ARTIFICIAL INTELLIGENCE IN CUSTOMER ENGAGEMENT: STRIKING A BALANCE BETWEEN RESPONSIVENESS AND ADVOCACY

Sobia Jamil

Department of Business Administration, Jinnah University for Women, Karachi - Pakistan

Kousar Zaheer

Department of Business Administration, Jinnah University for Women, Karachi - Pakistan

Syeda Sadaf Seraj

Emaan Institute of Management Sciences

Abstract

Purpose

Artificial intelligence is becoming mainstream and well-known by people in every field and at every age. Whether they are students, businessmen, customers, housewives, celebrities, or even children, Artificial Intelligence has already left an impression in their minds but as this phenomenon is new in the world and progressing and evolving day by day the existing data is too hard to understand and in a few instances of progress in this field it will become obsolete. That's why in this study, we will shed light upon the basics of AI as well as cited facts and our own observations by linking AI to customer relationships, potential marketing strategies, CSR and the rapidly growing unease and ethical dilemmas caused by AI.

Methods

Using data collected from our society, we developed a theoretical framework, analyzed the data, and draw conclusions regarding AI in the corporate world. In order to collect data, our target population includes students, employees, businessmen, and people who are familiar with the concept or work in this field.

Results/Findings

Following the collection and analysis of all data, we have identified a few things, and we would like to conclude the discussion in the following manner. People are intrigued by the developments in this field, and they want to know, but it's complex for them to understand it as a layman. They also understand that it is necessary for them to know about it and its use case.

Novelty/Originality of The Study

As a result of this study, researchers will be able to access relevant data and information in the future. This will start a conversation globally regarding artificial intelligence and its usage. We will also discuss the limitations of this study which will pave the way for future research that can be conducted in this rapidly developing technology.

Keywords: Artificial Intelligence, AI, AI in Business, AI and Customer perceptions, AI and ethical issues, AI and CSR, AI-Enabled Customers, Customer Advocacy, Customer Responsiveness, Customer Callousness.

1. Introduction

Artificial Intelligence has been a fantasy or fiction for a long period, but it is turning into reality and everybody is interested in AI for their own reasons. AI is defined as the capability of machines to perform tasks exhibiting smart human-like behavior (e.g., machine learning, computer vision, speech recognition, and natural language processing (Caluori, 2023). AI-enabled products and services, such as vehicles with autonomous functions, digital personal assistants (e.g., Amazon's Alexa, Apple's Siri), virtual nurses, robo-advisors, and AI-enabled personalized recommendations, have become increasingly popular.(Du & Xie, 2020). Due to its popularity, there is no doubt we will have to learn how to control and use AI for our own benefit. In fact, everyone, from students to employees to businesses will need to harness the opportunity that is known as AI in order to become more efficient and effective in their jobs. It is a must to understand how AI impacts a business' relationships with its customers. Also, customers are the main factor that will be directly affected by the high inclusion in our daily life that's why it's important for us to look into customer responsiveness. Being rude or dismissive towards customer service representatives, making unrealistic demands, or being indifferent to a business' attempts to address their concerns or issues are some of the typical behaviors of callous customers (Yorgov, 2023)

One of the humongous causes Customer responsiveness is integral to any business is because it builds a positive relationship with the customers. A very popular quote in the business world is "Right or wrong, the customer is always right." By responding appropriately to feedback and complaints, a business can easily get into its customers' good graces by providing them with the goods and services they actually desire and need instead of what they believe is what the customers want (Hossain, 2023). That along with quick responses to any queries and grievances of customers goes a long way in establishing customer trust, loyalty, and goodwill via word-of-mouth and e word-of-mouth as well as customer retention. And because of the rising global competition about states using cutting-edge technology and innovative practices, positive promotion from the customers is the biggest asset to any firm (Quaye et al., 2022). Customer advocacy and loyalty not only affects a business' own goodwill but is also free marketing as well as a reliable means of winning competitors' customers over. This can decrease marketing and R&D costs as well as production costs as the happier customers there are, the more the products are sold, and the highest profit margin can be achieved by minimizing production costs via bulk production.

With the rise in the availability and usage of AI, there have been many studies that have their focus aligning ethical use of AI, uses of Big Data, AI-related value co-creation as well as AI software and their uses in organizational processes. The new addition in the corporate world of AI in terms of new software and change of marketing strategies in Amazon Go stores without any cashiers and automated billing systems makes it a threat for employees. But even with all this research and physical implications, there is so much left to be desired to be studied and explored, particularly for people who are newly discovering AI as well as AI usage for marketing and managing customer relationships for businesses. The fact that there is a lack of research material available for future research or addition to existing knowledge and if there is any source material then it is far from a laymen's understanding (Himanen et al., 2020)

This is why our study aims to minimize the struggles of finding easy-to-understand research data for those that wish to learn about AI as well as get the marketing field caught up with the AI-related advancements other fields have already undergone. Research objectives of the study are a) Exploring is the relationship between customer callousness and customer responsiveness in light of business' practices, b) Exploring how AI can help to innovate marketing practices, c) Discovering the practical implications for the businesses that link AI products/services with customer advocacy, d) Looking for the potential ethical consequences of normalizing use of AI in every field of life.

This study will add to the existing knowledge of AI in marketing as well as provide updated data for basic academic research.

RQ1: What is the relationship between customer callousness and customer responsiveness in light of business' practices?
RQ2: How can AI help to innovate marketing practices?
RQ3: What are the practical implications for the businesses that link AI products/services with customer advocacy?
RQ4: What are the potential ethical consequences of normalizing use of AI in every field of life?

This research is done in a standard sequence. The first topic is the introduction of the study after which we move to theoretical framework. This is followed by the development of the hypothesis right after the literature review. While compiling the research methodology we divide it under the headings of research approach, data collection, instrument, data analysis, limitations of research and conclusion of research.
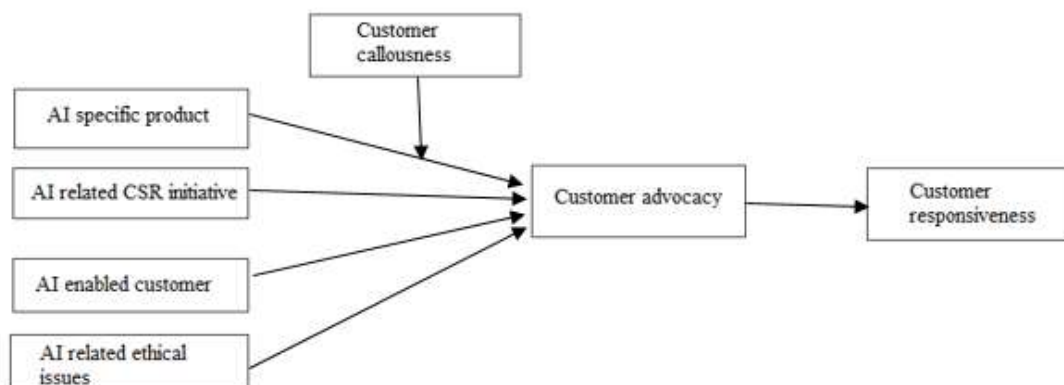

Figure 1 Theoretical Framework

2. Literature review

2.1 Theoretical Exposition

In this research, we are using the Technological mediation theory. Technological mediation theory asserts that through the value-embedded design and democratic assessment of technological artefacts, they can transform, guide, and nudge humans' actions and experiences into moral senses. (Liu, 2022).Linking this theory to AI-specific product can explain, we can see how AI was originally founded to aid humanity by making things simpler and error-free for them. By the use of AI, decisions could be made, information could be gathered, and guidance could be found by an unbiased and educated program that was constantly collecting data from all over the internet and making it accessible in the blink of an eye. It was made to convenience human life. (de Melo et al., 2022)

If we look into the concept of AI-affiliated CSR inventiveness in light of the technological mediation theory, we can see how AI as a technology was not just made to make human life easier but to also make it easier for businesses to invest in their society and environment's conservation and betterment. Many AI products are specifically made to protect the environment and by protecting the environment, this technology can increase the longevity of human life and better human health for decades if not centuries. (Al-Sharafi et al., 2023).By the use of AI, business have become Customer Advocates and built deeper and better relationships with their customers. By the use of AI, customers can easily find the data about the companies they buy from. This increases transparency and mutual trust between customer and business and they work together to provide each other with products, services and feedback they need. (Li & Xu, 2022)

Through using AI to better customer experience, customer callousness can be decreased. The lack of empathy, sympathy, loyalty/commitment issues and customer rudeness towards employees and business as a whole can be, in worst case, diminished and at best, eliminated by using AI technology to enhance their experience, showing them how important each and every one of them is for the business and giving them incentives to become long-term loyal customers. This can establish a positive and mutually beneficial relationship between the company and its customers if used well and it can spell ruin for a business if misused as well. (Ghazwani et al., 2022)

2.2 Customer responsiveness

Responsiveness means timely decisions that lead to timely actions that lead to moving the business forward. The quicker the response times, the more quickly progress can occur(Merriam-Webster, 2021).A customer is the most important asset, a central factor around which entire businesses revolve and thus their feedback and opinions are vital for the survival of every business. Customer responsiveness is the 'speed and quality at which companies respond to their customers. (Chaturvedi, 2022)Customer responsiveness measures the speed and quality at which a company provides customer service and communication.(Li & Xu, 2022) This ensures that customers get the products and services they want in a timely manner which can positively affect their faith in the business and its operations and increase customer loyalty. There are many factors that affect customer responsiveness but two of the most important ones are accessibility/ease-of-interaction

(how easy is it for customers to interact with you to ask questions, voice concerns, or get a problem solved, etc.) and response time (how fast does the company deliver the ordered goods or services or respond to queries and feedback, etc.)(Green, 2021).

Studies have shown the benefits of customer responsiveness can weigh heavily on a firm's profitability as emphasized by the fact that loyal customers and profitability have a positive correlation. Not only that but customer-responsive practices can result in positive word of mouth which every business strives for. Positive word of mouth is always the best marketing a firm can have because many potential customers prefer personal information sources which are what a loyal customer's word of mouth is. (Manyanga et al., 2022)

2.3 Hypothesis Development

2.3.1 AI-specific Product and Customer Advocacy

Artificial intelligence is the study of how to make computers perform intelligent tasks that, in the past, could only be performed by humans. It is the general term for the science of artificial intelligence. It uses computers to simulate human intelligent behaviors and it trains computers to learn human behaviors such as learning, judgment, and decision-making(Zhang & Lu, 2021)**.** AI-specific product refers to the use of AI in a product or service like Dall.E (a text-to-image generator) and Chat-GPT (an AI chatbot that generates text-like responses) and these are only two of the most popular and widely used AI products. Since then, tech giants like Google and Microsoft have been developing and training their own AI. Many countries of the world have followed suit in using it as AI becomes more popular and more effective with each update. Customer advocacy is an advanced form of market orientation that responds to the new drivers of consumer choice, involvement, and knowledge. It aims to build deeper customer relationships by earning new levels of trust and commitment and by developing mutual transparency, dialogue, and partnership with customers (Ledro et al., 2022)

Artificial intelligence has experienced a long development process, with a history of more than 70 years. Its development process can be divided into several stages: in 1943, the artificial neuron model was proposed, and this opened the era of artificial neural network research. During this period, the trend of artificial intelligence research by the international academic community was on the rise, and academic exchanges were frequent. In the first decade of the 21st century, the development of the mobile Internet brought more artificial intelligence application scenarios(Zhang & Lu, 2021). As the mobile internet gave a big push to the development of AI now it's able to do most tasks humans used to do before and making jobs obsolete while increasing productivity and opening new doors for more developments.

It is important to comprehend the connections between AI and customer advocacy to optimize organizational performance and relational outcomes. From a customer's perspective, the use of state-of-the-art technology can enhance brand attractiveness and as a result, customers are more likely to identify with the brand. This is why, companies expect that the use of AI systems can result in both better customer experience and better customer relationships, leading to the promotion of the organization in the form of customer advocacy. There is also the fact that AI can serve as a touchpoint between a customer and the company, which means it can offer timely,

reliable, and flexible recommendations to increase customer-business interaction which will be a lot more accurate as compared to recommendations given by employees due to the fact humans are naturally biased creatures(Nguyen et al., 2021).

H₁: *AI-specific product has a significant impact on Customer Advocacy.*

2.3.2 AI-related CSR Initiatives and Customer Advocacy

Corporate social responsibility, or CSR, is a form of self-regulation that reflects a business's accountability and commitment to contributing to the well-being of communities and society through various environmental and social measures(Reckmann, 2023). AI-related CSR initiative is a term that collectively refers to any and all CSR efforts done with the help of AI, regardless of how much AI assistance it required. It is now possible to align a business' CSR strategy with its AI usage for more effective outcomes, for society and the company itself. Many companies are developing specific AI programs to suggest and combat environmental issues as well as predict future disasters. Some companies are creating AI to help ease the life of disabled people while bridging the gap between them and able-bodied society. AI is also helping employers to eliminate bias during the hiring process. One of the most effective AI-related CSR initiatives includes the AI-enabled robotic boat. Clearbot Neo uses AI to recognize and log the types of trash it collects. It can bring in as much as a metric ton of refuse per day for recycling or disposal. And when fitted with a bespoke boom, it can tackle localized oil and fuel spills by collecting up to 15 liters of pollutants a day. It also collects masses of data in the cloud using a two-camera detection system(Deayton, 2022).

This was only one example of AI-related CSR initiatives, but we can clearly see that as big as the impact of these AI-powered god-sends are on the environment, their positive impact is just as visible in the minds and hearts of the customers this directly and indirectly impacts. Not only will this sustain the environment, but it will also affect and increase the standard of life of those that live closer to these cleaned water bodies. The plastic and oil spills this boat will clean will directly increase the quality and quantity of the food as well as customers' health which will in return cause them to appreciate and give back to the firm that has done so much for them. It is as much a marketing strategy as it is a CSR initiative.

H₂: *AI-related CSR initiatives have a significant impact on Customer Advocacy.*

2.3.3 AI-enabled customer and Customer Advocacy

An AI-enabled customer is a customer who interacts with a business that uses AI technology to enhance its overall customer experience. This could include using AI-powered chatbots and virtual assistants to handle customer inquiries, etc. AI-enabled customers are a bigger asset for a company than the customers who don't use AI as they are on a different level of technological awareness than the average customer, the level that is closer to the AI utilizing company itself. This means the company and customer can relate to each other's experiences and provide feedback that is more useful as it comes from the customer's experience after using AI products or services.

This is why building a transparent and long-lasting positive relationship with AI-enabled customers is a priority for every firm that uses AI.

H₃: *AI-enabled customer has a significant impact on Customer Advocacy.*

2.3.4 AI-related ethical issues and Customer Advocacy

An ethical issue is a situation where a moral conflict arises and must be addressed. In other words, it is an occasion where a moral standard is questioned. Ethical issues occur when a given decision, scenario, or activity creates a conflict with a society's moral principles (Balasubramaniam et al., 2022). They tend to interfere with society's principles.AI ethical issues are the problems and challenges that stem from the use and development of AI systems that can affect human values and interests as well as the entire course of human life including businesses and governments as well. The rapidly prevalence of AI based products pose unique ethical challenges and call for urgent attention as compare to conventional tech based product. (Du & Xie, 2020)

There are two major types of AI-related Ethical issues that impact its customers; Customer Privacy and Customer Cyber security. Privacy violations occur whenever personal information is collected or used without the informed and voluntary consent of the person(Du & Xie, 2020). These days, companies and websites are all about collecting data for personalized advertisement and search results in the form of cookies, account information, and a user's internet history. Sometimes, applications even ask for access to other application data such as contacts, calendars, etc. which they use to make their user experience better but this data can also be used in other ways that involve using loopholes for getting user consent. It can and is being used to teach AI which is endangering the privacy of people.

Then there is the case of cyber security which is closely related to the privacy issue. Cookies and other user data accessed by sites can easily be hacked into or sold for money for unethical purposes which is a huge breach of information. This information may also be sensitive and confidential which can have a big impact on a lot of different parties related to or not related to the customers of these AI websites and programs. Whether customers know about this breach of privacy or not, it doesn't matter. Because in both scenarios this is very damaging to the mutual transparency, trust, and partnership the firms try to make with their customers as a part of their customer advocacy practices.

H₄: *AI-related ethical issues have a significant impact on Customer Advocacy.*

2.3.5 Customer Advocacy and Customer Responsiveness

A company might choose to embrace advocacy by becoming a faithful representative of customers' interests. Under this approach, a firm provides customers and prospects with open, honest, and complete information (Wulandari, 2022). Customer responsiveness and Customer Advocacy are very similar in many regards, including the fact that their emphasis is on ensuring customer loyalty and retention. The major difference between both is that customer advocacy is a passive approach while customer responsiveness falls on the action side of the spectrum with businesses utilizing customer feedback to better their products and services and retaining

customers while advocacy is about building an emotional and longer-lasting connection with customers. Companies are trying hard to bridge the gap between the propensity to respond and the corresponding ability to respond.

H₅: Customer Advocacy has a significant impact on Customer Responsiveness.

2.3.6 Customer Advocacy mediating the Relationship between AI-related ethical issues and Customer Responsiveness

Recently there has been an outbreak of user data security breaches of social media companies (e.g., Facebook, LinkedIn, Twitter, Google, Yahoo), software developers (e.g., Adobe's more than 150 million usernames and passwords were compromised), banks (e.g., the U.S. Federal Reserve bank's website was hacked), retailers (e.g., Target store with over 40 million customers' credit and debit cards number stolen), and others. (Du & Xie, 2020)Such data can be sold to people who may or may not want to use it for unlawful purposes that may harm the customers. This customer data can also be sold to websites that use it to power AI algorithms that target these customers for the advertisement of their products and services which these customers may not want. This is a big breach of privacy as customers have not consented to this information being sold as well as due to the fact that customers aren't aware of who is selling what from their data and to whom. This is the opposite of customer responsiveness and due to its nature as unethical, can have a very long-lasting negative impact on a firm's reputation and longevity if this was found.

In 2018, the case of Cambridge Analytica caused an uproar among people. They called out for justice and privacy as was revealed by Christopher Wylie, who obtained the data working with a Cambridge University academics: *"We exploited Facebook to harvest millions of people's profiles. And built models to exploit what we knew about them and target their inner demons. That was the basis the entire company was built on."("Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach," 2018)* But as much harm as AI can bring, there are also companies that are championing their customers and their privacy, the pioneer of which is Apple itself. Apple introduced its 2022 Privacy Nutrition labels which are designed to help users understand how apps handle their data, including apps developed at Apple. The website has an extensive list of Apple apps users can check to see if they are concerned about their data being collected and used("Privacy Nutrition Labels," 2022). And due to the positive reception of this, many other companies are following suit and making customer advocacy a priority again.

H₆: Customer Advocacy mediates the impact of AI-related ethical issues on Customer Responsiveness.

2.3.7 Customer Advocacy mediating relationship between AI related CSR initiatives and Customer Responsiveness

By using AI related CSR initiatives, companies can gain better support from their customers as customers and their environment are more often than not directly related to these CSR initiatives. Relationships with customers and a company's perception in the customer's mind are longer-lasting positive impacts of these initiatives. They feel less of a profit opportunity and

more valuable as the firm strives to make things better and easier for them of their own means, without any direct feedback or complaints. It appeals to customers' intrinsic motivation to be more involved and vocal with the firm as well as promotes customer loyalty. Not only will that but at the public level, such AI-based CSR activities promote equality and societal justice, and the mutual relationship of humans and AI.(Du & Xie, 2020).

A good example of an AI-related CSR initiative comes from the well-known Google Inc. It started a program called AI for Social Good which is going to use the company's resources and expertise in AI toward philanthropic projects(Condon, 2018). A part of this initiative is the AI Impact Challenge which will use 25 million dollars to fund 20 companies out of the 119 applications it received for using AI for social good as well as giving them training and access to Google's own resources("Working together to apply AI," 2018). There is also Carnegie Mellon University that is developing AI tools that are designed, developed, and deployed responsibly to lead to a more equitable world by utilizing its expertise and ingenuity to redirect AI toward CSR. (Aupperlee, 2022)

We can clearly see that these and so many other firms are employing their own resources in the name of AI-related CSR which is a great plus point in the eyes of the customers and society. These initiatives will impact the society and environment positively for a long time and thus advocate for their customers and their needs well before they speak up about them which ensures customer satisfaction and retention.

H₇: *Customer Advocacy mediates the impact of AI-related CSR initiatives on Customer Responsiveness.*

2.3.8 Customer Callousness moderating relationship between AI-specific Product and Customer Advocacy

Callous customers tend to be indifferent to brands, unemotional towards the less fortunate and lack commitment loyalty, and consistency in general. (van Esch et al., 2021)A callous customer may exhibit behaviors such as being rude or dismissive towards customer service representatives, making unreasonable demands, or be unresponsive to attempts by the business to address their concerns or issues. When customer callousness interferes with the relationship between AI product and a company's customer advocacy, the effects can range from nothing to bad for business in a myriad of ways, all of which can end in them losing customers and establishing a bad reputation due to negative word of mouth and online unresolved complaints. Since customers are already wary or callous towards AI products and services, this can tip their already precarious relationship with the business at a moment's notice. This is one of the reasons, if not the most important that a firm should never disregard its moneymakers, and its customers no matter what the circumstance and especially not when it's dabbling with something as new and uncertain as an AI product or service. Their behavior with their customers can make or break a customer's trust in not just their firm but in AI in general which can be a huge impact if used well.

Callous customers especially need a lot more from the business in terms of customer service because while regular customers especially loyal ones are up for the ride no matter what new innovative product or service the company introduces; indifferent customers feel no emotion

or only negative emotions regards to too much change especially if they don't know how to utilize the innovative service/product to their benefit. It can make them lash out or leave the business in favor of another 'un-complicated' business that might give them the same products/services without the complexity of learning something new and different like AI.

It all depends on the firm's interaction with these customers and how much they value the callous ones. Because as much as customer advocacy results in strong, long-lasting relationships with customers, callous customer behavior can destroy all the progress the company and AI, in general, have made over the years.

H₈: *Customer Callousness moderates the impact of AI-specific products on Customer Advocacy.*

3. Research Methodology

3.1 Research Approach

There are two approaches that we can use while conducting research such as deductive and inductive approach. As our research is based on quantitative research and it is also expanding the existing knowledge and research material on AI and its use case in consumer market that's why we are using deductive approach.

3.2 Data Collection

Population is an entire arrangement of groups of individuals which select for the study (Saunders, 2009). The population for this research are the individuals (Students, Business owners, Employees as in programmers, teachers, designers and script writers etc.) who are likely to have basic understanding of AI and how it has become the necessity of the users. For instance, consider the usage of chatGPT, open AI, Dall-E and other free chatbots. Stutely's (2003) suggest that for statistical analysis minimum thirty sample sizes are required. Saunders gives the benchmarks for the study while constructing sample size. Saunders (2009) also suggests 150 samples 30 for each variable. Pedhazur (1997) discuss an approximate technique to determine the sample size is to have fifteen or more respondent for every construct another researcher (kline,2000) simplified this techniques and state that two or more respondents for each scale in construct. In this study seven variables are there, and 8 hypotheses have been constructed for example, SP-CA (AI-specific Product and Customer Advocacy) and CA-CR (Customer Advocacy and Customer Responsiveness). So, for 7 variables we need 30 responses each (210 total responses). Sampling system is a strategy in which research conductors choose their sample to test since it isn't achievable for researcher to look into entire population. Sample is a subset of individuals from population to analyze substitutes of the population. We have 2 types of system: chance sampling (probability sampling) and Non-Probability Sampling techniques. Hence here we are taking Non-Probability Sampling techniques and using its convenience sampling method.

3.3 Instrument

The questionnaire is the "efficient data collection mechanism when researcher knows exactly what is required and how to measure the variables of interest" (Lund, 2023). Dependent variables respond to the change in independent variables (Saunders et al., 2003). And in our case

the dependent variable is *Customer Responsiveness* (CR) introduced by (Merriam-Webster, 2021) which is being altered by the effects of independent variables *AI-Specific Product* (AI-SP) defined by(Zhang & Lu, 2021), *AI-enabled customer* (AI-EC) introduced by(Ameen et al., 2021),*AI-related CSR initiatives* (AI-CSR) and *AI-related ethical issues* (AI-EI) both of which are studied by(Du & Xie, 2020). The effects of independent variables AI-SP, AI-CSR, AI-EC and AI-EI on dependent variable CR is also moderated by the variable *Customer Callousness* (CC)(van Esch et al., 2021). The relationship and effects are explained by the variable *Customer Advocacy* (CA) as studied by (Nguyen et al., 2021)

3.4 Data Analysis

In this study, we used Smart PLS (3), a statistical tool that examines data using partial least squares modeling (PLS-SEM). The reason for choosing this analytical approach lies in the data and sample characteristics as well as the moderation and mediation analysis. This approach has become well-known in research in human resource management, marketing, and related fields. Hair Jr et al. (2021) proposed using PLS-SEM to predict the effect of the dependent variable. Similarly, (Moon & Russell, 2008) suggested that the method is suitable for predicting the set of equations of the proposed research model and building relationships between variables at the same time. This study uses PLS-SEM as a validated reporting approach for in-depth analysis in the field of management science. SEM is a versatile second-generation data exploration technique developed theoretically to examine linear and additive random relationships. This allows researchers to study relationships between constituents. SEM is considered the best approach to measure direct and indirect pathways because it analyzes latent structures that are difficult to study and unobservable. SEM consists of inner and outer model analyzes that examine the relationships between independent and dependent variables and between latent constituents and their observed pointers. PLS focuses on the analysis of variance that can be done with Smart PLS. Therefore, this approach is chosen for our study.

4. Results

Table 1:

Common Bias Method

Constructs	VIF
AI Specific Product (AI-SP1)	1.157
AI Specific Product (AI-SP2)	1.140
AI Specific Product (AI-SP3)	1.721
AI Specific Product (AI-SP4)	1.529
AI Specific Product (AI-SP5)	1.287
AI Specific Product (AI-SP6)	1.163
Customer Callousness (CC1)	1.017
Customer Callousness (CC2)	1.017
Customer Advocacy (CA1)	1.027
Customer Advocacy (CA2)	1.027

AI Related CSR Initiative (AI-CSR1)	1.393
AI Related CSR Initiative (AI-CSR2)	1.383
AI Related CSR Initiative (AI-CSR3)	1.201
AI Enabled Customer (AI-EC1)	1.239
AI Enabled Customer (AI-EC2)	1.320
AI Enabled Customer (AI-EC3)	1.359
AI Enabled Customer (AI-EC4)	1.302
AI Enabled Customer (AI-EC5)	1.351
AI Related Ethical Issues (AI-EI1)	1.017
AI Related Ethical Issues (AI-EI2)	2.137
AI Related Ethical Issues (AI-EI3)	1.803
AI Related Ethical Issues (AI-EI4)	1.846
AI Related Ethical Issues (AI-EI5)	1.412
AI Related Ethical Issues (AI-EI6)	1.423
Customer Responsiveness (CR1)	1.333
Customer Responsiveness (CR2)	1.333

4.1 Common Biased Method

In this study, we used the common method bias of testing the collected data, it may occur due to customer callousness and AI-related ethical issues. Following (Podsakoff & Organ, 1986) Harman's 1-factor test was conducted with the multiple constructs in the current research model which includes the variables customer advocacy, customer responsiveness, AI-related CSR initiatives, and AI-specific product so the sample which is used in this study has no significant concern with regard to common method bias (Saeed & Shafique, 2020).

4.2 Variance inflation factor (VIF)

Table 1 summarized the values of VIF which is conventional and perhaps the most important one for analyzing common method bias. The VIF values of AI-SP1, AI-SP2, AI-SP3, AI-SP4, AI-SP5 and AI-SP6 are 1.157, 1.140, 1.721, 1.529, 1.287, and 1.163. The VIF value of CC1, and CC2, are 1.017, and 1.017. The VIF value of CA1, and CA2, are 1.027, and 1.027. The VIF values of AI-CSR1, AI-CSR2, and AI-CSR3 are 1.393, 1.383, and 1.201. The VIF values of AI-EC1, AI-EC2, AI-EC3, AI-EC4, and AI-EC5 are 1.239, 1.320, 1.359, 1.302, and 1.351. The VIF values of AI-EI1, AI-EI2, AI-EI3, AI-FI4, AI-EI5 and AI-EI6 are 1.017, 2.137, 1.803, 1.846, 1.412, and 1.423. The VIF values of CR1 and CR2 are 1.333, and 1.333.

Table 2:

Reliability Analysis And Convergent Validity

Construct Name	Items	Outer loadings	Cronbach's Alpha	CR	AVE
AI Specific Product	AI-SP1	0.532			
	AI-SP2	0.403			
	AI-SP3	0.832	0.683	0.789	0.396
	AI-SP4	0.758			
	AI-SP5	0.596			
	AI-SP6	0.556			
AI Enabled Customer	AI-EC1	0.628			
	AI-EC2	0.708			
	AI-EC3	0.604	0.742	0.819	0.432
	AI-EC4	0.612			
	AI-EC5	0.640			
AI Related CSR Initiative	AI-CSR1	0.814			
	AI-CSR2	0.747	0.666	0.816	0.598
	AI-CSR3	0.757			
AI Related Ethical Issues	AI-EI1	0.379			
	AI-E2	0.803			
	AI-EI3	0.684	0.697	0.756	0.361
	AI-EI4	0.747			
	AI-EI5	0.385			
	AI-EI6	0.450			
Customer Callousness	CC1	0.696	0.229	0.720	0.564
	CC2	0.802			
Customer Responsiveness	CR1	0.876	0.666	0.857	0.750
	CR2	0.855			
Customer Advocacy	CA1	0.690	0.279	0.732	0.579
	CA2	0.826			
Moderating	Customer Callousness x AI Specific Product	1.000			

Above Table 4 shows the results of the reliability and validity testing of the measurement scales.

4.3 Internal Consistency

This study has determined the internal consistency of the constructs through Cronbach's values. Study has presented the results in Table 2 Cronbach's alpha values were above the threshold of

0.70 set by (Gadermann et al., 2012): AI-SP (α = 0.683), AI-EC (α = 0.742), AI-CSR (α = 0.666), AI-EI (α = 0.697), CC (α = 0.229), CR (α = 0.666), and CA (α = 0.279).

4.4 Convergent Validity

Table 2 summarizes the result of composite reliability (CR) and average variance extracted (AVE). CR values were above the threshold of 0.7 (Hair et al., 2017): AI-SP (CR = 0.789), AI-EC (CR = 0.819), AI-CSR (CR = 0.816), AI-EI (CR = 0.756), CC (CR = 0.720), CR (CR = 0.857), CA (CR = 0.732). The AVE values were also above the threshold of 0.50 (Chin, 2010): AI-SP (AVE = 0.396), AI-EC (AVE = 0.432), AI-CSR (AVE = 0.598), AI-EI (AVE = 0.361), CC (AVE = 0.564), CR (AVE = 0.750), CA (AVE = 0.579). Factor Loadings were significant, and t-values were above the threshold value of 0.50 (Hair et al., 2017). The values of $CR > 0.7$ (Hair et al., 2017) and $AVE > 0.5$ (Chin, 2010) were above the threshold values and fulfilled the standard requirements for validity (Schuberth et al., 2018).

The Table 4 indicates that individual items of each item are loaded higher in their relevant construct as compared to other constructs due to their cross-loading difference being higher than the recommended criteria of 0.1 recommended by (Gefen & Straub, 2005), it also confirms the discriminant validity.

Table 3 :
Heterotrait-Monotrait Ratio (HTMT)

	AI Related CSR Initiative	AI Enabled Customer	AI Related Ethical Issues	AI Specific Product	Customer Advocacy	Customer Callousness	Customer Responsiveness	Customer Callousness x AI Specific Product
AI Related CSR Initiative								
AI Enabled Customer	0.883							
AI Related Ethical Issues	0.423	0.948						
AI Specific Product	0.783	0.348	0.716					
Customer Advocacy	0.178	0.273	0.605	0.855				
Customer Responsiveness	0.618	0.734	0.353	0.740	0.903	0.622		
Customer Callousness	1.198	0.189	0.708	0.354	0.862	0.345	0.865	
Customer Callousness x AI Specific Product	0.359	0.482	0.262	0.659	0.730	0.301	0.447	0.765

Heterotrait-monotrait ratio (HTMT) is the latest criterion for evaluating and measuring the discriminate validity. As shown in Table 3, HTMT values of these constructs were less than the recommended values 0.9 (Henseler et al., 2015) which thereby verify that the discriminate validity is established.

Table 4:
Discriminant Validity

	AI Related CSR Initiative	AI Enabled Customer	AI Related Ethical Issues	AI Specific Product	Customer Advocacy	Customer Callousness	Customer Responsiveness
AI Related CSR Initiative	0.773						
AI Enabled Customer	0.632	0.657					
AI Related Ethical Issues	0.214	0.224	0.601				
AI Specific Product	0.556	0.691	0.336	0.629			
Customer Advocacy	0.487	0.578	0.388	0.548	0.761		
Customer Callousness	0.444	0.496	0.375	0.533	0.725	0.751	
Customer Responsiveness	0.428	0.538	0.307	0.511	0.628	0.563	0.866

Note: The square root of the VE is shown on the diagonal, the correlations between the constructs under shown under the diagonal.

4.5 Discriminant Validity

Fornell-Larcker criterion is used to assess discriminant validity. The construct is unique as it is established by the discriminant validity additionally it captures the phenomenon that is not observed by others. The correlations between constructs were not higher than the square root of the variance extracted between each pair of factors (Yusuf & Busalim, 2018). Table 6 shows that the square root of AVE is higher than the correlation values suggesting the constructs are unique and distinct.

4.6 Structural Model

The study has generated a structural model based on bootstrapping of 5,000 subsets. The structural model is presented and the model and hypotheses' results are in subsequent sections.
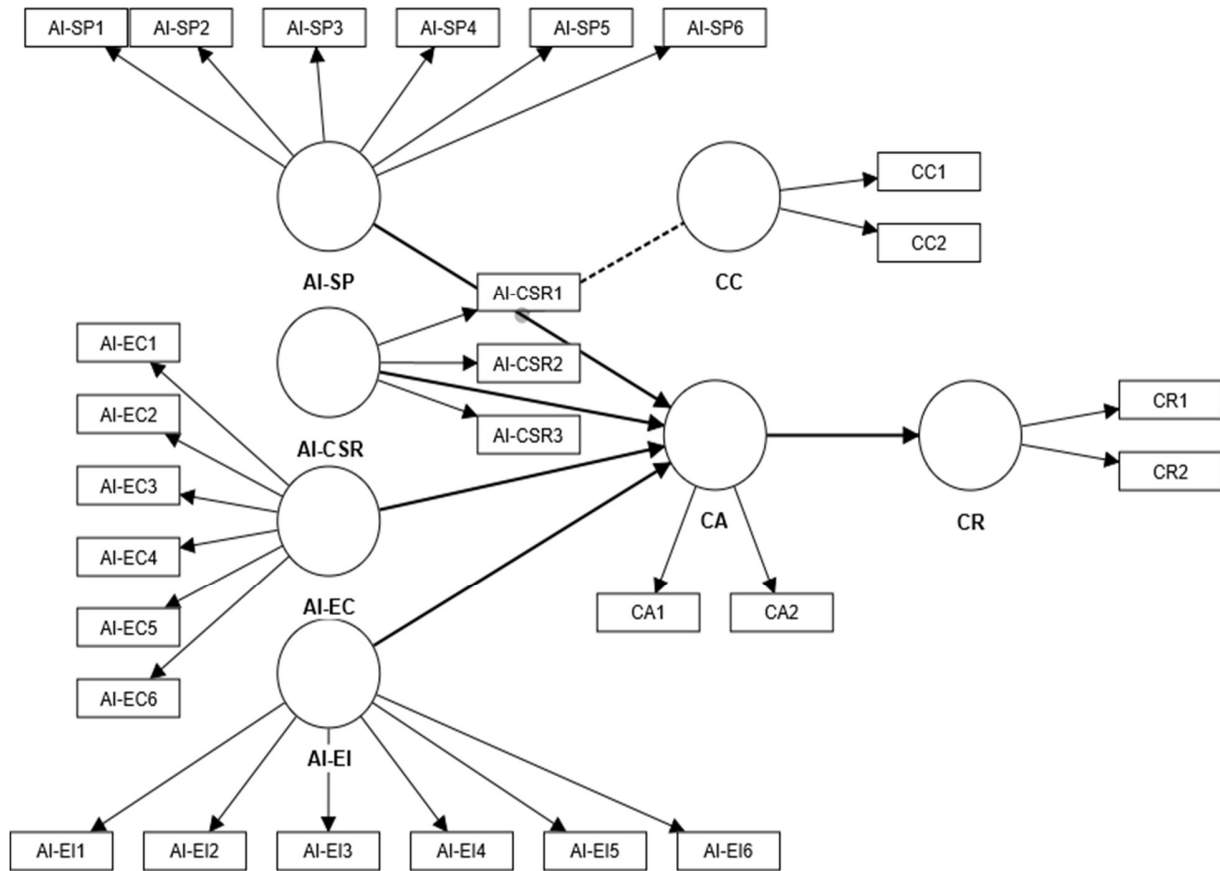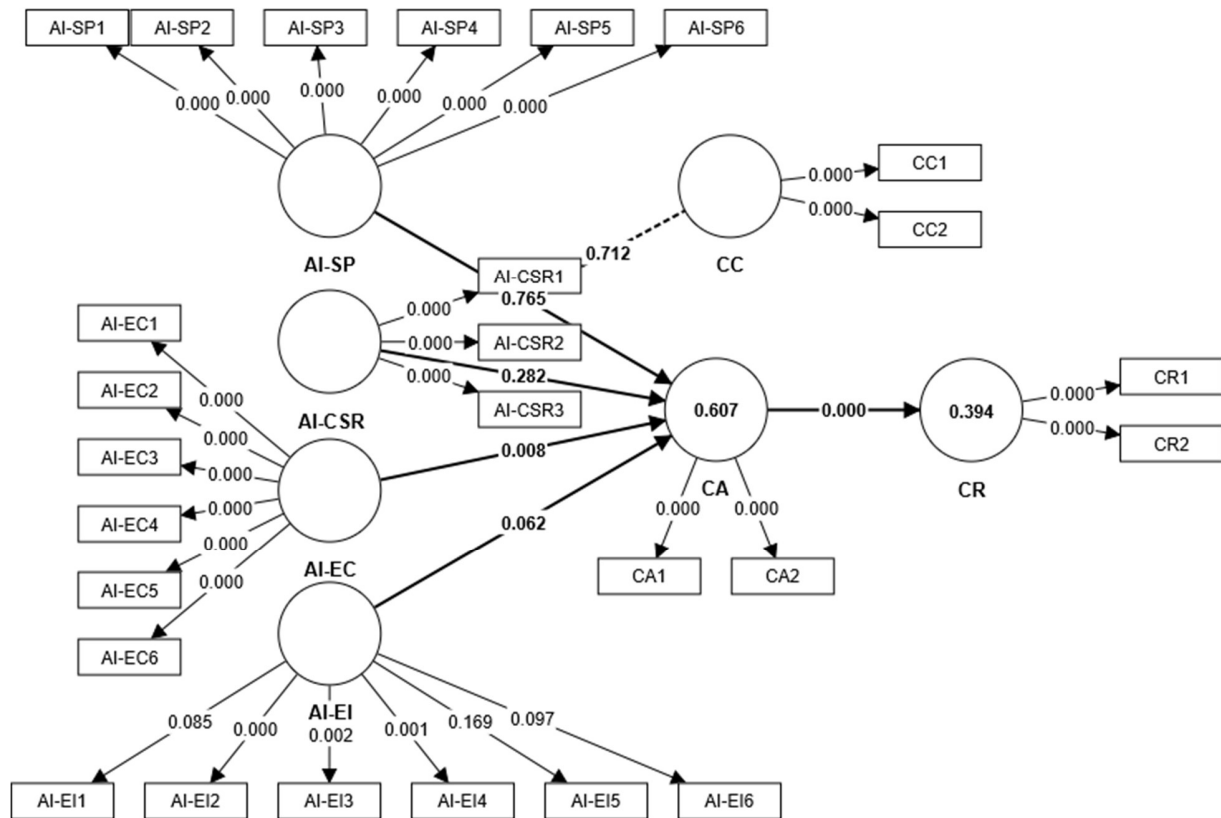
Figure 2

Figure 3 Measurement Model

4.7 Predictability of The Model

This research has determined the predictability of the model using its R square values. The adjusted R square values are greater than 0.10, suggesting that the model has suitable predictive power.

Table 4:

Predictability of the Model

	R-Square	R-Square Adjusted
Customer Advocacy	0.607	0.591
Customer Responsiveness	0.394	0.390

4.8 Hypothesis Results

Table 5 shows the hypotheses testing which indicates that three hypotheses out of seven are found to be supportive. AI-related CSR initiatives (H1) have not a significant determinant influence on customer advocacy with t-statistics 1.076 (p = 0.282). AI-enabled customer (H2) has a significant impact on customer advocacy with t-statistics 2.655 (p = 0.008). AI-related Ethical Issues (H3) has a significant influence on customer advocacy with t-statistics 1.869 (p = 0.062). AI-specific product (H4) has not significant impact on customer advocacy with t-statistics 0.299 (p = 0.765).

Customer Advocacy significantly mediates between AI-specific product and customer responsiveness (H5) with t-value 7.673 (p = 0.000). Customer Callousness has a significant influence on customer advocacy (H6) with t-value 6.305 (p = 0.000). Customer Callousness does not significantly plays a moderating role between AI-specific products and customer advocacy (H7) with t-statistics 0.370 (p = 0.712). Thus H3, H4, and H7 are supporting the study whereas H1, H2, H5 and H6 were not supporting the research.

Table 5:

Hypothesis Testing

Hypothesis	Structural relation	Std. deviation (STDEV)	T-Values	P-Values	Beta	Result
H1	AI Related CSR Initiative -> Customer Advocacy	0.066	1.076	0.282	0.001	Rejected
H2	AI Enabled Customer -> Customer Advocacy	0.083	2.655	0.008	0.006	Accepted
H3	AI Related Ethical Issues -> Customer Advocacy	0.060	1.869	0.062	0.003	Rejected
H4	AI Specific Product -> Customer Advocacy	0.082	0.299	0.765	0.014	Rejected
H5	Customer Advocacy -> Customer Responsiveness	0.082	7.673	0.000	0.001	Accepted
H6	Customer Callousness -> Customer Advocacy	0.082	6.305	0.000	-0.013	Accepted

H7	Customer Callousness x AI Specific Product -> Customer Advocacy	0.042	0.370	0.712	-0.017	Rejected

5. Discussion

Current study has offered and tested seven hypotheses, and the results support only four hypotheses. The study has discussed the results and their relevance with previous literature in the following section.

Hypotheses (H1) states that AI-related CSR initiatives (H1) have not determinant influence on customer advocacy with the effect size ($\beta = 0.001$). This suggests that the influence of CSR activities on consumer advocacy depends greatly on how customers perceive the CSR efforts in terms of their relevance and closeness. If the customer perceives the CSR activities as being far away, either in terms of space or time, from their immediate context or interests, the influence of these activities on consumer advocacy may be less significant or direct. This study corroborates the idea that the correlation between CSR initiatives and consumer advocacy is neither simple or uniformly impactful, but rather contingent on other elements such as the   customers' perception of the CSR activities' relevance and immediacy (Aljarah et al., 2022).

Hypotheses (H2) show that AI-enabled customers have determinant influence on customer advocacy with the effect size ($\beta = 0.006$). This study emphasizes the potential of AI-powered services to greatly enhance customer engagement and happiness, resulting in a subsequent rise in consumer advocacy. The study indicates that incorporating AI into service contacts enhances the customer experience by tailoring it to individual preferences and needs, resulting in improved efficiency and a stronger emotional bond with the service provider. The utilization of AI to improve customer experience is a crucial factor in transforming clients into strong supporters of the business or service. Hence, AI-powered services have a significant impact on consumer advocacy by enhancing the quality of client interactions and satisfaction.(Huang & Rust, 2021).

Hypotheses (H3) states that AI-enabled customers have not   significant influence on customer advocacy with the effect size ($\beta = 0.003$). This study indicates that the use of artificial intelligence in digital marketing may not consistently and efficiently reach out to clients, especially those who are more susceptible, within the financial services industry. The report emphasizes that although AI can provide advanced data analysis and customization abilities, it may lack the essential human connection necessary for achieving the best consumer experience and engagement. The lack of customization and comprehension of intricate human emotions and behaviors might result in less impactful advocacy among consumers. Essentially, depending solely on AI without the nuanced comprehension and empathy that human connection offers, may result in incomplete consumer engagement or the failure to convert them into brand evangelists. The

results suggest that the lack of human contact in AI-powered consumer interactions may restrict the ability to cultivate robust customer connections and advocacy. (Mogaji et al., 2020).

Hypotheses (H4) states that AI-specific product has not determinant influence on customer advocacy with the effect size ($\beta = 0.014$). The study indicates that AI-powered digital marketing tools, despite their advanced capabilities, may lack the human element and emotional intelligence necessary to comprehensively comprehend and connect with clients' wants and preferences. The existence of this gap might result in diminished consumer engagement and advocacy, since AI systems may be unable to adequately address the many emotional and psychological elements that impact customer choices and loyalty. Essentially, the use of AI for consumer connection and marketing, without the nuanced comprehension and empathy that human interaction provides, may restrict its ability to cultivate robust customer relationships and advocacy (Kamal & Himel, 2023).

Hypotheses (H5) states that Customer Advocacy has significant mediation between AI-specific product and customer responsiveness with the effect size ($\beta = 0.001$). This study indicates that the quality of AI services has a strong correlation with both the happiness and engagement of both internal and external customers. These characteristics are essential in mediating the link between service quality and client loyalty. Wei and Prentice (2022) found that AI-enabled services of high quality improve customer happiness and engagement, resulting in higher levels of consumer advocacy. This advocacy serves as an intermediary in the connection between the quality of AI services and the responsiveness of customers. Put simply, when clients see AI services of superior quality, they are more inclined to endorse the business or product, resulting in increased receptiveness from other potential customers.

Hypotheses (H6) states that customer callousness has determinant influence on customer advocacy with the effect size ($\beta = -0.013$). The research conducted by Kumar Madupalli and Poddar (2014) is titled "Problematic customers and customer service employee retaliation." This study investigates the impact of troublesome client behaviors on emotional dissonance and emotional resource depletion among customer service professionals, resulting in increased levels of staff retribution. Within the realm of customer indifference, this study posits that when consumers exhibit hostile, demanding, or otherwise challenging behaviors, it might elicit a detrimental emotional reaction from service staff. This response might appear as a diminished inclination to advocate for the customer's wants or interests. Put simply, when consumers exhibit callous or inappropriate conduct, it can undermine the quality of the service relationship, resulting in a reduced chance of personnel advocating for these clients. Customer requirements or preferences. Put simply, when consumers display callous or troublesome conduct, it can diminish the quality of the service contact, resulting in a reduced probability of personnel advocating for these clients.

Hypotheses (H7) states that Customer Callousness has not significantly plays a moderating role between AI-specific product and customer advocacy with the effect size ($\beta = -0.017$). The research conducted by Madupalli and Poddar (2014) is titled "Problematic customers and customer service employee retaliation." This study investigates the impact of troublesome client behaviors on emotional dissonance and emotional resource depletion among customer service professionals, resulting in increased levels of staff retribution. Within the realm of customer indifference, this

study posits that when consumers exhibit hostile, demanding, or otherwise challenging behaviors, it might elicit a detrimental emotional reaction from service staff. This response might appear as a diminished inclination to advocate for the customer's wants or interests. Put simply, when consumers exhibit callous or inappropriate conduct, it can undermine the quality of the service relationship, resulting in a reduced chance of personnel advocating for these clients.Customer requirements or preferences. Put simply, when consumers display callous or troublesome conduct, it can diminish the quality of the service contact, resulting in a reduced probability of personnel advocating for these clients (Ting et al., 2020). The current results have been validated with the results of previous studies.

5.1 Theoretical Implications

The exponential growth of AI-based products with their profound effects on individual and societal level, there is an immediate need to understand the ethical challenges and opportunities attached with AI based products. This study will evaluate the current status of AI-related company-customer relations. It will also deliberate how companies still be profitable while shaping the future of ethical AI along with loyal customer retention. This research aims to expand knowledge regarding AI and AI related ethical consequences, CSR initiatives and business-based relationships in a world powered by AI.

5.2 Practical Implications

This study brings forth several practical implications, some of them include the following. Firstly, this gives us insight into how AI is being used for both good and evil, in business world and in our society and makes it easier for us to learn and understand its ethical uses in both. Secondly, a firm can use this analysis on AI and customer relationships for studying ethical issues and recognizing corporate initiatives they could apply to resolve those.

Third, using AI for CSR can build a positive brand image in the eyes of society and increase profits and customer retention. Using the guidance of AI for firm's operations and CSR can lead to competitive advantage and longevity for the firm. A company can develop long term competitive advantage by taking such CSR initiatives.

Last but not the least a periodic monitoring system involving the managers should be established to scale the effectiveness of AI based CSR initiatives and their implications on company, customer and society.(Du & Xie, 2020)

5.4 Conclusion

Artificial Intelligence is a new concept. A cutting-edge technology that learns from the available information and is capable of making decisions and doing things in a way that rivals a human's perspective. Artificial Intelligence products are useful, unbiased and can solve problems effectively and efficiently. But just as every other technology before AI had its downsides as much as it had benefits, so does AI but as a new technology which has not been adopted by the entire world and every field, it is almost impossible to know all the ways it can be used and abused. In this study, we shed light upon AI, what it is, what it does, its potential use in the business world, its effect on customers and how it has been used in awe-inspiring ways and abused in chilling

ways. At the end of the study, we have provided with limitations that can be used for further study on this amazing technology. AI is the future and it can do so much more than we can, it can be used to demolish all societal and environmental problems and it can be used to destroy the society and environment too. It is up to us how, why, where and when we use this tool. It is us who will decide if it's a blessing in disguise or a disaster sent to punish humanity.

5.5 Limitations and Future Direction

The current research has some limitations which can be carefully taken as future research opportunities.

- AI is such an unexplored field when it comes to corporate. The most AI has been used for is selling its premium services but that's about that. AI has massive potential, particularly in the areas of strategy designing, productivity, marketing and corporate social responsibility. There isn't enough data available about AI for firms to utilize.
- The lines about what use of what AI is ethical and what is not is also something that hasn't been made clear yet, especially as extensively as it needs to be with our rapidly-falling morals. What is ethical and what is not when it comes to AI in its current and potential future versions?
- How to hold firms and other AI users accountable and ensure customer/user's data privacy and ensure no illegal and unspecified use of this data is not being made?
- How should companies accurately gauge the extent of AI biases in their products and use the level of AI biases as a key parameter of product quality control?
- How to reduce biases regarding AI based products and how to make an ethical framework applicable to AI-enabled products? (Du & Xie, 2020)

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