and allows the respondent to freely narrate events without any constraints (Saunders et al., 2007). This approach was not suitable for this study since the interviews required additional organizations because unstructured interviews generally result in a collection of split and incomplete discussions. When conducting a semi-structured interview, you will use an interview guide that has been specifically customized to the interview object's responses (Bryman 2016).

Thematic Analysis

According to Braun and Clarke (2006) Among the many approaches to conducting qualitative analysis, thematic analysis is one of the most commonly ascribed approaches opted by researchers. Despite the wide popularity that it may receive in academic forums, thematic analysis is often misconstrued regarding its imprecision and underpinnings. Data analysis in particular is one of the most complex and dubious steps of the entire research architecture. Having said that, the structure of the thematic analysis is based on three crucial steps whereby the responses of the data set are evaluated. The evaluation is extracted from the statements, attitudes, behavior, and expressions of people which are recorded by the researcher. The second stage is when the researcher evaluates these accumulated responses and deciphers the needed themes and codes from the transcribed responses in relativity to his or her study. Thirdly, the extracted themes are then viewed and named as the key categories under the spectrum of the study. According to Braun and Clarke (2012), thematic analysis is one of the most practical approaches utilized by qualitative researchers and enables to rectification of the data analysis approach with more appropriateness and effectiveness. Braun and Clarke (2014) have also construed that thematic analysis is the method through which most repeated patterns can be identified and further interpreted. The most distinct feature of thematic analysis that makes it applicable in different types of qualitative research is its ability to be flexible and dynamic. This means that it can delve into the dimensions of data analysis including the analysis of human attitudes and behavior, as well as their most adopted views. Through this process, the key themes and variables can be identified. Many scholars are of the view that thematic analysis is the bridge to constructivism (Joffe, 2011). The reason is that it is the process through which the data analysis allows us to build the narrative of how a certain aspect is socially constructed by looking at the views.

Simultaneously, for the study at hand, the researcher too has proposed and opted for thematic analysis through which the data set and their responses have been further analyzed.

Choice of interview objects

These qualitative data were gathered through ten interviews with managers from different companies. One of them works for FMCG company as the General Manager (GM) of Special Projects. The National Visibility and Customer Collaboration Manager also work for very renowned FMCG organizations in Pakistan is the second respondent. The Marketing Manager of the Apparel firm is the third respondent. The fourth respondent is employed as a tailor with Apparel. The Distribution Manager and Customer Relationship Manager, respectively, work in the Apparel industry. The two most recent managers work as brand managers in Textile Mills. The last two respondent works as marketing manager in a leading FMCG company in Pakistan. All of whom had first-hand experience with the use of AI in their marketing departments. The goal of this configuration of interview objects was to get a comprehensive picture of the focus area by interviewing marketing managers who have used AI in their industry as well as specialists at the confluence of AI and marketing. A key takeaway from this discussion was that marketing managers discussed how the use of AI is changing the roles of managers, as well as how they want to participate. With the help of artificial intelligence (AI), we were able to learn how AI is already altering marketing, as well as what future capabilities are considered to be possible for the technology.

Sampling technique

Scholars chose purposive sampling because it is "widely utilized in qualitative research for the discovery and selection of information-rich instances for the most efficient use of resources," According to Palinkas et al. (2015). Identifying and selecting "persons or groups of individuals that are particularly informed about or experienced with interest phenomena" is what Cresswell and Plano Clark (2011, cited in Palinkas et al., 2015). The efficiency of this sample approach, as well as our lack of both time and funds, led to select it. Additionally, because of the hectic schedules of business professionals, obtaining relevant interview items may be challenging (Bryman & Bell, 2011). It is suggested by Saunders et al. (2012) that the investigators leverage their current relationships as a solution to this problem. Due to his "exceptionally informed" and "experienced" status at the confluence of AI and marketing, Scholar contacted marketing managers of different organizations who have expertise in Artificial Intelligence is selected, to see if they would be interested in participating in an interview. This is an example of purposeful sampling using the snowball sampling technique (Palinkas et al., 2015).

After conducting these ten interviews, we reached empirical saturation, which is defined by (Roulston and Choi, 2018) as the point at which you know that enough data has been collected to answer the study issue.

Transference of interviews

Interview guide

Semi-structured interviews, as described in this chapter, are performed using an interview guide (Bryman 2016). According to Bryman and Bell (2011), we should ask ourselves "what do we need to know to answer each of the research questions?" when producing the guide. As a result, this was considered while creating the interview instructions. Furthermore, it's critical to examine what the respondents value most when it comes to the themes being investigated. There were questions like "Does Artificial Intelligence help you in your tasks as a marketing manager? How has it affected your

organization? Are you primarily concerned with Artificial Intelligence as an opportunity or a threat concerning your role as a marketing manager? " and "In your opinion do you think Artificial Intelligence will change the marketing in the future?" for marketing managers. This allowed us to make better use of the respondents' knowledge and experiences while also collecting perspectives from other sides. While many of the questions were based on the same subject matter, they were worded differently to be more precise. The value of having expertise as an interviewer is also stressed by Kvale and Brinkman (2009).

Pilot Interview

The authors argue that the interviewer must be well-prepared and that doing a pilot interview is an excellent method to do so. In addition, (Bryman 2016) stresses the need of doing pilot research to identify and rectify any interview question issues. A pilot interview with the manager of FMCG was performed as part of this study. Several inputs were received, and some questions required to be rephrased as a result. In addition, this familiarized us with the interview's semi-structured and increased our adaptability when we came to the interview guide. A manager from an Apparel firm was then subjected to a second formal interview as part of the study's data-gathering process. Additionally, continued to clarify the guidance during the first several interviews to make the questions easier to comprehend. The data gathering method did not include the addition of any new questions or the exploration of any new phenomena.

Interviews through videoconference

Face-to-face interviews are always the best choice for conducting interviews, according to Bogner et al. (2018). In the event of geographically distant respondents, interviewing videoconference software like Zoom is a suitable option if time or budget are constraints. This was also the case in this study. Only two in-person interviews could be done because of the time constraints as well as the pandemic situation for the last two interviews the researchers visited the office.

Transcribing

Bryman and Bell (2011) advocate tape-recording interviews in qualitative research. To minimize prejudice in hastily jotted down notes and the authors' memories, this has been proven to be a useful feature. The researchers can also concentrate on the interview and the questions and listen to what they do during it (Saunders et al., 2012). Qualitative research involves listening to what people have to say as well as how they say it, which necessitates recording to capture the tone of their voices (Vogt et al., 2012). Taking notes, on the other hand, gives the interviewee the impression that their responses are important while also keeping the interviewer's attention on the task. Recording and taking notes at the same time are highly recommended to get the most out of both approaches.

Qualitative analysis

In qualitative research, it might be challenging to uncover analytical routes in vast, frequently unstructured datasets, according to Bryman and Bell (2011). As a result, it's critical to avoid becoming distracted by the wealth of information available. Qualitative data analysis has fewer well-established methodologies than quantitative data analysis, but some basic approaches do exist. While there are numerous subcategories to a thematic analysis, all of them entail finding themes and applying the gathered data to them (Bryman & Bell, 2011).

Ethical considerations

This study's ethical principles heavily relied on those recommendations for inspiration and direction. Given that this study utilized the Internet for several research activities, including data collecting, this was deemed to be the most suitable. All respondents were told clearly and precisely at the beginning of the interview about the type of data that would be collected during the interview, and that data obtained and respondents and their company's names would be treated confidentially upon request. However, also let them know that using their titles and business names in the research would be very welcomed because of the additional credibility it would provide, which most respondents stated that it, was a problem. It was also emailed to the interview subjects who consented to this, and they were asked once again if they agreed to the material being published or if they wished to be handled with total confidentiality instead.no one, however, objected to the material being made public.

They were also told that the interview was entirely up to them, which allowed them total discretion over when and how they wanted to interrupt the interview, as well as whether or not they wanted to answer any of the questions. They were also told that they had the option of answering questions about themselves and their business in a particular or more generic fashion, without disclosing any sensitive information. No one has had access to the information acquired without permission. Each interviewee was asked in advance if it was alright to record the interview, and everyone consented. Before the interview, emailed ethical standards and a copy of them to the respondents to make sure they understood them and to avoid interviews with uninformed participants.

Truth criteria

According to Yin (2009), research in social sciences, which includes case studies, should be evaluated using four common criteria. Construct validity is the first of these four criteria. The other three are internal validity, external validity, and reliability respectively. All of these distinct factors should be considered at various points in the investigation. However, using the second criterion, internal validity, in exploratory research is irrational. The reason for this is that exploratory investigations are not concerned with explaining how and why incident x led to event y. Being an experimental study, scholars didn't think about internal validity.

Construct validity

Yin (2009) emphasizes the need of using a variety of information sources while doing case studies since the results and conclusions will be more accurate. Multiple evidence sources, also known as triangulation, have been employed to assure the study's quality and the validity of its findings. To get a more expressed picture of the research topic, the authors drew on both past empirical research in the respective domains and fresh qualitative empirical data collected through interviews with marketing managers. Also, because the study topic pertains to the marketing manager's future, this step was used to weed out any possible emotional bias. For the second criterion, the evidence must be linked from the research topic to the study's results such that an external observer can verify them. Following Yin's techniques, this principle has been implemented. As a starting point, the largest amount of correct citations from sources has been utilized. Other investigations have referenced and validated the theoretical foundational research, which has been widely published in major academic publications. As discussed earlier this chapter provides a thorough explanation of how empirical data was gathered and analyzed. The chapter was provided to each interview subject for evaluation and acceptance before publishing the research, which satisfied the third requirement of having key Respondents evaluate a draught of the case study. These criteria

were further supported by the pilot research, in which a respondent from the FMCG company shared her thoughts on the interview guide

External validity

The issue of whether or not a research's conclusions are generalizable outside the scope of the immediate case study is addressed by external validity (Yin, 2009). Case study research has received a lot of criticism for its lack of external validity due to the nature of the research itself the problem is that such critique is misplaced when used in case studies, which rely on analytic generalization rather than statistical generalization. This is explained by Yin (2009) Analysis generalization, as described by the authors, is trying to generalize data from one study to a larger theory. Managers in marketing would have a transformative role in this situation. To add to this, the generalizability of philosophy is considerably enhanced when the findings are replicated in several situations. Scientists can build on previous findings by doing similar experiments over and over again, as illustrated by the author's use of replication logic. To put it another way, the generalizability increases as findings become more similar over time. It was decided to explore a larger number of examples so that the conclusions about marketing managers' roles in comparable situations might be extrapolated. Due to the constructionist nature of this qualitative study, the goal is not to draw any general conclusions, but rather to gain a better understanding of *to explore the role, challenges, future, and decision-making process tackled by the managers in the context of Artificial intelligence in business to consumer firms in Pakistan*. While the single-case research provided greater evidence, the multiple-case study provided more solid evidence since comparable data were obtained from many distinct cases following the replication logic.

Reliability

To establish dependability, a researcher should be able to replicate a prior study using the same techniques specified by the previous researchers and come to the same conclusions and findings (Yin, 2009). As a result, reliability's goal is to reduce study mistakes and bias to a minimum. This may be overcome by creating a database for the case study, which organizes and documents all acquired data and evidence utilized for the research as well as the paper itself). It should be able to run a second analysis using this database that is separate from the first and that yields the same results (Yin, 2009). Accordingly, Google Drive has been used to store all of the gathered data. Mendeley software was used to store and manage additional articles. Page numbers are used throughout the article to make it simpler for readers to find the referenced information. All correspondence with respondents and with organizations was recorded in electronic form. All of this is in line with Yin's (2009) guidelines for research that aims for high dependability. As Yin (2009) points out, it's critical to include notes and protocols in the case study to ensure high dependability in the database. These are critical components of a database.

Data Analysis

Conducting the interviews

Ten marketing managers were interviewed for this study who have sound knowledge about artificial intelligence (AI). The findings of this study are given throughout this chapter. Interviews were taken with different marketing managers of Business Consumer firms. However, for reasons of confidentiality, it is not disclaimed which corporations are these. The managers explain the use of AI for the computerization of functioning areas like decision-making, budgeting, innovation, sales, and consumer insight., details of the respondents are shown in Table 1.

Table 1: Respondents Profile

Respondents	Gender	Position	Experience
Respondent 1(R1)	Male	Manager	5 to 10 years
Respondent 2(R2)	Male	Manager	Below 5 years
Respondent 3(R3)	Female	Manager	Below 5 years
Respondent 4(R4)	Male	Assistant Manager	5 to 10 years
Respondent 5(R5)	Male	Manager	5 to 10 years
Respondent 6(R6)	Female	Manager	5 to 10 years
Respondent 7(R7)	Male	Senior Manager	15– 25 years
Respondent 8(R8)	Male	Manager	5 to 10 years
Respondent 9(R9)	Female	Manager	Below 5 years
Respondent 10(R10)	Female	Manager	Below 5 years

The interviews included ten managers from ten different organizations in Karachi, Pakistan

Theme 01 Role of Manager in Acquiring Required Skills with AI

According to the respondents the AI-based training programs are smart, intelligent, and expert in handling questions. These systems can select content, lie, evaluate, and provide feedback to the trainee, thereby making learning more flexible and realistic. The Marketing managers were asked what AI means to them, to which B2 C managers responded, that it can mean many things. This research is centered on the understanding of various systems, but in a more practical sense, they explain that it is about prediction. They further describe that machine learning has received important consideration in the AI community in later years, and forecasting within marketing has the countless possibility, that is not being leveraged enough. Moreover, the interpretation of AI being an umbrella term is shared by the Apparel industry managers, but that it is also synonymous with machine learning and deep learning models in their respective domains

Themes 02 Role of Managers in AI Development in the Workplace

AI makes your marketing automation very smart. It can work automatically in marketing to enable you to translate data into decisions, and meaningful interactions and have a positive impact on your business outcomes. According to respondents, the biggest factor contributing to the integration of AI in advertising is competitive competition. Many companies feel pressure from competing firms to integrate AI into advertising. According to the respondent (R10), he has noticed that company executives have begun to push to integrate AI into advertising, and media attention, competitive pressure, and digital maturity are the reasons for their tendency to integrate. Everything is about data, but the most important thing is to convert data quickly and accurately into functional information. In other words, the speed at which marketing activities are created and implemented is an important factor that AI can bring to your business.

Themes 03 Role of AI – Assistant in the Workplace

There have been relatively few organizations interested in investing in the development of AI-based products. The Marketing managers were further questioned on how AI can automate and augment marketing decisions. Respondents 7,9 & 10 believe that the

comprehension capabilities of humans are limited, but instead, we can build systems to achieve greater comprehension. Every individual component of such a system does not need to be cleverer than a human, but they can work much faster, nonstop. Furthermore, Respondent 7 believes that machines can substitute some relatively uncomplicated decisions, in the sense that they are easily formulated and computed. An example would be for product recommendations, to find complex connections when there is an opportunity to perform calculations based on available data. In contrast, Respondents 2,4 & 5 find it to be unlikely that an algorithm can find relationships between data from different sources that it does not have access to. They draw upon an example with a book about "e-grocery" that becomes popular, and as a manager of a grocery store, you can then speculate that there will be a great demand for this, thus you should introduce it.

Themes 04 Role of AI in Transforming marketing strategies

To begin with, this theme includes responses to questions posed to marketing managers on their perceptions of AI and how it has impacted their marketing strategies. AI, according to all marketing managers, is a fantastic prospect for marketing and their jobs as marketing managers. Only one respondent identified AI as a concern, citing the potential for damage if competitors harness these relatively new technologies faster and better than they do.

Furthermore, several respondents believe that AI, notably machine learning, opens up entirely new dimensions and possibilities for analysing massive volumes of data. All of the respondents also stated that the analysis performed by machine learning algorithms would ordinarily need numerous data scientists, with the outcomes likely being inferior.

Themes 05 Ethical Dilemma Regarding AI Advancement

There is a general discussion about privacy and surveillance of information technology, which is closely related to access to confidential data and personal data. Privacy has a few well-recognized features, e.g., "right to privacy", the confidentiality of information, privacy as a personal component, control of information about you, and the right to privacy. Today, AI is important in many industries, including healthcare, banking, marketing, and manufacturing. Transparency in AI means using accurate language to talk about the programs we are developing, how they work, and how they know. It also means explaining where the data came from. The responders were then asked about the challenges faced by Marketing Managers with the implementation of AI. None of the respondents said it was a significant issue for them. They also believed that to be effective with AI technology, marketing managers needed to relinquish some control.

Conclusion

The main purpose of this research was to investigate the role of artificial intelligence in Pakistani business-to-consumer companies. This was accomplished through triangulation, which includes interviews with marketing managers who explained their jobs and how AI has affected them, as well as previous literature and research on the topic. The idea was to map out marketing managers' roles to determine how AI may replace and support B2C businesses. The participants were also asked about their perspectives on how market dynamics are altering, as well as the hurdles they encounter when integrating AI. As a result, the researcher was able to draw assumptions and develop a baseline, which was used to build the marketing manager's viewpoint. AI is a huge contributor to digital marketing; marketing strategies have rapidly changed over the last decade. Marketers have turned towards social media for the marketing of their goods and services. That has made Artificial Intelligence (AI) significant

in the field of digital marketing as all social Media are using AI for their advertising strategies. Digital marketing through AI is done by feeding the data to the systems (demographic, budgets), this allows the software to work following these assigned patterns by the marketers. This way the managers can make data-based decisions, which in turn improves the overall business revenue

To discuss the challenges of AI at the consumer level we have to see the additional concerns AI technology raises about ethics and privacy, leading to growing anxiety in people about having a social presence on the internet. Overall, these concerns have majorly affected the ability of AI to participate in automated analytics and will change the nature of human interaction with the machine in many firms. But artificial intelligence has the potential to improve the ability of a firm by customizing their local offerings when they have a greater understanding of customer behavior in a wider range of local cultures. However, overuse and misuse of AI regarding personal data collection have a potential negative impact on society, which may lead to an increasing number of corporate entries into consumer personal integrity in the pursuit of growth net worth. This is the way the consumer wants to make sure that the marketer act following ethical guidelines and regulations, thus not collecting and using more consumer data than they need, as well as putting things beyond the policies and communication this effectively

Theoretical contributions

As the computer programming capabilities have increased over time there is a huge enhancement in data storage and usage, and it has also improved the algorithmic efficiency. The consistent development of software and hardware and integration of compatible technologies, e.g. robots, sensors, and IoT has paved the way for AI systems of a new generation that require minimal human intervention to function. The data is collected and then processed according to a given set of coded objectives through AI to make sense. The AI system forms an integral part of the concept as it reflects the environment and defines its structure and/or internal capabilities in other places. AI systems are designed to mimic the human thinking processes, it is widely agreed that current advances are not enough to create Artificial Intelligence. AI is capable of applying learned skills and knowledge in a variety of contexts. By performing a qualitative multi-case study, we were able to investigate the managers' role, challenges, future, and decision-making process in the context of Artificial Intelligence in Pakistani business-to-consumer companies. AI has emerged as an area that is under-researched in proportion to its significance (Wedel & Kannan, 2016). Furthermore, in several areas, our study has made a substantial contribution to the literature.

First, the data suggest that marketing managers rely substantially on emotional intelligence, creativity, and intuition, which is consistent with Mintzberg's (1994) conclusion that synthesis, intuition, and creativity are the pillars of strategic thinking. Because marketing managers must comprehend the dynamics of ambiguous decision-making, which involves the building of a brand, emotional intelligence is extremely important. As for the negative side of AI, it is hard to see AI mimicking human emotions any time soon in foreseeable future. That is one of the major reasons why AI isn't able to replace humans as it doesn't possess the human emotions that are required for many situations while conducting business or dealing directly with the consumer. Despite being more efficient and cost-effective than human business still prefers human for customer dealings as they connect with the consumer.

The second reason must be that a business can't foresee many circumstances and they require humans to be able to deal with uncertain situations. Third, the outcomes of this study

suggest that AI assistants have become essential for decision making, as the data acquire by AI plays a huge role for managers to be able to forecast future demand and supply, either as a result of machine learning, incapacity to effectively predict consumer preferences or because all brands have reached their maximum ideal. Contrary to Dawar (2018), who believes that brand equity will become less relevant unless it is already a critical choice criterion, such as in brick-and-mortar sales, the data validate Jarrahi's (2018,) conclusion that managers must be prepared to adapt and re-adapt in the face of increasing AI. The same looks to be true for marketing managers, as the rapid growth of AI assistants forces marketers to shift their focus to AI assistants due to the predictability of the key product category. Therefore, the recent outbreak of coronavirus-2019 has had an impact of significant value on the national and global economy. Almost all businesses face different problems also a certain level of loss. In particular, businesses experienced and still experiencing various problems such as disruption of the supply chain, shortage of immature goods, declining demand, cancellation of export orders, and transportation disruption, among others.

However, businesses around the world are experiencing a significant impact of the COVID-19 outbreak in their businesses. Many small and medium-sized businesses also face major problems. For example, the textile and clothing industry has been severely affected by the work ban. As our results show that 67.93% of businesses are facing financial difficulties, therefore, the government should consider lending to these businesses to combat this ongoing problem. More than 54% of Pakistan's exports are from beverages, food, tobacco, and textile industries; a decline in demand for these particular sectors tends to have a significant impact on Pakistan's economy. Many small and emerging businesses are now facing serious problems because of this. For this reason, the textile and clothing industry has been severely affected by lockdown closures. The rapidly changing business environment has increased the importance of timely and original business information. Therefore, to survive in the digital world economy, organizations face the pressures and challenges posed by the business environment while planning their strategy. Therefore, organizations are focused on the use of business intelligence tools and applications for analysis within or within the organization as well as performing external data collection tasks. Currently, in Pakistan, most companies use ERP solutions and few will benefit from BI. In the future, we see more BI implementation in Pakistan.

The emergence of Artificial Intelligence and B2C firms in Pakistan:

Artificial intelligence has proven to be of great support to B2C firms. Through this fast-paced technology, the B2C firms have managed to avail great opportunities and earn a lot of sales. Extracted themes have indicated that although the potential of AI was inevitable and growing Pakistan still stands in the infancy stage. It needs to ensure that it is capable of utilizing the workforce following the technology's diverse domain and categories by focusing on upskilling and reskilling of employees and needed skills. The aspect of Deep learning technology has provided significant relief to B2C firms in Pakistan but it is essential that other dimensions like Gait Technology, machine learning, and robotics be utilized to their full capacity and capabilities so that they can uplift the businesses effectively.

Limitations and future research

The drawback of this study is that it lacks generalized because it's a qualitative study that employs an inductive research strategy. One drawback of inductive research is that knowing how generalized the findings are sometimes difficult (Patel and Davidson, 2011, p. 23). As a result, the study's conclusions can only be taken at face value in the conditions investigated, which is consistent with our philosophical viewpoint. As a result, the goal of

this research was to understand more about the challenges faced by marketing managers by the arrival of Artificial intelligence. The findings, however, can be deemed more robust than they would be in single-case research because this research covers multiple bases; we believe the findings might be applied to other businesses that are comparable to the ones investigated. However, because our research was limited to the FMCG and Apparel Industry, all of which were Pakistani companies involved in the retail industry directly or indirectly, we recommend that more qualitative research be conducted on a larger number of cases with more diverse characteristics. AI is changing not just the future but also the very present that we are living in. Artificial intelligence will have an impact on future human resource management.

References.

Alford, J. (2019). *AI marketing: What does the future hold? SAS*. Retrieved from https://www.sas.com/en_us/insights/articles/marketing/ai-marketing-what-does-the-future-hold.html.

Alpaydin, E. (2016).*Machine Learning. MIT Press*. Retrieved from https://mitpress.mit.edu/contributors/ethem-alpaydin .

BBC (2017, 25 May). *Google AI defeats the human Go champion. BBC*. https://www.bbc.com/news/technology-40042581. [Retrieved 2019-04-24]

Bogner, A., Littig, B., & Menz, W. (2018). *Generating Qualitative Data with Experts and Elites. In: Flick, U. 2018. The SAGE handbook of qualitative data collection*. 1st ed. Los Angeles: SAGE, 652-668.

Bolton, R.N., Gustafsson, A., McColl-Kennedy, J.R., Sirianni, N.J., & Tse, D.K. (2014). Small details that make big differences: A radical approach to consumption experience as a firm's differentiating strategy. *Journal of Service Management.* 253-274.

Braun V, Clarke V. 2006. Using thematic analysis in psychology. *Qual Res Psychol. 3*(2):77–101.

Braun V, Clarke V. 2012. *Thematic analysis. In: Cooper H, editor. APA handbook of research methods in psychology. Vol. 2, research designs*. Washington (DC): American Psychological Association.

Braun V, Clarke V. 2014. What can "thematic analysis" offer health and wellbeing researchers? *Int J Qual Stud Health Well-Being. 9*(1): 26152.

Brodrechtova, Y. (2008). Determinants of export marketing strategies of forest products companies in the context of transition—The case of Slovakia. *Forest Policy and Economics, 10*(7), 450-459

Bryman, A. (2016). *Social research methods*. Oxford university press.

Bryman, A., & Bell, E. (2011). *Business research methods*. 3rd ed. Oxford: Oxford Univ. Press.

Chowdhary, K. (2020). Natural language processing. *Fundamentals of artificial intelligence*, 603-649.

Christensen, C. M. & Raynor, M. E. (2015). *The Innovator's Solution: Creating and Sustaining Successful Growth. Boston, MA*: Harvard Business School Press.

Dawar, N., & Kehtarnavaz, N. (2018). Action detection and recognition in continuous action streams by deep learning-based sensing fusion. *IEEE Sensors Journal*, *18*(23), 9660-9668.

De Bruyn, A., Viswanathan, V., Beh, Y. S., Brock, J. K. U., & von Wangenheim, F. (2020). Artificial intelligence and marketing: Pitfalls and opportunities. *Journal of Interactive Marketing*, *51*, 91-105.

Ehret, M., Kashyap, V., and Wirtz, J. (2013). Business models: impact on business markets and opportunities for marketing research. *Industrial Marketing Management.* 649-648.

Eisenhardt, K.M. (1989). Building theories from case study research. *Academy of Management Review*. *14*(4), 532-550.

European Journal of Nuclear Medicine and Molecular Imaging, 2630–2637.

Govindarajan, V. & Kopalle, P.K. (2006). The usefulness of measuring disruptiveness of innovations ex-post in making ex-ante predictions. *Journal of Product Innovation Management*, *23*, pp. 12–18.

Hargrave, M. (2020, November 24). Deep Learning. Retrieved from Investopedia: https://www.investopedia.com/terms/d/deep-learning.asp

Harrison, H., Birks, M., Franklin, R., & Mills, J. (2017, January). Case study research: Foundations and methodological orientations. In *Forum Qualitative Sozialforschung/Forum: qualitative social research* (Vol. 18, No. 1, pp. 1-17).

Janiesch, C., Zschech, P., & Heinrich, K. (2021). Machine learning and deep learning. *Electronic Markets*, *31*(3), 685-695.

Jarek, K., & Mazurek, G. (2019). MARKETING AND ARTIFICIAL INTELLIGENCE. *Central European Business Review*, *8*(2), 46-56.

Joffe H. 2011. *Thematic analysis. In: Harper D, Thompson AR, editors. Qualitative methods in mental health and psychotherapy: a guide for students and practitioners*. Chichester (UK): John Wiley & Sons; p. 209–224.

Kornbluh, M. (2015). Combatting challenges to establishing trustworthiness in qualitative research. *Qualitative research in psychology*, *12*(4), 397-414.

Kvale, S., & Brinkman S. (2009). *Interviews, learning the craft of qualitative research interviewing*. SAGE Publications Ltd. United States of America

Lara, A., Kolasani, A., & Ramamurthy, B. (2014). Network innovation using open-flow: A survey. *IEEE communications surveys & tutorials*, *16*(1), 493-512.

Lhiadi, R., Kaaouachi, A., & Jaddar, A. (2021). The Role of Applications Deep Learning in Achieving Sustainable Development Goals. In *Emerging Trends in ICT for Sustainable Development* (pp. 71-78). Springer, Cham.

Ma, L., Liu, Y., Zhang, X., Ye, Y., Yin, G., & Johnson, B. A. (2019). Deep learning in remote sensing applications: A meta-analysis and review. *ISPRS journal of photogrammetry and remote sensing*, *152*, 166-177.Machine learning: new ideas and tools in environmental science and engineering. *Environmental Science & Technology*, *55*(19), 12741-12754.

Marinchak, C. M., Forrest, E., & Hoanca, B. (2018). Artificial intelligence: redefining marketing management and the customer experience. *International Journal of E-Entrepreneurship and Innovation (IJEEI)*, *8*(2),14-24.

McIlwraith D., Marmanis H., & Babenko D. (2017). *Inteligentna sieć. Algorytmy przyszłości.* Helion, 2nd edition, Gliwice, p. 27.

Moghaddam, F.M. & Foroughi, A. (2012). The influence of marketing strategy elements on the market share of firms. *International Journal of Fundamental Psychology and Social Science,* *2*(1), 19-24.

Muoio, D. (2016, 10 March). Why Go is so much harder for AI to beat than chess. *Business Insider.* https://www.businessinsider.com/why-google-ai-game-go-is-harder-than-chess-2016-3?r=US&IR=T. [Retrieved 2019-05-01]

Ndegwa, S., (2012). *A Framework for E-Content Adoption in Secondary Schools*. School of Computing and Informatics. The University of Nairobi.*Negocios*, (2594-0163 en línea; 1665-7039 en impreso), (39), 5-30.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, *42*(5), 533-544.

Payne, A., & Frow, P. (2014). Developing superior value propositions: A strategic marketing imperative. *Journal of Service Management*, 25(2), 213–227.Pearson New International ed. Harlow: Pearson Education Limited.

Pearson New International ed. Harlow: Pearson Education Limited.

Power, B. (2017, May 30). How Harley-Davidson Used Artificial Intelligence to Increase New York Sales Leads by 2,930%. Retrieved from Harvard Business Review: https://hbr.org/2017/05/how-harley-davidson-used-predictive-analytics-to-increase-newyork-sales-leads-by-2930

Roulston, K., & Choi, M. (2018). Qualitative interviews. *The SAGE handbook of qualitative data collection*, 233-249.

Russell, S.J., & Norvig, P (2014). *Artificial Intelligence: A Modern Approach.* 3rd,

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*. 6th ed. Harlow, New York: Pearson. Student literature.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*. 6th ed. Harlow, New York: Pearson. Student literature.

Shanahan, M. (2015). *The Technology Singularity*. MIT Press

Square. (2018, October 25). How to Find the Right Pricing. Retrieved from Squareup: https://squareup.com/us/en/townsquare/saas-pricing-guide

Sterne, J. (2017). *Artificial intelligence for marketing: practical applications*. John Wiley & Sons.

Syam, N., & Sharma, A. (2018). *Waiting for a sales renaissance in the fourth industrial revolution: Machine learning and artificial intelligence in sales research and practice.* Industrial Marketing Management, 69, 135-146.

Uzialko, A. (2019, April 22). How Artificial Intelligence Will Transform Business. Retrieved from Business News Daily: https://www.businessnewsdaily.com/9402-artificialintelligence-business-trends.html

Vogt, W. P., Gardner, D. C., & Haeffele, L. M. (2012). *When to use what research design*. Guilford Press.

Vrontis, D., Morea, D., Basile, G., Bonacci, I., & Mazzitelli, A. (2021). Consequences of technology and social innovation on a traditional business model. *Technological Forecasting and Social Change*, *170*, 120877.

Webster, F. E., & Lusch, R. F. (2013). Elevating marketing: marketing is dead! Long live marketing! *Journal of the Academy of Marketing Science*, *41*(4), 389-399.

Wirtz, J. G., Tuzovic, S., & Kuppelwieser, V.G. (2014). The role of marketing in today's enterprises. *Journal of Service Management*.

Yin, R. (2009). *Case study research: Design and methods*. 4th ed. London: SAGE.