Impact of Artificial Intelligence and Advertisement on Project Customer Engagement and Project Success in Project based Firm with Mediating Role of Brand Image

by

Sitara Ali

A thesis submitted in partial fulfillment for the
degree of Master of Science

in the

2023

Dedicated To My Parents and Siblings

CERTIFICATE OF APPROVAL

Impact of Artificial Intelligence and Advertisement on Project Customer Engagement and Project Success in Project based Firm with Mediating Role of Brand Image

by

Sitara Ali

Registration No: (MPM203006)

THESIS EXAMINING COMMITTEE

S. No.	Examiner	Name	Organization
(a)	External Examiner	Dr. Mubashir Hassan Zia	AIOU, Islamabad
(b)	Internal Examiner	Dr. Muhammad Kamran Naqi Khan	CUST, Islamabad
(c)	Supervisor	Dr. Lakhi Muhammad	CUST, Islamabad

———————————

Dr. Lakhi Muhammad
Thesis Supervisor
January, 2023

———————————

Dr. Lakhi Muhammad
Head
Dept. of Management Sciences
January, 2023

———————————

Dr. Arshad Hassan
Dean
Faculty of Management & Social Sciences
January, 2023

Author's Declaration

I, **Sitara Ali,** hereby state that my MS thesis titled "**Impact of Artificial Intelligence and Advertisement on Project Customer Engagement and Project Success in Project based Firm with Mediating Role of Brand Image**" is my own work and has not been submitted previously by me for taking any degree from Capital University of Science and Technology, Islamabad or anywhere else in the country/abroad.

At any time if my statement is found to be incorrect even after my graduation, the University has the right to withdraw my MS Degree.

(Sitara Ali)

Registration No: (MPM203006)

Plagiarism Undertaking

I solemnly declare that research work presented in this thesis titled "**Impact of Artificial Intelligence and Advertisement on Project Customer Engagement and Project Success in Project based Firm with Mediating Role of Brand Image**" is exclusively my research work with no remarkable contribution from any other individual. Small contribution/help wherever taken has been dully acknowledged and that complete thesis has been written by me.

I understand the zero tolerance policy of the Higher Education Commission and CUST towards plagiarism. Therefore, I as an author of the above titled thesis declare that no part of my thesis has been plagiarized and any material used as reference is properly cited.

I undertake that if I am found guilty of any formal plagiarism in the above titled thesis even after award of MS Degree, the University reserves the right to withdraw/revoke my MS degree and that HEC and the University have the right to publish my name on the HEC/University website on which names of students are placed who submitted plagiarized work.

(Sitara Ali)

Registration No: (MPM203006)

Acknowledgement

In the name of **Allah**, the most Merciful, the most Beneficent. Praise be to the Lords of all worlds. Prayer and peace be upon our **Prophet Muhammad**, his family and all of his companions. Special thanks to my parents for their untiring support and love throughout all the anxious moments and penciled deadlines.

Special Appreciation to my respected supervisor **Dr. Lakhi Muhammad** for his kind supervision and constant support. His valuable help of constructive comments and suggestions throughout the thesis work has contributed to the completion of this research. I am indebted to **Dr. Lakhi Muhammad** for his valuable guidance, encouragement and dedicated support that enabled me to complete my MS Degree Program.

I want to express my heartiest regards to my parents who always supported me morally, spiritually & prayed for my success and to my siblings for all the support and encouragement.

Sitara Ali

Abstract

This research aims to investigate impact of artificial intelligence, advertisement, brand image on project customer engagement and project success. Moreover, the research also considers whether brand image mediates the relationship between artificial intelligence, advertisement and project success. Data was gathered from 325 individuals working in project-based firms (information technology and customer interactive companies) in Pakistan. Data were analyzed by using SPSS v 25.0. Results revealed that artificial intelligence and advertisement have a positive association with brand image. Additionally, brand image mediates the association among artificial intelligence, advertisement and project success. It was also found that project customer engagement has positive association with project success. These results have theoretical and practical implications particularly for project based IT firms. presence of asymmetric behavior among different industries.

Keywords: Artificial Intelligence; Advertisement; Brand Image; Project Customer Engagement; Project Success.

Contents

List of Figures

List of Tables

Abbreviations

AD	Advertising
AI	Artificial Intelligence
BI	Brand Image
DV	Dependent Variable
H	Hypothesis
IV	Independent Variable
MV	Mediating Variable
PCE	Project Customer Engagement
PS	Project Success

Chapter 1

Introduction

1.1 Background of the Study

Project based firms are using Artificial Intelligence as it allows them to digital transform retail activities; these technologies have several implications for marketing activities to make their performance better. One of these technologies is Artificial Intelligence (AI) that enables marketers to better understand and target customers and customizing marketing actions (Davenport, Guha, Grewal, & Bressgott, 2020). In project based IT industry AI gives advertisers new strategies and instruments, which assist them with accomplishing their objectives; man-made intelligence presents benefits to shoppers, advertisers and society in general through working on the creation, advancement and circulation of significant worth. McKinsey estimates that man-made intelligence might convey an extra financial result of around US$13 trillion by 2030, expanding worldwide Gross domestic product by around 1.2% every year.

In recent years, Man-made intelligence turns into an arising pattern in a wide range of fields; promotion is one of these fields. Many companies and the showcasing groups that help them are quickly taking on keen innovation answers for empower functional productivity while further developing the client experience. These shrewd arrangements frequently come as Artificial Intelligence (AI) promoting stages. Through these stages, advertisers can acquire a more nuanced, comprehensive comprehension of their objective audiences' artificial intelligence

fundamentally changes the idea of marketing; AI involves tremendous changes in the manner that consumers connect with organizations enemy model man-made intelligence showcasing can assist you with conveying customized messages to clients at suitable places in the customer lifecycle. It can likewise assist computerized advertisers with distinguishing in danger clients and target them with data that will get them reconnect with the brand With the advancement of regular language handling through artificial intelligence, chat bots are currently being utilized to increase client support specialists. Clients with additional essential questions can allude to chat bots which will give quick, exact responses. They will actually want to use past inquiries and verifiable information to convey customized results. This gives time back to client support specialists to deal with muddled demands that need more human subtlety.

Brand Image is the aggregate impression clients have of an organization. Each experience clients have with an organization adds to that organization's image. In light of that definition, the job of computer based intelligence in making a real brand experience arrives in a couple of structures. As advertisers make increasingly more video content, they can without much of a stretch reject hard of hearing and not good at learning clients (Schultz & Block, 2015). Physically produced subtitles take time and may not be really important for advertisers confronting a packed substance schedule. Enter man-made intelligence created video subtitles, which permit brands to easily further develop video availability. Usable even on live video, simulated intelligence controlled inscriptions add a profundity of involvement to video content. For those with visual disabilities, the picture rich universe of web-based entertainment showcasing can be trying to explore, not to mention appreciate. Facebook and Instagram's underlying computer based intelligence created picture inscriptions include is separating those obstructions (Li, Ongpauco, Rubante, et al., 2022).

This implies more individuals can appreciate virtual entertainment content, whether or not a brand has added a picture portrayal. Past eliminating obstructions in availability, computer based intelligence can likewise eliminate boundaries in understanding. For some advertisers, gathering client criticism is similarly illuminating and time-consuming. While brand surveys and online notices give a window

into client brand discernments, they're in many cases concealed in the profundities of crude information. Man-made intelligence controlled feeling examination allows simulated intelligence to accomplish the messy work of figuring out information to create experiences on the manner in which clients see brands. Past straightforward "positive," "negative" and "nonpartisan" discernments, more up to date techniques for artificial intelligence driven opinion examination are in any event, starting to remove mockery in client criticism. Advertisers could all the more promptly acknowledge computer based intelligence's part in availability, examination and personalization, however really imaginative simulated intelligence can in any case be estranging. Yet, even simulated intelligence fit for producing plan and content has a significant part to play in making brand encounters more legitimate (Quynh, 2019).

Client commitment is undeniably more than a value-based relationship. It's not generally restricted to deals, administrations and backing and is a continuous cycle where an organization expects a client's requirements and gains their steadfastness. In 2011, Gartner assessed that 85% of client collaborations with a venture wouldn't include a human by 2020. In 2016, Accenture assessed that computer based intelligence could twofold yearly monetary development by 2035. It can as of now alter the manner in which brands cooperate with clients. Lifting client care through strategies like hyper-personalization, quicker help work area directing and constant admittance to important information. As the quantity of channels organizations use to speak with their clients develops, it's not difficult to see the reason why computer based intelligence advances like bots, remote helpers and correspondence stages controlled by AI are on the ascent. Kate Leggett, VP and head examiner at Forrester Exploration, as of late expounded on individuals' rising assumptions from client care. They expect, she says, for "you to esteem their time, to make commitment simple, and to convey answers and goals in an exceptionally private way and with regards to their activities and journeys." AI offers marks the chance to regard every client as though they're their only one. Artificial intelligence fueled client support allows you to see clients on a singular level and afterward convey them customized showcasing, deals and service. If you've at any point thought about how your program "knows" you were simply exploring

the most recent pattern in yoga, you can say thanks to man-made intelligence for assisting you with tracking down significant proposals sometime later. Organizations, on the other side, can gain what to offer individual clients from the data artificial intelligence assembles on a singular's movement and purchasing behaviors. As indicated by Hub spot, more than 90% of clients say they're bound to make rehash buys from brands that offer great client care. At the point when one-on-one help is important, marks fundamentally associate with clients in two ways: people and bots. Clients and brands the same stand to acquire huge advantages from artificial intelligence. To capitalize on the innovation, associations should make a point to utilize it wisely and offer customized encounters their clients recall long after an exchange is finished. As creator Paul Greenberg just however impeccably put it: "In the event that a client likes you and keeps on preferring you, they will work with you. On the off chance that they don't, they will not."

Computerized reasoning (man-made intelligence) is reshaping the way in which publicizing works in shocking ways. In 2018, Lexus delivered an ad totally prearranged by simulated intelligence. The organization utilized IBM Watson, a computer based intelligence framework, to dissect 15 years of grant winning vehicle ads. Watson distinguished which components of effective promotions reverberated most with audiences. Today, artificial intelligence is rapidly turning into the fate of publicizing. Promoters are as of now utilizing computer based intelligence to recognize and portion crowds, fabricate advertisement imaginative, test promotions, further develop promotion execution, and upgrade spend — all consequently, progressively, at scale. Execution enhancement is one of the key use cases for man-made intelligence in publicizing. AI calculations are utilized by economically accessible answers for investigate how your promotions perform across unambiguous stages, then, at that point, give proposals on the most proficient method to further develop performance. In a few cases, these stages might utilize simulated intelligence to keenly robotize activities that you realize you ought to be taking in light of best works on, saving you critical time. In different cases, they might feature execution issues you didn't know you had. In the most developed cases, artificial intelligence can naturally oversee promotion execution and spend improvement, pursuing choices completely on its own about how best to arrive at

your publicizing KPIs and suggesting a completely enhanced budget. In another case, there exists no less than one stage that distributes promotion dollars consequently across all channels and crowds, so people can zero in on higher-esteem vital errands, as opposed to manual mystery about what works and what doesn't. Thanks to stages like Facebook, LinkedIn, Amazon, and Google, you have a truly vigorous arrangement of shopper information with which to target crowds, both through work area and portable promoting. Yet, physically doing so isn't generally efficient.AI can help here by taking a gander at your past crowds and promotion execution, gauge this against your KPIs and continuous execution information coming in, then recognize new crowds liable to purchase from you (Lewis et al., 2016).

One of the principal stresses of undertaking the executives chiefs is knowing, with some expectation, assuming the venture they are overseeing will find true success or not. This stress isn't a speculating game. The information understanding capacity of computer based intelligence can give continuous experiences into project measurements. It can empower project chiefs to pursue information driven choices in view of previous experience. For example, Cap Gemini utilizes the mental processing framework IBM Watson to further develop asset arrangement in projects through productive asset arranging. Project administrators can turn unpredictable tasks around by adding applied knowledge to execution checking apparatuses. Along these lines, you can follow progress and remain admonished of potential dangers that compromise project conveyance. Each undertaking is inclined to gambles. Artificial intelligence can precisely foresee the quantity of imperfections or quality overall in overseeing projects. Utilizing simulated intelligence models at various phases of activities can help recognize and alarm groups in the event that the cycle is hazardous. For instance, artificial intelligence can notice the genuine advancement and contrast it with the arranged timetable. To guarantee your tasks stay on target, the perfect individuals should deal with them. Computer based intelligence digs into the historical backdrop of past activities, which give you continuous data on asset commitment. For example, the director can make the task group and relegate jobs and obligations to individual colleagues. Simulated intelligence instruments additionally guarantee that the task chiefs deal

with the undertaking successfully and stick to cutoff times. Prescient examination is utilized to make expectations about future occasions. It can create future bits of knowledge in light of verifiable information and examination methods, for example, measurable demonstrating and (Hoffman & Novak, 1996). Organizations can use past and current information to gauge patterns and ways of behaving dependably. Man-made consciousness is changing the way in which organizations work, and undertaking the board is a critical region decidedly impacted. The uses of simulated intelligence in project the executives are exhaustive. These arrangements furnish the task director with upgraded precision, technique, and backing. It has likewise further developed the undertaking chiefs' ability to appreciate people on a profound level and imagination and discredited individual dynamic predispositions which brings about high pace of venture achievement (He, Wang, Chan, & Xu, 2021).

Accordingly, advertisers need to set themselves up for the progressions that come in the period of Artificial Intelligence; Finding out about the impact of artificial intelligence on promoting becomes urgent. On the other hand, the depths of research about the impact of Artificial Intelligence on consumer behaviors are rare, which hinder marketers to apply such technology. There is a need for marketers to comprehend how they can involve artificial intelligence in their showcasing exercises to enhance their brand image, increase customer engagement in order to obtain project success and customer engagement in order to obtain project success.

1.2   Gap Analysis

Artificial Intelligence is affecting the possible destiny of every single industry and every person. It has probably gone as the central driver of emerging advances like tremendous data, mechanical innovation and IoT, Promoting and it will continue to go probably as a mechanical pioneer from now into the indefinite future. Employees' degree of input is determined by their psychological association to the company. Only a few researchers have looked at its impact on Brand image and customer engagement and the number of research conducted in our country is far

less than researches conducted internationally, the current study aims to investigate how does AI impacts the field of marketing targeting the companies working on AI in Pakistan with larger sample data then past.

1.3   Problem Statement

Artificial intelligence (AI) is one of the many used technologies worldwide right now, the researchers from all over the world are trying to find solutions, issues, benefits, disadvantages and the other aspects of different technologies of AI. Pakistan is one of the countries with rising usage of AI technologies but very less work done in the research sector for AI or the sample data in the researches held has not been sufficient. For these reasons the Project based Firms that are using AI don't clearly know how AI can impact their services especially in the advertisement area.

1.4   Research Questions

The goal of this study is to find the answers to the following research questions:

Research Question 1

What is the relationship between Artificial Intelligence and brand image?

Research Question 2

Does advertisement effects a brand image?

Research Question 3

Does brand image mediates the relationship between Artificial Intelligence and project customer engagement?

Research Question 4

Does brand image mediates the relationship between advertisement and project customer engagement?

Research Question 5

Does brand image mediates the relationship between advertisement and project success?

Research Question 6

Does brand image mediates the relationship between Artificial Intelligence and project success?

1.5   Research Objectives

1. To examine the relationship between Artificial Intelligence and brand image.

2. To examine the relationship between Advertisement and brand image.

3. To examine the relationship between brand image and project customer engagement.

4. To examine the relationship between brand image and project success.

5. To examine the mediating effect of brand image between Artificial Intelligence and project customer engagement.

6. To examine the mediating effect of brand image between Advertisement with project customer engagement.

7. To examine the mediating effect of brand image between Artificial Intelligence and project success.

8. To examine the mediating effect of brand image between Advertisement with project success.

9. To examine the relationship between project customer engagement and project success.

1.6   Significance of the Study

The current study adds to the writing in numerous ways. Firstly, the research explores the impacts of Artificial Intelligence and Advertisement on project success

and project customer engagement. Secondly, the study would also explore how does advertisement through AI impacts the brand image. It will provide insight to the organizations about Artificial intelligence and its impacts on advertisement targeting brand image and project customer engagement. In countries, like Pakistan, Artificial intelligence is becoming a topic of interest and is being implemented in very few organizations now. Thus, the present study would contribute both theoretically and contextually.

1.7 Supporting Theory

1.7.1 Natural Language Processing-NLP

Natural language Processing (NLP) is a part of man-made brainpower inside software engineering that spotlights on assisting PCs with understanding the way that people compose and talk. The field of study that spotlights on the cooperations between human language and PCs is called regular language handling, or NLP for short. Regular Language Handling (NLP) empowers simulated intelligence frameworks to investigate the subtleties of natural language to acquire importance among others, from blog passages, item audits, billions of day to day tweets, Facebook posts, and so on. NLP calculations have various purposes. Fundamentally, they permit engineers and organizations to make a product that grasps human language. Algo is an association involving NLP in Pakistan.

It sits at the crossing point of software engineering, man-made brainpower, and computational semantics. NLP drives PC programs that translate text beginning with one language then onto the following, answer spoken requests and summarize immense proportion of text rapidly even ceaselessly. There is a fair open door that a client could speak with NLP in sort of voice-worked GPS systems, electronic accomplices, talk to message correspondence programming, client care visit bots and other buyer solaces. Regardless, NLP in like manner expects a filling part in enormous business game plans that help with streamlining business undertakings, increase laborer effectiveness, and develop key business processes. A couple of NLP endeavors separate human text and voice data in habits that help the PC

with sorting out the thing it's ingesting. A piece of these endeavors consolidate the going with:

Discourse acknowledgment, Grammatical form labeling, Word sense, Co-reference goal, Feeling investigation, Regular language age and so forth. NLP is used to explore text, allowing machines to appreciate how individuals talk. This human-PC correspondence engages genuine applications like customized message frame, feeling examination, point extraction, named component affirmation, linguistic elements marking, relationship extraction, stemming, and that is only the start. NLP is typically used for text mining, machine translation, and mechanized question tending to. Normal language handling has a great many applications in business. As only one model, brand opinion examination is one of the top use cases for NLP in business. Many brands track feeling via web-based entertainment and perform virtual entertainment opinion examination. In web-based entertainment opinion examination, brands track discussions online to comprehend what clients are talking about, and gather knowledge into client conduct.

1.7.2 Cognitive Marketing

Cognitive Marketing is a type of showcasing that depends on artificial intelligence and purchaser conduct to make customized relationship with the client that can increment client engagement. It is a method for involving the mind's capacity to consider itself a method for shaping an association with a client and make brand unwaveringness and transformations which in the end helps in drawing in clients and making project progress. Mental promoting is about the client thus the focal point of missions that utilization this strategy is on the ideal interest group. This guarantees that missions are completely designated and really viable, eliminating different impacts that could influence how well the brand-to-client association is fashioned. Artificial intelligence, or 'mental', showcasing frameworks utilize modern processing power, huge information, and AI to further develop advertising execution. While mental promoting has not yet been sent generally, it before long will be. As per IDC, the greater part, everything being equal, will utilize mental advertising by 2022.

"What mental does is assist advertisers with zeroing in less on dreary everyday assignments and more in the master plan, pleasing the client. Today, advertisers spend almost 70% of their experience on unremarkable subtleties and only 30% planning and making encounters for clients." Harriet Green, senior supervisor of Watson Web of Things, and Business and Training at IBM. In the event that the reason for a mission is the client and their information is examined and utilized at each phase of its creation, in addition to the fact that there is a superior possibility making an association, it will probably bring about a more grounded one, which has various advantages for a brand.

One of the most incredible ways of making promoting efforts more powerful is to customize them to every individual from your interest group. Here artificial intelligence and mental advances truly become an integral factor, as you can utilize genuinely online way of behaving to all the more likely section your crowd thus adjust your directive for each gathering. One such large organization that has begun to utilize its own scientific device is IBM which will be the future of Mental Marketing. With IBM's Watson, Open topic utilized Man-made consciousness components like NLP (Regular Language Handling) Discourse to-text and Scientific categorization capacities to break down media specifies from 300,000 + everyday sources and score the importance of each notice for characterized classifications: Hair, Body, Age, Garments, Beauty. Many organizations are joining this promoting procedure with IBM like Toyota, Dove.

Chapter 2

Literature Review

2.1 Artificial Intelligence and Brand Image

Computerized reasoning is to be sure among the most astonishing utilizations of data innovation for cutting edge organizations, nonetheless, its impact on a few significant elements is barely tended to in writing. One of these viewpoints is brand picture of venture based firms. Vishnoi, Bagga, Sharma, and Wani (2018) carried out a comprehensive literature review and concluded artificial intelligence can help contemporary firms to serious areas of strength for have picture notwithstanding improved authoritative execution. The various parts of computerized reasoning assume a functioning part in acquiring the interest of the clients and at last outcome in reinforcing of connections of firms with their clients. Blake Morgan; a senior article contributor and a customer experience futurist claims that by the end of the year 2025, more than 95% of human interaction will be supported by A.I. only. It is also expected that by 2025, the A.I. industry will hit a benchmark of USD 190 Billion. Technological development changes the advertising market. The broad utilization of the web(internet) has brought showcasing of items or administration into the internet based stage underscoring a memorability's in the worldwide market (Davenport et al., 2020). The internet assists organizations with doing their business in a computerized stage like online entertainment, online business sites to extend the quantity of clients by specific marked/branded items. In the ongoing situation computerized reasoning is utilized widely to send functional promoting

that incorporates ID of risks, focusing of clients, brand publicizing and evaluating to expand the benefits (Marinchak, Forrest, & Hoanca, 2018).

In the computerized age, artificial intelligence brings a huge effect and change through promoting correspondence and channels. Industry specialists have fought that computerized reasoning is getting a move on through huge data assessment, artificial intelligence, electronic diversion assessment, estimation route, generation showing, and various methods that is used for brands detectable quality in the overall market (Singh et al., 2019). Artificial Intelligence is more into motorized machines that portable like individuals, portrays the cycle integrates perspectives, set of direction/orders, recalling, decisive reasoning on genuine arranged lead. Thus, artificial intelligence is significantly changing brand inclinations, advertising procedures and client demeanor. Also, these approaching changes in the worldwide gig economy (for example in view of adaptable or brief positions, frequently includes interfacing with clients or clients through a web-based stage) extensively affects showcasing exercises (Wamba-Taguimdje, Wamba, Kamdjoug, & Wanko, 2020). Artificial Intelligence is a bunch of calculation machines that are planned or coded to individual gaining from information helps for expectations and remarkable exhibitions by means of Artificial Intelligence , mechanical cycle computerization and text mining, neutral network.

Further, Artificial Intelligence acts with the joining of the business and advertisers to make, sort out and information utilized in showcasing to sell their brands across the globe (Davenport & Ronanki, 2018). Artificial Intelligence in promoting has been tending to the regulatory, legitimate and key arranging cycle of deals, publizing, marketing, evaluating in the administration area. Accordingly, the great focal point of the ongoing study is to examine artificial intelligence suggestions on marketing and promoting information that brings business improvements. Artificial Intelligence is exceptionally effective in answering pragmatic issues and entering choices progressively or close to that by the substitution of a person. For example, chat bots is a Artificial intelligence application that help robots laid out by Booking.com which gives nonstop client assistance in 43 languages to address the queries asked by their clients . This exceptionally elaborate language handling

capacity helps chat bots ready to communicate with clients and propose those altered suggestions. It assists booking.com with expanding deals with improved on work. For business to business (B2B) companies, Aritificial Intelligence assists with changing enormous information into solid data and information that may be expected to foster successful advertising and deals techniques. The number of research in branding with Artificial Intelligence is very less/limited (Schultz & Block, 2015). The Artificial Intelligence impact on branding has gained a lot of importance/popularity in recent times. Brands are accomplished by wrapping average items with close to home and social relationship with the assistance of man-made intelligence to drive hierarchical achievement. Due to the recent advancements in Artificial Intelligence the process of searching of brands is completely changed because of the usage of keywords and audio search. A virtual assistant assists with further developing hunt usefulness all the more definitively and effectively to figure out the right brand. What's more, specialists contended that Artificial Intelligence would drive item development, also, clients ready to recognize the right brand of the items through product offering expansions. The studies in early times examine the importance of the recommendation of products/items given by Artificial Intelligence (Lee, Hosanagar, & Nair, 2018), which works in association with different brands in the era of digital (a combination technology, intervention of humans, technology, cloud and big data). Along with these findings there is a need to put more efforts to extant the literature about the impact of Artificial Intelligence in marketing as it lacks clarity.

Jain and Aggarwal (2020) analyzed the meaning of artificial intelligence in changing advertising methodologies and found that among every one of the advantages of computerized reasoning for firms, one of the most unmistakable element is brand picture. More recently, Rodgers (2021) used topical investigation of earlier writing to comprehend job of man-made consciousness for firms and contended that computerized reasoning is significant for brand picture of firms inside enhanced settings. In the greater part of the earlier examinations, it was seen that analysts had the option to sort out man-made reasoning as fundamental determinant of brand picture and hierarchical achievement. Therefore, it is projected that artificial intelligence would have positive impact on brand image of project based

firms.

Hypothesis 1: Artificial Intelligence positively affects the process of building brand image.

2.2 Advertisement has Positive Impact on Brand Image

The relationship of business with brand picture has been an area of interest for research specialists for late years, however concerning project-based firms, the significance of this relationship in extended because of the way that both promotion and brand picture are fundamental for project based firms. Saydan and Dulek (2019) on direct of school students towards online promotions of different firms and assumed that for project based firms and various kinds of associations, sees ads unequivocally affect brand picture notwithstanding brand demeanor, brand mindfulness and brand devotion. Arbouw, Ballantine, and Ozanne (2019) analyzed the job of business concerning pragmatic brand regards and recognized that brand picture can be upheld by convincing use of promotion. This incorporates the substance of advancement alongside the plan and the component of adverting. Barely any new investigations have affirmed that for brands as well as firms, it is vital to concentrate entirely on promotion since it improves the brand picture and reinforces the connections of firms with clients (Li et al., 2022). Advertising is any part of non-individual show and progression of considerations, labor and items by a particular support to be paid (Kotler, Armstrong, Harris, & Piercy, 2017).

According to the Padget et al., the business can be able to used for encouraging a brand picture as it will get a space in the mind of gathering. Encounters with respect to associations correspondingly develop an enormous piece of brand picture as the conviction which made after the experience is extra striking strong regions for and in advance. As indicated by Meenaghan and Tony, the business is an inconceivably steady source to impel brand picture at affiliation, retail and thing level. Propelling make individuals cautious about the fundamental functionalities

of any brand in the best and controlled manner. In the event that the association profoundly wants to extend the showcasing projections, the association will coordinate fight in a technique for publicizing on television, printed media, radio and others. For the cycle to get exhibiting benefit the entire neighborhood, and clients the equivalent ought to understand and practice an ethical approach to acting which suggests that purchasers can't be constrained to purchase the items/organizations they shouldn't mess around. Consequently, it is speculated that advancement might be significant solid areas for an of brand picture for project based firms. According to: "is a wide range of paid on non-individual show and headway of considerations, work and items by the help. Publicizing can a propel way to the extent that expense to scatter, still up in the air to manufacture brand tendency or teach people."

Brand picture is a connection dynamic in memory when one contemplates a particular brand. One more comprehension of the brand picture is a bunch of convictions about specific brands (Meenaghan, 1995). Brand picture is by and large translated as the image of the word 'character' or 'reputation' or from a more modest perspective described as internal impression of an association which is confided in by the delegate. Purchasers who see the association as an association with a fair picture would be compelled to purchase things from these organizations referenced that a few elements of the brand picture comprise of: earnestness, fervor, skill, and complexity. While getting the brand image is a lot of brand affiliations molded in the characters of buyers. Purchasers who are familiar with using explicit brands will as a general rule have consistency with the brand.

According to Zhang et al. (2015), the brand picture is the impression of the brand as an impression of buyer relationship of the brand. The association's image suggests that the public impression of its corporate person. This insight relies upon what people know or think about the association concerned. As per Park et al., fanning out a brand picture is a very colossal propelling limit as it on occasion straightforwardly teams up with deal. As per the Gwinner et al., supporting an occasion give a critical forward leap to the brand picture as the brand got a tremendous rehash of thought in an unpretentious edge. It besides falls in the

gathering climate when you set up the occasion with such genial clarification so you can definitely get a delicate corner in the focal point of your typical clients. Other than Roth et al. said that what execution anticipates that a fundamental part should make uncommon brand picture as by a wide margin a large portion of individuals trust on execution than the assertions of mouth. While putting your image on the general situation, the affiliation ought to grasp the social and social possible additions of a specific space to get what's going on in the characters of neighborhood clients. Another specialist Graeff et al. likewise talked about that the use designs besides examine the picture of brand as it shows the level of relationship of clients with unequivocal brand concerning use.

One can without an entirely surprising stretch overview the reliability or obnoxiousness of brand picture by simply changing the utilization conditions and look at the reaction of normal clients. Faircloth et al., told that the brand mindset and brand picture construct brand value which is generally worried to directors. A brand having great picture in the market will legitimately draw in the preferable deal over the others so contribute a ton in the brand value. According to Fishbein and Ajzen (2011) there are assessment disposition, profound inclination, and the propensity of activities that are good or horrible, enduring from an individual against some item or thought. Promoting show the mentality of shoppers and the general demeanor towards the organization of the advertisements showed. Remembered for mentalities toward promoting is one individual's viewpoint on the comfort or bother got by an individual on the promotion and furthermore a general demeanor of shoppers towards publicizing. Influence or impact according to du Plessis et al. (2013) alludes to the capacity to control the most common way of promoting the watchers insight to conquer public detachment, snatch consideration, keep up with interest, and imbue items with solid maintenance. A portion of the variables that impact the effect is the worry and acknowledgment of the crowd to the messages passed on through media.

Therefore, it is projected that advertisement would have positive impact on brand image of project based firms.

Hypothesis 2: Advertisement has a positive effect on brand image.

2.3 Brand Image has a Positive Impact on Project Customer Engagement

The view of any brand in the personalities of purchasers is exceptionally basic for the association overall as it characterizes the brand picture of the firm (Quynh, 2019). For project based firms, brand picture turns out to be considerably more significant as these organizations look to acquire trust of their shoppers and foster positive discernment about their image contributions inside the personalities of the clients. It has been explored that brand picture is a basic element among different determinants that assume positive part in upgrading connections of brands with the clients (Szalaty & Derda, 2020). With more spotlight on web-based presence, purchasers can effectively look to study the brand, its contributions and online audits to foster positive or negative insight about that specific brand (Cambra-Fierro, Fuentes-Blasco, Huerta-Álvarez, & Olavarría, 2021). What drew in clients do to a great extent relies upon what organizations permit and what innovation empowers. A few instances of activities that drew in clients can perform are: they give thoughts, they do a piece of the work, they bunch up, co-make, they purchase, they support a brand or thing to family, mates or assistants and they give input. Hollebeek (2011) for the vast majority of the part portrays client responsibility as the level of enunciation of a solitary client's convincing, picture related and setting subordinate perspective portrayed by a level of foundation, ID and support in brand composed endeavors. One more persistent appraisal about client obligation is done by van Doorn et al. who propose that client commitment ways of behaving go past exchanges and might be characterized as "a customers' behavioral manifestations that have a brand or firm focus, beyond purchase, resulting from motivational drivers" (Van Doorn et al., 2010). The board practive as well as the scholarly community show a developing interest in grasping client commitment. According to Vivek et al., client commitment may be showed mentally, regularly, socially or inwardly. The psychological and profound parts of client responsibility solidify the experiences and impressions of clients while the direct and social parts get the help by current and probable clients, both inside and past the exchange conditions (Vivek, Beatty, & Morgan, 2012).

Brodie et al. propose that inside instinctive, exceptional business conditions, client responsibility today tends to a fundamental essential for delivering overhauled corporate execution, including bargains improvement, predominant high ground and productivity (Brodie, Hollebeek, Jurić, & Ilić, 2011). Client commitment straightforwardly influences shopper impression of your image picture previously, during, and after the buy. This commitment assumes a part in all promoting collaborations between your objective market and your business. Because of digitalization, the resources between your crowd and your image increase. And this expanded contact impacts how buyers feel about your image. Hence, getting one item, customers take a functioning interaction to learn about the brand, which shapes the brand's assumptions. This interaction guides purchasers to be more educated, associated, engaged, and dynamic, and these encounters influence client sentiments emphatically. Client connection can be named a good or gloomy inclination. Positive client commitment remembers positive ramifications for the short and long haul that are monetary and non-monetary for the organization. Client commitment can occur on the web or disconnected. Disconnected commitment is the idea of commitment, yet is subjectively not quite the same as online commitment on the grounds that web-based commitment offers ways of imparting and mingle which can't be supplanted by a disconnected medium. Disconnected commitment is predominantly a one-way correspondence, like verbal, surveys or references. As opposed to this, online media gives clients the open door not exclusively to connect yet additionally to talk about and collaborate in conversation discussions, sites or virtual entertainment stages as Facebook or Twitter. In this way, online client commitment is "a cognitive and affective commitment to an active relationship with the brand as personified by the website or other computer mediated entities designed to communicate brand value" (Mollen & Wilson, 2010).

Promoting composing will overall see online brands as additional things or organizations that meet unequivocal client needs through correspondence in a PC mediated environment (Hoffman & Novak, 1996). A thing can give most noteworthy significant benefits to students as purchasers; the brand ought to have a brand name or uniqueness that remembers it from its opponents and gives a beguiling experience. Meaning of brand experience is proposed by Brakus, Schmitt,

and Zarantonello (2009) as a pile of opinions, sensations, perceptions, and direct responses propelled by brand-related enhancements that are brand character parts. Promoting experts complement the emotive pieces of brand understanding and conceptual evaluation of brands, highlighting the meaning of brand character, images (Da Silva & Syed Alwi, 2008; Kwon & Lennon, 2009), or brand equity (Christodoulides, De Chernatony, Furrer, Shiu, & Abimbola, 2006).

According to this study Client commitment is one of today's key examination issues and can be characterized as initial, a mental course of the client that leads to the development of dedication. Second, a client's conduct indication towards a brand or a firm, past buy, coming about because of inspirational drivers and third, a mental express that is described by a level of energy, devotion, retention, and collaboration. Client commitment can happen in a disconnected or online climate though online client commitment has acquired expanding consideration because of the ascent of person to person communication destinations. Particularly long range informal communication locales, to be specific Facebook allow organizations the opportunity to connect with their clients and expected clients to more prominent collaboration. Client Commitment is considered as an immediate and deliberate asset commitment from shoppers where the organization will get input, ideas or thoughts as the need might arise as another type of organization value added, furthermore, the worth added center means to make a Brand Picture (Merz, He, & Vargo, 2009). Lian and Yoong (2018) studied brand image and customer engagement within tourism brand context and concluded that brand image has positive impact on customer engagement which leads towards tourism brand performance. Likewise, brand image has found to be an influential factor to enhance customer engagement along with satisfaction and loyalty (Yunika et al., 2022). For that reason, it is predicted that brand image can be a determining factor of project customer engagement in the perspective of present study. According to Hollebeek (2011); Mollen and Wilson (2010), and Vivek et al. (2012), there is marketing research that characterizes client commitment as the close to home, mental, and conduct connection of clients with brands. Client commitment is categorized in four unique wellsprings of the worth got from customers: lifetime value (purchase), incentive referral, influence value, and knowledge value

(Newman, Bonilla, & Buntine, 2011). According to Patterson, Yu, and De Ruyter (2006), client commitment is the reasonable of significant, mental, and profound appearance of clients in their association with the organization. A few pointers to quantify client commitment that emphasis on a brand's virtual entertainment are utilization, commitment, and creation (Schivinski & Dabrowski, 2016). Another examination about client commitment is finished by van Doorn et al. who recommend that client commitment ways of behaving go past exchanges and might be characterized as an as "a clients' social signs that have a brand or firm concentration, past buy, coming about because of persuasive drivers" (Van Doorn et al., 2010). Brodie et al. suggest that within interactive, dynamic business conditions, client commitment today addresses a fundamental essential for making worked on corporate execution, including bargains improvement, common advantage and efficiency (Brodie et al., 2011). It is expected that brand image plays significant role in project customer engagement. Hence, it is hypothesized that "brand image positively effects project customer engagement".

Hypothesis 3: Brand Image positively effects Project Customer Engagement.

2.4 Brand Image and Project Success

Studies have investigated numerous positive workplace results of brand image, together with leadership communication and team innovation, and the project success (Das & Mishra, 2020). The idea of brand picture is characterized as the arrangement of impressions, convictions and thoughts that the clients hold or has about the specific item, item or administrations (Andriani, 2017). The job of brand picture is in every case vital to urge the task group to do exercises to the greatest potential at bunch level as well as the singular level (Koo & Curtis, 2020). Brand picture has become significant for each business as it assists with satisfying the business thought processes. Brand picture is the vital of brand execution as great picture brings great benefits. Moreover, brand picture assists pioneers with perceiving the necessities of colleagues at the gathering level as well as individual level and address their fears (Minbashrazgah, Garbollagh, & Varmaghani,

2021). Since, this could not simply remove the obstacles that every specialist of the group faces during his/her work, yet in addition move the laborers concerning their undertakings and create confidence about the assistance of their chief generally (He et al., 2021). A task has been, customarily, sorted as fruitful on the off chance that it achieved the Triple Requirement: degree, spending plan and timetable. Customary insights or parametrical instruments were enough for this reason. Anyway these devices leave to the side other subjective parts of undertaking the executives, for instance the partners' perspective. Basic achievement elements might differ during the undertaking life cycle so distinguishing them all through the project is significant. From this beginning stage, these calculations have been recognized in writing surveys to identify basic achievement elements of ventures (CSF's):Neural Organizations, Fluffy Mental Guides, Hereditary Calculations,The Bayesian Model. artificial intelligence apparatuses are more exact than customary instruments, however are as yet reciprocal to conventional devices. Computerized reasoning apparatuses are truly useful for the undertaking administrator to control and screen the task.

A unique job of brand picture, at bunch level, is to convey an obliging climate to laborers where it is more straightforward to take care of issues and offer data with respect to the undertaking (Das & Mishra, 2020). This sort of agreeable air raises the specialists' execution and ensures the successful work of the venture without upsetting the typical progression of the task (China, 2022). Additionally, the specialists are sincerely involved towards the undertaking group because of dynamic commitment of brand picture towards project, allowing freedom as well as independence to the laborers while giving noticeable quality to every specialist (Ramautar, Overbeek, & España, 2021). Perspectives and brand picture can be decidedly impacted through a brand experience that furnishes shoppers with delight by how the item causes them to feel or the tomfoolery encounters the brand can give provide. The predominant state of mind of the buyer, while presenting to a promoting message, has effect on how the shopper feels and structures perspectives towards the brand and recollects that it over the long run. According to this research going about as an organization, item or administration, can do supernatural occurrences. Frequently, simply because of a solid positive picture

can contend in an immersed market and accomplish acknowledgment of an item or administration. Brand picture can be seen as feeling, which, being an immaterial resource of the organization, guarantees its drawn out flourishing. Because of the overflow of brands, the buyer is presented to numerous special motivating forces, however he influences the most grounded. For the purchaser, the worth is made by brands that can fulfill the principal components: perceivability, quality, cost, affiliation, brand personality, unwaveringness, and connections. The flexibility of these components implies that the actual brand should become different.

Because of the present up close rivalry (Arslan & Altuna, 2010), fostering major areas of strength for a, picture has become essential to the support of enduring upper hand. Birtwistle and Shearer (2001) also, quickly changing customer needs and markets, areas of strength for place to organization to support their image picture and keep their products and administration cutting-edge. (Haeckel & Nolan, 1993). With high brand picture, a business can procure more unmistakable perspective on the brand among clients, client commitment, high net incomes, more sure disposition to cost changes and less shortcoming diverged from competitors (Arslan & Altuna, 2010). During the 1980s, the idea of brands changed greatly, when the organization started to get a handle on the meaning of a brand as an asset of the business. Nowadays, brands are seen something past pictures and names: brands are critical assets of an association in view of the way that "a brand addresses all that an item or administration means to buyer." That is the justification for why brands ought to be painstakingly evolved and made due. To sum up, nowadays, brands are seen as the critical part while making associations among associations and clients. Brands are the best approach to winning a circumstance in the business place since they convey extraordinary benefits and manufacture significant relationship with clients. Kotler and Armstrong (2010) Besides, clients are the most essential, in any case, crucial social occasion to ponder considering the way that clients can continually peruse where they buy. Thusly, they will buy from the maker that offers the most advantage (Doyle & Stern, 2006). Motivated by the brand picture, laborers intentional themselves as fundamental and significant drivers, taking everything into account (Koo & Curtis, 2020). Hence, it is hypothesized that "brand image has positive association with project success".

Hypothesis 4: Brand Image has positive effect on Project Success.

2.5 Project Customer Engagement and Project Success

Project customer engagement is significant in contemporary organizations and has been found to have positive influence over connection sustainability among consumers, marketers and project managers (Lückmann, 2015). Project achievement can be estimated as the proficiency and viability of a task and client and partner fulfillment. Writing likewise stresses dealing with partner's commitment by imparting and communicating, while control partner's commitment through checking them and their undertaking connections; since partner commitment is the method for conveying an excellent item which meets, or surpasses assumptions. According to this study, incapable partner contribution leads towards incapable dynamic in systems, which then cause a disappointment of an undertaking. Project customer engagement permits consumers and managers to assist and simplify the needs and demands of consumers during and after the project. This may be fundamentally linked to the facet of communication in project setting since it is important for project success. Moreover, project customer engagement further improves this cooperative behavior among male and female consumers and managers as well. This implies that the project customer engagement significantly reduces gender discrimination as well as gender bias in project setting (Fesenko, Shakhov, Fesenko, Bibik, & Tupchenko, 2018). In viable work setting where gender disparities continue to endure particularly within project-based markets, project customer engagement plays important part to lessen gender disparities and eventually improves the effectiveness and overall execution of the project. That's why Demonstrates in his examination that extreme focus of contribution of partner leads towards high possibilities of undertaking portfolio achievement.

In nearly all parts of the globe, and more specifically in the developing states, the positioning of project based firms/industries culture is primarily "masculine" and hence project customer engagement grows to be even more prominent within

project management setting. Furthermore, it is generally observed that marketers and project managers display very less concerns to consumer opinions therefore it is indispensable for marketers and project managers to work collaboratively with the consumers and assist them to certify smooth finishing and timely accomplishment of project (Lückmann, 2020). Therefore, project customer engagement not only helps to assist the cooperation in project setting but it also lessens the possibilities of occurrence of disputes later on as well. Furthermore, project customer engagement also helps in dealing with ambiguities since the challenges linked to complicated projects are more managerial and less technical. Then again, responding towards needs of consumers for better support further develops their self-assurance connecting with project results (Janssens, 2021). Coordinated project the board approaches like Scrum, Lean/Kanban, the Unique Frameworks Improvement System, or Versatile Venture Structure are acquiring ubiquity since they offer a structure for more profound client contribution in projects. The Standish Gathering's Tumult Report as often as possible positions client related issues like client contribution, clear necessities, and reasonable assumptions as key achievement factors in IT-projects. Therefore, it is expected that project customer engagement has positive impact on project success in the context of present research. The successful and fitting coordination of venture clients is turning out to be more significant in light of the fact that it permits obliging higher levels of intricacy in a wide range of undertakings.

Hypothesis 5: Project Customer Engagement has a positive effect on Project Success.

2.6 Brand Image Mediate the Relationship between Artificial Intelligence and Project Customer Engagement

The intervening effect of brand picture between man-made brainpower and client commitment has seldom been inspected by research researchers. Similar as commercial, this affiliation is more difficult to find in project based firms setting.

Some exploration studies have recognized impressive relationship of man-made consciousness with brand picture (Rodgers, 2021). Likewise, few investigations have additionally recognized positive relationship of brand picture with client commitment (Cambra-Fierro et al., 2021; Yunika et al., 2022). The engagement of customer refers to "a customers' personal connection to a brand as manifested in cognitive, affective, and behavioral actions outside of the purchase situation". Past studies have examined the factors that enhence (Rather, Hollebeek, & Islam, 2019) or hamper about developing customer engagement regarding brands.

According to the results of the past studies regarding customer engagement, it is concluded that brand loyalty is positively influenced by customer engagement (Bergel, Frank, & Brock, 2019). With the quick development of the web, clients might foster a profound connection toward virtual entertainment. Genuinely connected purchasers are able to reflect themselves through a favored brand and display striking mindfulness and their responses about that particular brand. Customer engagement enhances self-brand collection (a dimension of attachment with a brand) and the emotional bond between the service provides and their consumers (Brodie, Ilic, Juric, & Hollebeek, 2013), suggesting that drew in clients are joined to a brand. Furthermore, clients with close to home connection to a brand show extensive brand loyalty (Schmalz & Orth, 2012). Buyers having high commitment to virtual entertainment brand networks will more often than not see solid brand dependability. Demonstrated that drew in clients are faithful to the travel industry brand. Analysts have investigated the client commitment middle people results connection (Bergel et al., 2019).

Choo and Hoe (2022) considered the intervening job of brand picture in the connection between man-made brainpower and buy aim and reasoned that man-made consciousness, in its expanded structures like expanded reality, upgrades buy expectation among Malaysian purchasers. The concentrate additionally proposed to investigate the effect of man-made consciousness on other significant elements like client commitment while considering the interceding job of brand picture. From the hypothetical perspective, researchers have proposed that future investigations need to analyze the client commitment idea (Creevey, Kidney, & Mehta, 2019), Brand prominence is the defined as the bond intensity between a customer and a

particular brand. Clients foster close to home connection to objects in the travel industry, like travel services and visit pioneers (Chen et al., 2018).In short there is a huge possibility that customers can form an attachment to brands through different social media sites. Despite this fact attachment with brand through social media platforms has gained very less/little attention in the literature.

Artificial Intelligence has advanced quickly from performing straightforward errands (e.g., Siri) to undertaking more modern social capabilities, for example, perceiving clients' feelings for ensuing mediation. According to an IT viewpoint, simulated intelligence alludes to insight showed by machines through AI and regular language handling (Russell & Norvig, 2016). According to the business point of view, artificial intelligence addresses mechanically fueled frameworks or instruments that work with business tasks to accomplish cost efficiencies and advance benefit expansion. According to a client viewpoint, simulated intelligence is a progression of devices that further develop task effectiveness (e.g., for representatives) and give added comfort and adaptability to shoppers. Man-made intelligence can be actually used in thinking, making sense of, displaying, anticipating and guaging. Specifically, clients or specialist co-ops address organic entities that see simulated intelligence as a valuable chance to achieve added accommodation (for clients) and can give expanded degrees of client commitment (for the supplier). Seen as a business administration, artificial intelligence should exhibit its monetary worth as far as how clients see, esteem, evaluate and answer such help. Client insights and appraisals decide administration quality results. Client reactions are intelligent of their perspectives (e.g., satisfaction) and behavior's (purchase and loyalty), as explained theory of planned behavior (TPB). Actually, artificial intelligence has been utilized in client administrations to draw in clients. For example, chat bots as the primary resource could recognize client necessities and issues and move clients to human specialists when important. Chat bots at times draw in clients by giving a positive and reliable degree of collaboration with clients and consistent help to advance consistent help encounters. Client commitment is connected with hierarchical results including monetary and non-monetary results (Newman et al., 2011). In practice, AI (e.g. robots) is broadly utilized in client care to draw in clients and upgrade the assistance experience by giving accommodation and adaptability.

Research in the space of venture client commitment is fairly restricted, which to some extent is because of dissimilar comprehension and conceptualization of artificial intelligence. The affordance idea has been generally applied to associations to figure out how innovations (e.g., Artificial Intelligence) can be used to accomplish hierarchical results including functional productivity, consumer loyalty and commitment. Therefore, it is expected that brand image would play significant mediating role in relationship between artificial intelligence and project customer engagement in the context of present study.

Hypothesis 6: Brand Image mediates the relationship between Advertisement and Project Customer Engagement.

2.7 Brand Image Mediate the Relationship between Advertisement and Project Customer Engagement

The job of brand picture as arbiter among notice and client commitment has seldom been explored in earlier writing and it becomes more difficult to find in project based firms setting. Many examinations have distinguished critical and positive relationship of commercial with brand picture (Li et al., 2022). Additionally, barely any examinations have likewise distinguished positive relationship of brand picture with client commitment (Yunika et al., 2022). Khan, Yang, Shafi, and Yang (2019) completed a far reaching research with regards to online brand based networks and found that brand picture affects the relationship of promotion and the degree of commitment of clients. It was reasoned that brand picture improves the adequacy of commercial in web-based brand networks when it is considered to play interceding job. This exploration gives significant hypothetical base to consider brand picture as a middle person between the ad and undertaking client commitment. The point of relationship advertising has been to fabricate durable associations with the clients (Berry & Parasuraman, 2004). Web-based entertainment empowers clients to make stories that are associated with brands, and the brand picture, by supporting them deal and exchange information about

their main brands (Gensler, Völckner, Liu-Thompkins, & Wiertz, 2013). Sponsors are by and by zeroing in on building extraordinary relationship with clients that go past purchases, and the clients thusly feel more connected with people and relationship behind these brands that they as frequently as conceivable use. In view of this positive relationship building, clients are constantly giving information to displaying firms, and this cycle is ending up being continuously shrewd. This essentially helps in building long stretch associations between the clients and the associations, adding parts of obligation to effective relationship advertising (Vivek et al., 2012). Advertisers likewise understand the tremendous expected in these turns of events, and accept that a web-based commitment methodology can successfully support giving an upper hand, and give the organizations the capacity to be more worthwhile than their rivals. The difficulties of the Digital era time have brought forth another term, OCBE, which basically addresses the clients' collaborations with the different brands that they interact.

There has been an always developing revenue in the dynamic commitment and consideration given to the client, by advertisers, to turn out to be more rewarding in the communications that are made through virtual entertainment. Nonetheless, there is a scarcity of writing in this specific field of promoting. It is imperative that, in relationship showcasing there exists a hole regarding the dynamic administration of online commitment with brands, and there is likewise a desperate need to figure out the course of commitment according to a scholastic perspective. Online clients who are locked in by the brand, show improved degrees of unwaveringness, trust, responsibility, fulfillment, and profound holding towards the central brand in thought (Brodie et al., 2013). Commitment has frequently been concentrated on in the Pakistani setting, in various fields of examination. A portion of these fields are in many cases connected with human asset the executives, with an emphasis on representative commitment (Ahmed, Naji, Faisal, Al-Ansari, & Naushad, 2020), while different examinations depend on client commitment in conditions of orientation and brand connections. In such manner, specialists have suggested different indicators and results of commitment, and have likewise recommended that there is a need to verify these proposed factors with quantitative techniques, to test the size of commitment in various circumstances (Mollen & Wilson, 2010). At the

point when a Facebook client loves a brand's page, and follows it, to get regular updates of the items that are being offered, a peculiarity that can be named as online brand commitment (Wallace, Buil, & De Chernatony, 2014) becomes possibly the most important factor. In like manner, responsibility is complete, and coordinates every individual who is communicating with the Facebook brand page, by purchasing, or not accepting, the brand. In the beyond twenty years, the job of relationship advertising has been to devise procedures that can be utilized to hold clients. Nonetheless, with the coming of commitment, the job of relationship showcasing has essentially expanded, by fulfilling faithful clients, yet by likewise captivating them past their choice to make a buy. Furthermore, the job of relationship showcasing likewise remembers centering for possible clients, and concocting techniques to draw in new clients, and really associating with them (Vivek et al., 2012). Advertisers likewise understand the enormous expected in these turns of events, and accept that a web-based commitment system can really help with giving an upper hand, and give the organizations the capacity to be more worthwhile than their rivals. Over the long run, as the business sectors and purchaser conduct advanced, the objective of advertisers changed from sustaining relationship promoting, to connecting with clients, by understanding that brand dependability alone isn't sufficient to hold clients. Subsequently, it tends to be expected that the stage, Facebook, has turned into a significant promoting stage for brands to dive into positive commitment, by making brand mindfulness. Brands, by the quantity of preferences, offers, or remarks they get on Facebook, show that buyers who will generally like, offer or remark on a Facebook page are viewed as more drew in with a specific brand.

The point of relationship advertising has been to construct dependable associations with the clients (Berry & Parasuraman, 2004). Online clients, who are locked in by the brand, show upgraded degrees of unwaveringness, trust, responsibility, fulfillment, and profound holding towards the central brand in thought (Brodie et al., 2013).Commitment has frequently been concentrated on in the Pakistani setting, detached fields of examination. A portion of these fields are in many cases connected with human asset the executives, with an emphasis on worker commitment (Ahmed et al., 2020), while different examinations depend on client

commitment in conditions of orientation and brand connections. In such manner, specialists have suggested different indicators and results of commitment, and have likewise recommended that there is a need to support these proposed factors with quantitative techniques, to test the size of commitment in various circumstances (Mollen & Wilson, 2010). The build of commitment is advantageous in figuring out which section to take special care of, while simultaneously, formulating promoting systems and making connecting with Facebook content (Gummerus, Liljander, Weman, & Pihlström, 2012). Virtual entertainment empowers clients to make stories that are connected with brands, and the brand picture, by aiding them offer and trade data about their number 1 brands (Gensler et al., 2013). Advertisers are currently focusing on building great associations with clients that go past buys, and the clients consequently feel more associated with individuals and associations behind these brands that they much of the time use. Because of this positive relationship building, clients are consistently giving data to advertising firms, and this cycle is turning out to be progressively intuitive. This basically helps in building long haul connections between the clients and the organizations, adding components of commitment to powerful relationship advertising (Vivek et al., 2012). As per Algesheimer, the brand image comprises of the information and conviction of the idea of the brand, the consequences of the utilization of the brand, and legitimate use, notwithstanding assessment, sentiments, and feelings comparable to a brand.

Advertising influence to the brand image was expressed by Akaka, Vargo, and Lusch (2013) as: "Handling quick reactions to components of a commercial that happen during openness to that promotion. Fitting handling reactions need to happen to lay out or keep up with correspondence impact, which are getting through reactions related with the brand picture". At the point when a Facebook client prefers a brand's page, and follows it, to get successive updates of the items that are being offered, a peculiarity that can be named as online brand commitment (Wallace et al., 2014) becomes possibly the most important factor. Likewise, commitment is comprehensive, and consolidates each person who is interfacing with the Facebook brand page, by buying, or not buying, the brand. Along these lines, it might be normal that the stage, Facebook, has transformed

into a huge exhibiting stage for brands to dive into positive responsibility, by making brand care. Brands, by the amount of inclinations, offers, or comments they get on Facebook, show that customers who will commonly like, deal or comment on a Facebook page are seen as more attracted with a particular brand. In this manner, it is normal that brand picture could have huge interceding impact on notice and task client commitment with regards to introduce research.

Hypothesis 7: Brand Image mediates the relationship between Advertisement and Project Customer Engagement.

2.8 Brand Image Mediates the Relationship between Artificial Intelligence and Project Success

Brand image is very important in project based firms and has been studied to have a positive influence on relationship sustainability between managers and employees, artificial intelligence and project quality (Ma & Palacios, 2021). Brand picture permits the representatives and supervisors having a place with one association to help and work with the representatives having a place with a similar association while working over a similar task. This can be basically connected with the part of concordance inside project setting which critical for project achievement. This as well as man-made reasoning further improves this cooperative way of behaving among male and female representatives and supervisors too (Miller, 2021). This implies this man-made reasoning essentially diminishes the orientation segregation and orientation biasness inside project setting (Miller, 2021). In the cutthroat workplace where orientation imbalances keep on persevering explicitly inside project based work markets, brand picture and man-made consciousness assume imperative part to diminish orientation disparities and eventually improves the effectiveness and in general execution of the task.

As advertisers make increasingly more video content, they can undoubtedly prohibit hard of hearing and nearly deaf clients. Physically produced inscriptions

take time and may not be really important for advertisers confronting a packed substance schedule. Enter artificial intelligence produced video inscriptions, which permit brands to easily further develop video openness. Usable even on live video, simulated intelligence controlled inscriptions add a profundity of involvement to video content. For those with visual hindrances, the picture rich universe of web-based entertainment advertising can be trying to explore, not to mention appreciate. Facebook and Instagram's underlying simulated intelligence produced picture inscriptions include is separating those hindrances. This implies more individuals can appreciate virtual entertainment content, whether or not a brand has added a picture depiction. Past eliminating obstructions in availability, computer based intelligence can likewise eliminate hindrances in understanding. For some advertisers, gathering client input is similarly edifying and tedious. While brand surveys and online notices give a window into client brand discernments, they're in many cases concealed in the profundities of crude information. Man-made intelligence controlled feeling examination allows artificial intelligence to accomplish the filthy work of figuring out information to deliver experiences on the manner in which clients see brands.

Past straightforward "positive," "negative" and "impartial" discernments, more current strategies for computer based intelligence driven feeling examination are in any event, starting to get rid of mockery in client criticism. Not at all like client studies or meetings, opinion examination influences unfiltered client input. Joined with the size of information man-made intelligence can process, this application offers a total image of how clients see brands. By looking at these brand discernments against their expected image, advertisers can more readily comprehend where they may be coming up short. In attempting to close this hole, brands can turn into the most credible rendition of themselves. Beyond making client encounters more open and comprehended, simulated intelligence can likewise customize those encounters. One of the greatest snags to mark validness is the means by which unoriginal promoting becomes as it scales. While advertisers attempt to relieve this issue through division, fragments alone can't make the degree of personalization clients are looking for. To make the hard to find "section of one," Computer based intelligence offers a straightforward arrangement. Arrangements

like Google's Proposals simulated intelligence get familiar with the substance and items every client likes to serve them a greater amount of what they need. By decisively introducing the pieces of your image every client associates with, brands can offer completely customized encounters. This sort of balanced association causes clients to feel comprehended by brands (Afzal, Yunfei, Nazir, & Bhatti, 2019)

In many areas of the planet, and all the more exactly in emerging nations, the direction of task based enterprises culture is dominatingly "manly" and for that reason brand picture turns out to be much more powerful inside project the executives climate. Besides, it is regularly seen that project administrators show exceptionally low resistance towards human blunder and rebelliousness of time requirements and for that reason it is fundamental for laborers to utilize innovation to work in coordinated effort and help each other to guarantee smooth execution and convenient finishing of the undertaking which is a significant part of artificial intelligence (Minelle, 2022). Subsequently, brand picture and manmade brainpower not just assistance to work with the cooperation inside project setting however it additionally decreases the possibilities of rise of contentions also. Besides, artificial intelligence likewise helps for managing vulnerabilities on the grounds that the difficulties related to complex undertakings are not so much specialized (Cavaliere et al., 2021). It is expected that brand image plays significant role among the association between artificial intelligence and project success. Hence, it is hypothesized that "brand image mediates the relationship between artificial intelligence and project success".

Hypothesis 8: Brand Image mediates the relationship between Artificial Intelligence and Project Success.

2.9 Brand Image Mediates the Relationship between Advertisement and Project Success

It has been uncovered that that the brand picture and commercial have engaging and rousing qualities, and they are probably going to urge representatives to show project citizenship conduct that would portray selfless, agreeable and supportive

way of behaving (Brown, Schmied, & Tarondeau, 2002). Indeed, even in the hierarchical climate where representatives are hesitant to share data, as they move towards project climate with great brand picture and promoting, their venture responsibility will in general increment and they are more disposed towards information sharing and working in cooperation (Ma & Palacios, 2021). Without a trace of brand picture, there are more possibilities that the singular inclinations and character qualities, for example, independence, power, quirky requests and field reliance would win and forestall collaboration as well as commitment and adversely impact the general undertaking execution. Brand picture advances a "helpful environment" which is fundamental for ideal work execution of venture laborers and supervisors and expands the probability of task accomplishment too (Koo & Curtis, 2020). Besides, ad likewise brings about project director and laborers to conform to the principles and guidelines of the undertaking which is significant for the task arranged associations. This guarantees that the guidelines and methods guaranteeing project achievement are being adhered to and it further upgrades potential future undertaking amazing open doors (Lamprou & Vagiona, 2022).

Studies in the past also examined whether brand image plays the role of mediation among advertisement and success of a project (Tabassum, Khwaja, & Zaman, 2020). Besides, the contention for the intervening impact of brand picture depends on the idea of brand value hypothesis (Keller, 2020). It is accepted that through ad, the association contributes its assets augmenting the relationship prizes and inspiration for the workers (e.g. brand image) which thusly license their adherents to expand the compensations in type of venture achievement. It is normal that brand picture assumes critical part among the relationship among commercial and project success. There isn't any massive contrast between the different brands of whisky, or cigarettes or brew. They are about something similar. As are the cake blends and the cleansers, and the margarine. The producer who devotes his publicizing to building the most pointedly characterized character for his image will get the biggest portion of the market at the most elevated benefit (David Ogilvy). Under states of extraordinary market rivalry, each brand is attempting to fabricate major areas of strength for a base. Most frequently, a buyer can

scarcely separate brands in view of characteristicsfrom its opponent items (Walsh & Mitchell, 2010). In this way, to separate, most brands use big name supports for better review and influence (Misra & Beatty, 1990). Famous people are utilized to guarantee brands as they cause more to notice the promotions, get through the messiness of battling brands, and greatly affect customers' disposition. Studies have uncovered that a source thought to be fundamentally reasonable is more convincing than a less genuine source in standing out and expanding thought towards a brand by fostering an extraordinary brand character (Pornpitakpan, 2004). Advertisements can in like manner be seen on the seats of staple trucks, on the mass of air terminal walkways, on the sides of transports, plane and train. Advancements are commonly arranged any place a get-together can beyond a shadow of a doubt as well as an enormous piece of the time a passage visual as well as video (Busari, Olannye, & Taiwo, 2002). According to Liebeck teenagers and youngsters are now more knowledgeable. They are truly the internet generation, and get their news and information primarily from different sites on internet. So, it is the need of the time to create good quality and captive advertisement to enhance brand image in order to achieve project success.

Brand picture and notice expect a huge part to assist with increasing any business execution as brand picture is a deduced instrument which can earnestly change people's buying approaches to acting and promotion is going about as a central purpose for any business as it's a fruitful source to pass on your message and stay to client. At present time in overall and creating business areas business war isn't simply on cost anyway client interest, steadiness and relationship matters a ton. Brand picture and publicizing are a significant piece of any organization's execution as brand picture is a certain device that can possibly emphatically impact customers' purchasing conduct and publicizing is a inspiring component for a business as it is the Intervention is the message you send that stays in the client's brain (Al Sukaini, 2022). Brand picture is the fundamental component that adds to mark value, that suggests the shopper's general discernment furthermore, experience of a brand's impact on their way of behaving (Lu, Gursoy, & Lu, 2015). The center target of promoting endeavors is to influence purchasers' originations furthermore, points of view on a brand picture to them, moreover to support real

purchasing conduct (Bian & Moutinho, 2011). As clients distinguish brands with themselves, brand picture is equivalent to mental self portrait. In this furiously cutthroat world, a solid brand personality is fundamental for fostering a strategically situated brand (M. Arslan & Zaman, 2015). Organizations have consistently applied a solid effect on clients' mental connection to an organization rely upon their association with a brand picture. Ad is fundamental for each organization to further develop its presentation diagram since it's a profoundly powerful methodology for drawing in clients to your items. Ad is the best strong also, powerful advertising method accessible on the grounds that its great impact on customers' purchasing conduct. In this powerful time, where rivalry and progression of advancements are of prime significance, the associations are reliably bringing their new items and administrations. This opposition makes comfort to the client since they have various other options and their decisions of choosing an item become more extensive (Ballantyne, Warren, & Nobbs, 2006). So it is clear that good quality advertisement with target audience does enhance a brand's image which results in ultimate project success. Hence, it is hypothesized that "brand image mediates the relationship between advertisement and project success".

Hypothesis 9: Brand Image mediates the relationship between Advertisement and Brand Project Success.

2.10   Research Model
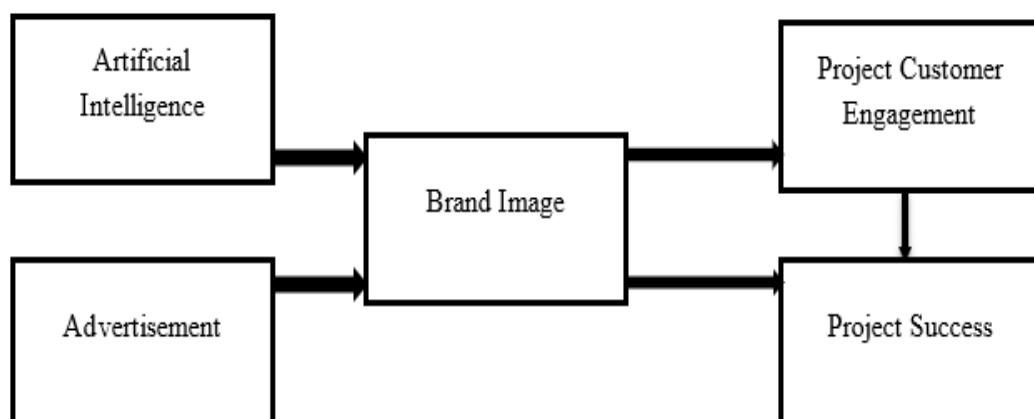
FIGURE 2.1: Research Model

2.11 Summary of Research Hypothesis

H_1: Artificial Intelligence has positive effect on Brand Image.

H_2: Advertisement has a positive effect on Brand Image.

H_2: Brand Image has positive effect on Project Customer Engagement.

H_4: Brand Image has positive effect on Project Success.

H_5: Project Customer Engagement has positive effect on Project Success.

H_6: Brand Image mediates the relationship between Artificial Intelligence and Project Customer Engagement.

H_7: Brand Image mediates the relationship between Advertisement and Project Customer Engagement.

H_8: Brand Image mediates the relationship between Artificial intelligence and project success.

H_9: Brand Image mediates the relationship between Advertisement and Project Success.

Chapter 3

Research Methodology

3.1 Research Design

The process of transforming research questions into research project is regarded as research design (Robson, 2002). One very popular approach in business research is survey strategy which is commonly associated with deductive approach as well it responses to "what, where, who, why and how" questions (Sauder & Espeland, 2009). This research highlights the effect of artificial intelligence on marketing among the Pakistan based organizations. It also studies the impact of marketing using artificial intelligence on marketing brand image and customer engagement.

3.1.1 Research Type

For research, there are two options either qualitative research or quantitative research relying upon the nature of the study. The present research is based on quantitative research as data was collected by respondents through questionnaires for the findings. Different statistical tools were used to test the data.

3.1.2 Cross Sectional Study

The present study was cross-sectional in nature concerning the time horizon. The data was gathered simply at a single point in time.

3.1.3   Unit of Analysis

The main focus of the present study is to address the impact of Artificial Intelligence on Marketing, based on Brand image and customer engagement. Focusing on Information Technology and Customer interactive organizations; the unit of analysis for the present study is an individual. Respondents were contacted personally as well an online survey form was provided to those in the network. For valid data analysis, sufficient data was required thus; all possible channels were used for valid opinion and to obtain a desirable target.

3.2   Population and Sample

3.2.1   Population, Sample and Sampling Technique

The population included employees as subordinates and supervisors working in Information Technology and customer interactive companies Pakistan. The reason for targeting these sectors was that they are usually use AI or they create different projects related to AI.

The most common technique used for data collection is sampling. The data was collected through non-probability, snowball sampling (Etikan, Alkassim, & Abubakar, 2016) from different cities of Pakistan. For data collection, self-administered questionnaires were used. To indicate research purposes, the cover letter was attached. For getting legitimate responses, all respondents were guaranteed confidentiality and anonymity. The online survey was used to target referred employees. Due to time limitations, responses were self-reported. Almost 400 questionnaires were distributed, and 325 appropriate responses were received.

3.3   Instrumentation

Adapted questionnaire was used for data collection. Four demographic variables in the questionnaire were also included including information regarding the respondent's gender, age and qualification and work experience. Other variables of study

include Artificial Intelligence, Advertisement, Brand Image and Project Customer Engagement and Project Success.

3.3.1 Artificial Intelligence

7 items, a five-point Likert scale were used to measure artificial intelligence, developed by Finstad (2010); Chung, Ko, Joung, and Kim (2020) ranging from SD (Strongly Disagree) to SA (Strongly Agree). Sample items are as follows: "The system replied to my question properly" and "The AI technology makes this brand's website easy to use and effortless."

3.3.2 Advertisement

A 10-item scale was used to measure the project complexity developed by (Ducoffe, 1996; Brackett & Carr, 2001). The two sample items include "This brand's advertising is entertaining." and "This brand's advertising is credible."

3.3.3 Brand Image

A 4-item scale was used to measure the impact of AI technology on brand image, created by (Jalilvand & Samiei, 2012). Sample item is: "This brand has a clean image." The responses were collected through a 5-point Likert scale ranging from SD=Strongly Disagree to SA=Strongly Agree..

3.3.4 Project Customer Engagement

Project Customer Engagement was measured with the 3-item scale developed by (Hollebeek, Glynn, & Brodie, 2014). Sample items of Customer Engagement sharing are "Using this brand's website gets me to think about the brand." and "Using this brand's website stimulates my interest to learn more about the brand." Which will be measured with a 5 point Likert scale ranging from SD=Strongly Disagree to SA=Strongly Agree.

3.3.5 Project Success

Project Success was measured with the 5-item scale developed by Liu and Zuo (2017). Sample items Project Success are "The project improved my performance as a customer." and "The project met my requirements." Items were measured with a 5-point Likert scale ranging from SD= strongly disagree to SA= strongly agree.

3.3.6 Statistical Tool

The data analysis for this study was performed via SPSS v 25.0 and this analysis consisted of descriptive statistics, frequency distribution, reliability, correlation and regression analysis.

Chapter 4

Results and Analysis

This study has examined the impact of artificial intelligence and advertisement on project customer engagement and project success with mediating role of brand image. For this purpose, several statistical tests were performed. The results of the statistical analysis have been congregated and shown in tables. Data collected from consumers was analyzed via SPSS 25.0, which is reliable and widely used in studies. Demographic variables included age, gender, experience, and qualification. Inferential statistics comprised of Correlation and Regression analysis.

TABLE 4.1: Demographic Profile of Respondents

Demographic	Characteristics	Frequency	Percent
Gender	Male	102	31.40%
	Female	223	68.60%
	Total	325	100.00%
Age	20-30 Years	300	92.30%
	31-40 Years	18	5.50%
	41-50 Years	7	2.20%
	51 or above Years	0	0.00%
	Total	325	100.00%
Qualification	Graduate	79	24.30%
	Masters/MS	144	44.30%
	Others	102	31.40%
	Total	325	100.00%
Experience	0-5 Years	73	22.50%
	6-10 Years	120	36.90%
	11-15 Years	114	35.10%
	16 or above Years	18	5.50%
	Total	325	100.00%

Table 4.1 displays frequency of gender, age, qualification, and experience. This was measured via sample of 325 respondents, i.e., N = 325. Considering gender, most observations came from female respondents. 223 female respondents encompassed 68.6% of entire sample. 102 male respondents encompassed 31.4% of entire sample while.

Considering age, table 4.1 portrays that highest number of respondents were from age group of 20-30 years, as 300 respondents encompassed 92.3% of entire sample. Age group of 31-40 years had 18 respondents and encompassed 5.5% of entire sample. Age group of 41-50 years had 7 respondents and encompassed 2.2% of entire sample. Age group of 51 or above years had no respondents and encompassed 0.00% of entire sample.

Considering qualification, table 4.1 displays that highest number of respondents had Masters/MS degree with 144 respondents and encompassed 44.3% of entire sample. Bachelors degree holders, with 79 respondents, encompassed 24.3% of entire sample. Other degree holders, with 102 respondents, encompassed 31.4% of entire sample.

Considering work experience, table 4.1 displays that highest number of respondents had work experience of 6-10 years where 120 respondents encompassed 36.9% of entire sample. 73 respondents with work experience of 0-5 years encompassed 22.5% of entire sample. 114 respondents with work experience of 11-15 years encompassed 35.1% of entire sample. 18 respondents with work experience of 16 or above years encompassed 5.5% of entire sample.

4.1 Correlation Analysis

TABLE 4.2: Correlation Matrix Student Performance

	AI	AD	BI	PCE	PS
AI	1				
AD	.426**	1			
BI	.561**	.776**	1		
PCE	.212**	.502**	.498**	1	
PS	.299**	.619**	.629**	.616**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.2 shows correlations among artificial intelligence (AI), advertisement (AD), brand image (BI), project customer engagement (PCE) and project success (PS). Table 4.3 reveals that there is a positive correlation among all the variables of the study i.e. AI and AD ($r = .426$, $p < .001$), AI and BI ($r = .561$, $p < .001$), AI and PCE ($r = .212$, $p < .001$), AD and BI ($r = .776$, $p < .001$), AD and PCE ($r = .502$, $p < .001$), and BI and PCE ($r = .498$, $p < .001$) respectively.

Correlation value for artificial intelligence and project success is 0.299 and its p value (.000) is significant. This identifies positive and weak association among AI and PS. Correlation value for advertisement is 0.619 and its p value (.000) is significant as well. There is moderately positive connotation between AD and PS. Correlation value for brand image is 0.629 and its p value (.000) is significant too. This stipulates moderately positive association among BI and PS. Correlation value for project customer engagement is 0.616 and its p value (.000) is also significant as well. There is moderately positive association between PCE and PS.

Table 4.2 reveals that strongest correlation, from perspective of project success, is between brand image and project success. However, weakest correlation is among artificial intelligence and project success. Correlation among all variables is positive and significant indicating that all variables are imperative in the present research context.

4.2 Regression Analysis

Regression analysis has been conducted to examine the extent to which artificial intelligence and advertisement impact brand image, the extent to which brand image impacts project customer engagement and project success, the extent to which project customer engagement impacts project success, the extent to which brand image mediates the association of artificial intelligence and advertisement with project customer engagement and the extent to which brand image mediates the association of artificial intelligence and advertisement with project success.

4.2.1 Artificial Intelligence, Advertisement and Brand Image

TABLE 4.3: Model Summary: Artificial Intelligence, Advertisement and Brand Image

Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Artificial Intelligence and Advertisement	0.816	0.667	0.665	0.43001

Dependent Variable: Brand Image

Predictors: (Constant), AD, AI

Table 4.3 displays model summary for regression analysis among artificial intelligence, advertisement, and brand image. Artificial intelligence and advertisement have the R2 value of .667. It indicates that 66.7% change in brand image is because of artificial intelligence and advertisement and remaining 33.3% change is owing to unidentified factors. Artificial intelligence and advertisement can increase brand image of information technology and customer interactive organizations by 66.7%.

TABLE 4.4: Coefficients: Artificial Intelligence, Advertisement and Brand Image

Variable	Standardized Coefficient Beta	t value	F value	Sig
Artificial Intelligence	0.282	7.925		0
Advertisement	0.656	18.43	321.91	0

Dependent Variable: Brand Image **Table 4.4** specifies positive and significant connotation among independent and dependent variables. The t value for artificial intelligence is 7.925 (>2), portraying significant effect of the variable. The t value for advertisement is 18.434 (>2), portraying significant effect of the variable. F value for the regression model is 321.910 (>4), postulating statistical significance of regression model. Outcomes presented in table 4.5 support that "Artificial

Intelligence has positive effect on Brand Image" and "Advertisement has positive effect on Brand Image".

4.3 Brand Image and Project Customer Engagement

TABLE 4.5: Model Summary: Brand Image and Project Customer Engagement

Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Brand Image	0.498	0.248	0.245	0.51853

Dependent Variable: Project Customer Engagement

Table 4.5 displays model summary for regression analysis among brand image and project customer engagement.

Brand image has the R2 value of .248. This indicates that 24.8% change in project customer engagement is because of brand image and remaining 75.2% change is owing to unidentified factors. Brand image can increase project customer engagement of information technology and customer interactive organizations by 24.8%. Dependent Variable: Project Customer Engagement

TABLE 4.6: Brand Image and Project Customer Engagement

Variable	Standardized Coefficient Beta	t value	F value	Sig
Brand Image	0.498	10.31	106.301	0

Table 4.6 specifies positive and significant connotation among independent and dependent variables. The t value for brand image is 10.310 (>2), portraying significant effect of the variable. F values for brand image is 106.301 (>4), postulating statistical significance of regression model. Outcomes presented in table 4.7 support that "Brand Image has positive effect on Project Customer Engagement".

4.3.1 Brand Image and Project Success

TABLE 4.7: Model Summary: Brand Image and Project Success

Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Brand Image	0.629	0.396	0.394	0.42943

Dependent Variable: Project Success

Table 4.7 displays model summary for regression analysis among brand image and project success.

Brand image has the R2 value of .396. This indicates that 39.4% change in project success is because of brand image and remaining 60.6% change is owing to unknown factors. Brand image can increase project success of information technology and customer interactive organizations by 39.6%.

TABLE 4.8: Brand Image and Project Success

Variable	Standardized Coefficient Beta	t value	F value	Sig
Brand Image	0.629	14.558	211.922	0.000

Dependent Variable: Project Success **Table 4.8** indicates positive and significant connotation among independent and dependent variables. The t value for brand image is 14.558 (>2), portraying significant effect of the variable. F values for brand image is 211.922 (>4), postulating statistical significance of regression model. Outcomes presented in table 4.9 support that "Brand Image has positive effect on Project Success".

4.3.2 Mediating Role of Brand Image Between Artificial Intelligence and Project Customer Engagement

Mediation analysis was executed by means of Hayes Process Macro Model 4 which is generally endorsed by many scholars (Hayes, Montoya, & Rockwood, 2017). Bootstrapping method, with 95% confidence interval, was used for mediation analysis.

The independent variable artificial intelligence (AI), the dependent variable project customer engagement (PCE) and the mediating variable brand image (BI) were added in corresponding options in Hayes Process Macro regression analysis.

TABLE 4.9: Mediating Effect of Brand Image Between Artificial Intelligence and Project Customer Engagement

Predictors	β	SE	t	p
IV → DV	-0.09	0.06	9.98	0.090
IV → MED	0.56	0.05	12.18	0.000
MED → DV	0.55	0.06	9.51	0.000
IV → MED → DV	0.21	0.05	3.88	0.000
Bootstrap results for indirect effect	Indirect Effect	LL 95% CI	UL 95% CI	
	0.31	0.22	0.41	

Notes: Bootstrap sample size 5000.

The outcomes shown in **Table 4.9** indicated that indirect effect (.31) of BI between AI and PCE lies among .22 and .41 in which 0 is not present in the 95% CI. Consequently, it is recognized that BI mediates association among AI and PCE, therefore sixth hypothesis H6 of this research is supported. Results revealed in

table 4.9 display insignificant connotation of IV and MV in mediation analysis. It shows while brand image is reflected as mediating variable among artificial intelligence and project customer engagement, the effect of artificial intelligence on project customer engagement is statistically insignificant. β value is -.09. t value is 9.98 (>2) however p value is .09 (>0.05).

The outcomes revealed in table 4.9 also display that there is substantial and positive connotation of IV and MV on DV in the mediation analysis. It indicates that while brand image is reflected as mediating variable among artificial intelligence and project customer engagement, the effect of artificial intelligence and brand image on project customer engagement is positive and statistically significant. β value is .56 which illustrates 56% impact. t value is 12.18 (>2) and p value is .000 (<0.05) showing statistical significance.

Table 4.9 also displays precise direct and indirect effect of artificial intelligence and brand image on project customer engagement when brand image is reflected as mediating variable. The direct effect is statistically significant with LLCI and ULCI values of .1059 and .3228 respectively, t value of 3.88 and p value of .000. Correspondingly, specific indirect effect of brand image is 31% where BootLLCI and BootULCI values are .2138 and .4325 respectively. The influence of artificial intelligence on project customer engagement becomes insignificant after inclusion of brand image as mediating variable which shows full mediation of brand image over artificial intelligence and project customer engagement in the information technology and customer interactive organizations.

Results presented in table 4.9 approve that hypothesis H6 i.e., "Brand Image mediates the relationship between Artificial Intelligence and Project Customer Engagement" has been upheld.

4.3.3 Mediating Role of Brand Image Between Advertisement and Project Customer Engagement

Independent variable advertisement (AD), dependent variable project customer engagement (PCE) and mediating variable brand image (BI) were added in corresponding options in Hayes Process Macro regression analysis.

TABLE 4.10: Mediating Effect of Brand Image Between Advertisement and Project Customer Engagement

Predictors	β	SE	t	p
IV → DV	0.32	0.08	3.88	0.000
IV → MED	0.77	0.04	22.08	0.000
MED → DV	0.27	0.07	3.63	0.000
IV → MED → DV	0.55	0.05	10.43	0.000
Bootstrap results for indirect effect	Indirect Effect	LL 95% CI	UL 95% CI	
	0.21	0.09	0.35	

Notes: Bootstrap sample size 5000. The outcomes presented in **Table 4.10** indicated that indirect effect (.21) of BI among AD and PCE lies between .09 and .35 while 0 is not existing in the 95% CI. Consequently, it is recognized that BI mediates the association among AD and PCE, therefore seventh hypothesis H7 of this research is supported. Outcomes shown in table 4.13 display significant and positive connotation of IV and MV in the mediation analysis. It indicates that while brand image is reflected as mediating variable among advertisement and project customer engagement, the effect of advertisement on project citizenship behavior is positive and statistically significant. β value is .32 depicting 32% impact. t value is 3.88 (>2) and p value is .000 (<0.05). Additionally, LLCI and ULCI values are .1597 and .4868 respectively besides 0 is not existing among these values which displays statistical significance of regression analysis.

The outcomes presented in table 4.10 also display significant and positive connotation of IV and MV on DV in the mediation analysis. It indicates that while brand image is reflected as mediating variable among advertisement and project customer engagement, the effect of advertisement and brand image on project customer engagement is positive and statistically significant. β value is .55 indicating 55% impact. The p value is .000 (<0.05. Additionally, LLCI and ULCI values are .4523 and .6626 respectively and zero is not existing among these values indicating statistical significance of regression analysis.

Table 4.10 also displays precise direct and indirect effect of advertisement and brand image on project customer engagement when brand image is reflected as mediating variable. The direct effect is statistically significant with LLCI and ULCI values of .1597 and .4868 respectively, t value of 3.88, p value of .000. Correspondingly, the specific indirect effect of brand image is 21% and BootLLCI and BootULCI values are .0899 and .3493 respectively. The influence of advertisement on project customer engagement is reduced after inclusion of brand image as mediating variable and this effect is still significant indicating partial mediation of brand image over advertisement and project customer engagement in the information technology and customer interactive organizations.

The results presented in table 4.10 approve that the hypothesis H7 i.e., "Brand Image mediates the relationship between Advertisement and Project Customer Engagement" has been upheld.

4.3.4 Mediating Role of Brand Image Between Artificial Intelligence and Project Success

The independent variable artificial intelligence (AI), dependent variable project success (PS) and mediating variable brand image (BI) were added in the corresponding options in Hayes Process Macro regression analysis.

TABLE 4.11: Mediating Effect of Brand Image Between Artificial Intelligence and Project Success

Predictors	β	SE	t	p
IV → DV	-0.07	0.05	-1.5	0.128
IV → MED	0.56	0.05	12.18	0.000
MED → DV	0.67	0.05	12.93	0.000
IV → MED → DV	0.27	0.49	5.62	0.000
Bootstrap results for indirect effect	Indirect Effect	LL 95% CI	UL 95% CI	
	0.38	0.30	0.46	

Notes: Bootstrap sample size 5000. The outcomes shown in **Table 4.11** displayed that indirect effect (.38) of BI among AI and PS lies between .30 and .46 while 0 is not existing in 95% CI. Subsequently, it is recognized that BI mediates the association among AI and PS, accordingly eighth hypothesis H8 of this research is supported. The outcomes presented in table 4.14 display insignificant connotation of IV and DV in the mediation analysis. It indicates that while brand image is reflected as mediating variable among artificial intelligence and project success, the effect of artificial intelligence on project success is statistically insignificant. β value is -.07, t value is -1.5 (<2), and the p value is .128 (>0.05). Moreover, LLCI and ULCI values are -.1706 and .0216 respectively and 0 is existing among these values demonstrating statistical insignificance of the regression analysis.

The outcomes presented in table 4.11 similarly display significant and positive connotation of IV and MV on DV in the mediation analysis. It shows that while brand image is reflected as mediating variable among artificial intelligence and project success, the effect of artificial intelligence and brand image on project customer engagement is positive and statistically significant. β value is .27 indicating 27% impact. The p value is .000 (<0.05). Additionally, LLCI and ULCI values are .1819 and .3777 respectively while 0 is not existing among these values indicating statistical significance of the regression analysis.

Table 4.11 also displays precise direct and indirect effect of artificial intelligence and brand image on project success while brand image is reflected as the mediating variable. The direct effect is statistically insignificant with LLCI and ULCI values of -.1706 and .0216 respectively, t value of -1.5, p value of .128 and. Correspondingly, the specific indirect effect of brand image is 38% and BootLLCI and BootULCI values are .3014 and .4571 respectively. The effect of artificial intelligence on project success is insignificant after inclusion of brand image as mediating variable indicating full mediation of brand image over artificial intelligence and project success in the information technology and customer interactive organizations.

The results presented in table 4.11 authorize that the hypothesis H8 i.e. "Brand Image mediates the relationship between Artificial Intelligence and Project Success" has been upheld.

4.3.5 Mediating Role of Brand Image Between Advertisement and Project Customer Engagement

The independent variable advertisement (AD), dependent variable project success (PS) and mediating variable brand image (BI) were added in the corresponding options in Hayes Process Macro regression analysis.

TABLE 4.12: Mediating Effect of Brand Image between Advertisement and Project Customer Engagement

Predictors	β	SE	t	p
IV → DV	0.34	0.07	4.94	0.000
IV → MED	0.77	0.04	22.08	0.000
MED → DV	0.37	0.06	5.67	0.000
IV → MED → DV	0.63	0.04	14.15	0.000
Bootstrap results for indirect effect	Indirect Effect	LL 95% CI	UL 95% CI	
	0.29	0.19	0.39	

Notes: Bootstrap sample size 5000.

The outcomes summarized in Table 4.12 indicated that indirect effect (.29) of BI among AD and PS lies between .19 and .39 while zero is not existing in the 95% CI. Consequently, it is recognized that BI mediates the association among AD and PS, therefore nineth hypothesis H9 of this research is supported. The outcomes displayed in table 4.15 indicate significant and positive connotation of IV and MV in the mediation analysis. It shows that while brand image is reflected as mediating variable among advertisement and project success, the effect of advertisement on project citizenship behavior is positive and statistically significant. β value is .34 indicating 34% impact. t value is 4.94 (>2), and the p value is .000 (<0.05). Additionally, LLCI and ULCI values are .2025 and .4696 respectively and 0 is not existing among these values indicating statistical significance of regression analysis.

The outcomes presented in table 4.12 also display significant and positive connotation of IV and MV on DV in the mediation analysis. It shows that while brand image is reflected as mediating variable among advertisement and project success, the effect of advertisement and brand image on project success is positive and statistically significant. β value is .63 indicating 63% impact. p value is .000 (<0.05). Additionally, LLCI and ULCI values are .5468 and .7234 respectively and

0 is not existing among these values indicating statistical significance of regression analysis.

Table 4.12 also displays precise direct and indirect effect of advertisement and brand image on project success while brand image is reflected as the mediating variable. The direct effect is statistically significant with LLCI and ULCI values of .2025 and .4696 respectively, t value of 4.94, p value of .000 and. Correspondingly, the precise indirect effect of brand image is 29% and BootLLCI and BootULCI values are .1913 and .3940 respectively. The effect of advertisement on project success is reduced after inclusion of brand image as mediating variable and this effect is still significant indicating partial mediation of brand image on advertisement and project success in the information technology and customer interactive organizations.

TABLE 4.13: Results of Hypotheses Testing

Hypothesis	Statement of Hypothesis	Supported/ Not Supported
H1	Artificial Intelligence has positive effect on Brand Image	Supported
H2	Advertisement has a positive effect on Brand Image	Supported
H3	Brand Image has positive effect on Project Customer Engagement	Supported
H4	Brand Image has positive effect on Project Success	Supported
H5	Project Customer Engagement has positive effect on Project Success	Supported
H6	Brand Image mediates the relationship between Artificial Intelligence and Project Customer Engagement	Supported / Full Mediation
H7	Brand Image mediate the relationship between Advertisement and Project Customer Engagement	Supported / Partial Mediation
H8	Brand Image mediates the relationship between Artificial intelligence and project success	Supported / Full Mediation
H9	Brand Image mediates the relationship between Advertisement and Project Success	Supported / Partial Mediation

The outcomes of all anticipated hypothesis for present research have been presented in table 4.13. The correlation as well as regression analysis of gathered data specified that all hypotheses have been supported. The proposed model has a positive association with project success indicating the significance of this research. The particular variables may be reflected as prominent aspects to study project success in the information technology and customer interactive organizations in Pakistan.

Chapter 5

Discussion and Conclusion

5.1 Discussion

This research was designed to determine the link among artificial intelligence, advertisement, brand image, project customer engagement and project success. Data was gathered from subordinates and supervisors working in information technology and customer interactive companies in Pakistan, and the outcomes have shown that artificial intelligence, advertisement, brand image, project customer engagement were directly and indirectly connected to project success. This study has talked about a vital gap in marketing and project management literature by empirically examining the connotation among artificial intelligence, advertisement, brand image, project customer engagement and project success, because connection between numerous other determinants (for instance citizenship behavior and service quality) and project success has previously been examined (Liu, Cui, Wu, Cao, & Ye, 2021). Outcomes of this study recommend that artificial intelligence, advertisement, brand image and project customer engagement must be indispensable for information technology and customer interactive companies for certifying the higher level of project success, consequently supporting the previous researches (Wamba-Taguimdje et al., 2020). Furthermore, the study has followed a previous call for research to determine the role of artificial intelligence, advertisement, brand image and project customer engagement in project success (Brock & Von Wangenheim, 2019).

5.1.1 Hypothesis 1, 2

H1: Artificial Intelligence has positive effect on Brand Image

H 2: Advertisement has a positive effect on Brand Image

This study also elaborates that artificial intelligence and advertisement have positive and significant link with brand image, which advocates that in addition to the other factors, artificial intelligence and advertisement also results in better brand image. This outcome supports the prior claim that artificial intelligence and advertisement are likely to have influence on brand image (Wu, Dodoo, Wen, & Ke, 2021). These outcomes also elaborate on the fact that artificial intelligence and advertisement are integral parts of marketing and project planning and they lead towards positive brand image.

5.1.2 Hypothesis 3, 4

H3: Brand Image has positive effect on Project Customer Engagement.

H4: Brand Image has positive effect on Project Success.

In this manner, the study also determined direct effect of brand image with project customer engagement and project success. Outcome was significant, indicating that brand image may directly lead to the accomplishment of project customer engagement and project success. Stronger influence on project customer engagement and project success (Robiady, Windasari, & Nita, 2021). Considering role of project customer engagement (Lückmann, 2020) and project success (Bergmann & Karwowski, 2018), this study has moved ahead by inclusion of these two indispensable constructs in a same context and it has anticipated that brand image might arouse project customer engagement and project success.

5.1.3 Hypothesis 5

H5: Project Customer Engagement has positive effect on Project Success.

This study has also focused on role of project customer engagement in explaining project success and found positive and significant link, which supports that, project customer engagement also results in project success. This outcome supports the prior claim that project customer engagement is probable to have impact on project success (Anantatmula & Rad, 2018). This outcome also elaborates on the fact that project customer engagement is an integral part of marketing and project planning, and it results in project success.

5.1.4 Hypothesis 6

H6: Brand Image mediates the relationship between Artificial Intelligence and Project Customer Engagement.

The research has investigated mediating effect of brand image among artificial intelligence and project customer engagement. The mediating effect was found to be full, suggesting that artificial intelligence can indirectly through brand image result in customer engagement. This indicated that this research adds to previous researches suggesting that artificial intelligence is likely to have a sturdier influence on brand image and project customer engagement (Hoyer, Kroschke, Schmitt, Kraume, & Shankar, 2020). Similarly, the study also elaborated on mediating effect of brand image among advertisement as well as project customer engagement. While this mediating impact was acknowledged to be partial, it still indicates that advertisement can directly and indirectly through brand image result in customer engagement. Hence, this research adds to previous research indicating that advertisement is plausible to have a stronger influence on brand image and project customer engagement (Vander Schee, Peltier, & Dahl, 2020).

5.1.5 Hypothesis 7, 8

H7: Brand Image mediates the relationship between Artificial intelligence and project success.

H8: Brand Image mediates the relationship between Artificial intelligence and project success.

The study further explored mediating effect of brand image between artificial intelligence and project success. Mediating effect was found to be full, indicating that artificial intelligence can indirectly through brand image result in project success. Hence, this research contributes towards prior research suggesting that artificial intelligence is likely to have a stronger influence on brand image and project success (Pan & Zhang, 2021). Similarly, the study also elaborated on the mediating effect of brand image among advertisement as well as project success. While the mediating effect was found to be partial, it still implies that advertisement may directly and indirectly through brand image result in project success. Hence, this research contributes towards previous research indicating that advertisement is likely to have strong influence on brand image and project success (Gómez-Rico, Molina-Collado, Santos-Vijande, Molina-Collado, & Imhoff, 2022).

5.1.6 Hypothesis 9

H9: Brand Image mediates the relationship between Advertisement and Project Success.

Considering the role of brand image within project customer engagement (Gruss, Kim, Abrahams, Song, & Berry, 2018) and project success (Koo & Curtis, 2020), this study has moved ahead by considering these two indispensable processes in the same context and it has anticipated that artificial intelligence and advertisement could stimulate brand image at the same time while resulting in project customer engagement and project success.

Marketing strategies for project success is a universal trend, and it has been acknowledged as one of the most important contributors to performance of businesses within diversified cultures. Philosophers firmly consider that project success is also one of the most valuable facets of companies and it must be investigated and evaluated at several stages and across various nations too. The growing recognition of project success in numerous industries has caused academicians and policy makers to systematically recognize all the aspects that impact project success in expanded frameworks and in vibrant cultural backgrounds also. This research has focused

on vital but less researched constructs in marketing and project management literature i.e., artificial intelligence, advertisement, brand image and project customer engagement, and identified their impact over project success in elementary schools in Pakistan.

It has been observed that companies in Pakistan are usually hesitant to accept diverse theoretically effective marketing and project management methods and most of their approaches are not appropriately strategic, opposing to numerous advanced countries where diverse marketing and project management like artificial intelligence are easily acknowledged. Contemplation of influences that either increase or decrease project customer engagement and project success within information technology and customer interactive companies has become even more important from the perspective of the developing countries such as Pakistan, where technology sector is determined to grow and facing abundant problems relating to political and economic situation. The findings of this research indicate that artificial intelligence, advertisement, and positive brand image are very important for project customer engagement and project success in information technology and customer interactive companies of Pakistan.

Regression analysis has resulted in significant values for R2 for artificial intelligence, advertisement, brand image and project customer engagement. The considerable values of R2 for artificial intelligence, advertisement, brand image and project customer engagement are rationalized because this research was an effort to study technology sector and more specifically information technology and customer interactive companies of Pakistan. Additionally, sample size of this research was exceptionally satisfactory, when related to whole population of the subordinates and supervisors working in information technology and customer interactive companies in Pakistan. It has also been explained from the viewpoint of a developing nation as Pakistan, where marketing and project related policies are normally much conventional and adaptation of modern strategies like artificial intelligence is to a lesser extent. Technology sector is yet in developing phase and executives are attempting to embrace to innovative tactics for effective consequences. All these aspects have resulted in considerable values for R2 for artificial intelligence,

advertisement, brand image and project customer engagement in information technology and customer interactive companies of Pakistan.

This research model has been found to affect the success of a project to a substantial degree. Individual effect of the independent variables i.e., artificial intelligence and advertisement and the mediating effect of brand image is significant. In the technology sector of Pakistan, artificial intelligence, advertisement, brand image and project customer engagement have been found to affect project success to the greatest extent. This signifies importance of taking into account all facets of artificial intelligence, advertisement, brand image and project customer engagement, as policy makers develop strategies to enhance the project success within information technology and customer interactive companies of Pakistan.

5.2 Conclusion

Marketing approaches within project management is evolving area of research in Pakistan; hence, it is important for marketing and project management academics and experts to be concerned about all aspects that directly or indirectly cause in improving the possibility of project success. Improved knowledge of marketers and project managers about adoption of numerous innovative strategies has allowed marketers and project management professionals to succeed under the innovative concept of project customer engagement. Prior studies have discovered the expectations pertaining to role of artificial intelligence and advertisement in marketing and project management context since artificial intelligence and advertisement, along with brand image can be noticeably prominent in this respect. The presence of similarities among artificial intelligence and advertisement, or project customer engagement and project success, are relevant to brand image prospered by marketers and project managers. Brand image is an important notion, and it must be considered while examining project customer engagement and success in project management perspective.

Marketers and project managers are constantly concerned about improving the propensity of project success in varied contexts, and a major contributor in the

direction of project success in most of the contexts is artificial intelligence. Various researches have examined prominent aspects that impact project success however not often a thorough study is found in marketing literature that characterizes the impact of an essential element of artificial intelligence in conjunction with mediating role of brand image. This research has endeavored to put forward a thorough analysis of the association among artificial intelligence, advertisement, brand image, project customer engagement and project success in the information technology and customer interactive companies of Pakistan.

The present study has identified significantly positive association between artificial intelligence, advertisement and brand image information technology and customer interactive companies of Pakistan. The impact of artificial intelligence as well as that of advertisement is substantial which suggests that their specific effects in improving success of the project cannot be overlooked. The marketers and project managers in Pakistan are observed to be to a lesser extent persuaded towards acceptance of novel approaches, marketing and project management approaches in Pakistan are conventionally planned, irrespective of the project nature which makes scheming advanced approaches to improve success of the project even more thought-provoking. The notion becomes more problematic and requires additional amplification when it comes to information technology and customer interactive companies of Pakistan which is still controlled by conventional managers having inconsequential familiarity with contemporary practices to improve efficiency.

Due to brand image, the impact of artificial intelligence and advertisement is enhanced, and it becomes important to examine both aspects to increase the project success in information technology and customer interactive companies of Pakistan. Project organization is not a one-time practice and marketers and project managers need to improve productivity by means of all possible methods. Contemporary marketing and project management practices must focus on endorsing artificial intelligence, advertisement, brand image, project customer engagement so that results can ultimately contribute towards project success explicitly within information technology and customer interactive companies of Pakistan. Subsequently, adding to long-term and short-term benefits for marketers and project managers.

5.3   Theoretical and Practical Implications

This research has intended at positively insinuating some truth in field of marketing and project management. The current study has substantial theoretical as well as practical implications in marketing and project management field. This research has added to infrequent literature pertaining to marketing and project management in Pakistan, and this implication is increased when the viewpoint of information technology industry is considered. This study has added towards marketing literature as well by relating it project management context and examining it in conjunction with the theories of artificial intelligence, advertisement, brand image and project customer engagement. This sets a good base for marketing and project management academics to think about these aspects in future investigations. The outcomes of this research can be considered to examine and analyze marketing practices for project management in different industries and within different cultural settings too. From practitioner's viewpoint, aiming only at information technology and customer interactive companies of Pakistan that has low consideration of artificial intelligence, advertisement, brand image and project customer engagement to inspire project success may result in development of effective approaches in this less researched marketing and project management context. Marketers and project managers with more inclination towards adoption of advanced approaches are projected to make improved marketing and choices of project management, consequently it is recommended that while scheming effective marketing and project management approaches to improve project's success tendency within information technology sector. Depending on efficacious strategies of artificial intelligence, advertisement in the information technology and customer interactive companies of Pakistan.

5.4   Limitations and Directions for Future Research

Limitations of this research may be acknowledged to be future research directions in comparable domain. The limitations and potential prospects of future research

are elaborated below:

1. This research is limited to information technology and customer interactive companies of Pakistan, in future related research can be replicated in other industries, such as construction.

2. This research is specific only to Pakistan and the sample size is limited to 325 respondents. Hence, similar research may be replicated in diverse cultures in future with a larger sample size.

3. In the current study, cognitive marketing theory has been examined under the context of Artificial Intelligence and Project Success. The criticism on this model widens the room for further research using a different model of artificial intelligence and project success with less criticism.

4. Data for the research was collected at one point in time. Longitudinal data may result in thorough results because marketing and project management approaches are anticipated to change over time.

Bibliography

Afzal, F., Yunfei, S., Nazir, M., & Bhatti, S. M. (2019). A review of artificial intelligence based risk assessment methods for capturing complexity-risk interdependencies: cost overrun in construction projects. *International Journal of Managing Projects in Business*, *14*(2), 300–328.

Ahmed, D. N., Naji, L. A., Faisal, A. A., Al-Ansari, N., & Naushad, M. (2020). Waste foundry sand/mgfe-layered double hydroxides composite material for efficient removal of congo red dye from aqueous solution. *Scientific Reports*, *10*(1), 1–12.

Akaka, M. A., Vargo, S. L., & Lusch, R. F. (2013). The complexity of context: A service ecosystems approach for international marketing. *Journal of international marketing*, *21*(4), 1–20.

Al Sukaini, A. K. M. (2022). The effect of brand image and advertisement on consumer buying behavior in iraq. *World Bulletin of Management and Law*, *12*, 190–199.

Anantatmula, V. S., & Rad, P. F. (2018). Role of organizational project management maturity factors on project success. *Engineering Management Journal*, *30*(3), 165–178.

Andriani, M. A. (2017). Fasilitas eduwisata budidaya bunga hias di batu. *eDimensi Arsitektur Petra*, *5*(2), 593–600.

Arbouw, P., Ballantine, P. W., & Ozanne, L. K. (2019). Sustainable brand image: An examination of ad–brand incongruence. *Marketing intelligence & planning*.

Arslan, & Altuna, O. K. (2010). The effect of brand extensions on product brand image. *Journal of Product & Brand Management*.

Arslan, M., & Zaman, R. (2015). *Impact of brand image and service quality on consumer purchase intentions. a study of retail stores in pakistan.* GRIN Verlag.

Ballantyne, R., Warren, A., & Nobbs, K. (2006). The evolution of brand choice. *Journal of Brand Management*, *13*(4), 339–352.

Bergel, M., Frank, P., & Brock, C. (2019). The role of customer engagement facets on the formation of attitude, loyalty and price perception. *Journal of Services Marketing*.

Bergmann, T., & Karwowski, W. (2018). Agile project management and project success: A literature review. In *International conference on applied human factors and ergonomics* (pp. 405–414).

Berry, L. L., & Parasuraman, A. (2004). *Marketing services: Competing through quality.* Simon and Schuster.

Bian, X., & Moutinho, L. (2011). The role of brand image, product involvement, and knowledge in explaining consumer purchase behaviour of counterfeits: Direct and indirect effects. *European Journal of Marketing*.

Birtwistle, G., & Shearer, L. (2001). Consumer perception of five uk fashion retailers. *Journal of Fashion Marketing and Management: An International Journal*, *5*(1), 9–18.

Brackett, L. K., & Carr, B. N. (2001). Cyberspace advertising vs. other media: Consumer vs. mature student attitudes. *Journal of advertising research*, *41*(5), 23–32.

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: what is it? how is it measured? does it affect loyalty? *Journal of marketing*, *73*(3), 52–68.

Brock, J. K.-U., & Von Wangenheim, F. (2019). Demystifying ai: What digital transformation leaders can teach you about realistic artificial intelligence. *California Management Review*, *61*(4), 110–134.

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of service research*, *14*(3), 252–271.

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement

in a virtual brand community: An exploratory analysis. *Journal of business research*, *66*(1), 105–114.

Brown, K., Schmied, H., & Tarondeau, J.-C. (2002). Success factors in r&d: a meta-analysis of the empirical literature and derived implications for design management. *Academic Review*, *2*(1), 72–87.

Busari, O., Olannye, P., & Taiwo, C. (2002). *Essentials of marketing.* Wadtson Dusme Limited, Mushin, Lagos.

Cambra-Fierro, J. J., Fuentes-Blasco, M., Huerta-Álvarez, R., & Olavarría, A. (2021). Customer-based brand equity and customer engagement in experiential services: insights from an emerging economy. *Service Business*, *15*(3), 467–491.

Cavaliere, L. P. L., Mangalasserri, D. K., Rajest, S. S., Venkateswaran, D. P., Byloppilly, D. R., Effendy, F., ... Regin, R. (2021). The impact of brand counterfieting on consumer behavior in the fashion sector. *Turkish Journal of Physiotherapy and Rehabilitation*, *32*(3), 19831–19846.

Chen, C.-Y., Aprillia, B. S., Chen, W.-C., Teng, Y.-C., Chiu, C.-Y., Chen, R.-S., ... Chen, L.-C. (2018). Above 10% efficiency earth-abundant cu2znsn (s, se) 4 solar cells by introducing alkali metal fluoride nanolayers as electron-selective contacts. *Nano Energy*, *51*, 597–603.

China, R. L. (2022). Building brand identity and organizational growth for a small media company.

Choo, D., & Hoe, Y. (2022). Relationship of augmented reality marketing and perceived price on consumer purchase intention with mediating role of brand image of shopee malaysia. *Journal of Business and Social Sciences*, *2022*(11), 1–10.

Christodoulides, G., De Chernatony, L., Furrer, O., Shiu, E., & Abimbola, T. (2006). Conceptualising and measuring the equity of online brands. *Journal of marketing management*, *22*(7-8), 799–825.

Chung, M., Ko, E., Joung, H., & Kim, S. J. (2020). Chatbot e-service and customer satisfaction regarding luxury brands. *Journal of Business Research*, *117*, 587–595.

Creevey, D., Kidney, E., & Mehta, G. (2019). From dreaming to believing: a review

of consumer engagement behaviours with brands' social media content across the holiday travel process. *Journal of Travel & Tourism Marketing*, *36*(6), 679–691.

Das, S., & Mishra, V. (2020). *Achieving project success through leadership communication: A study on construction industry.*

Da Silva, R. V., & Syed Alwi, S. F. (2008). Online corporate brand image, satisfaction and loyalty. *Journal of Brand Management*, *16*(3), 119–144.

Davenport, Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, *48*(1), 24–42.

Davenport, & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard business review*, *96*(1), 108–116.

Doyle, P., & Stern, P. (2006). *Marketing management and strategy.* Pearson Education.

Ducoffe, R. H. (1996). Advertising value and advertising on the web-blog@ management. *Journal of advertising research*, *36*(5), 21–32.

du Plessis, A., et al. (2013). Wikis and powerpoint as cognitive development tools in scientific literacy: A proposed heuristic. *Problems of Education in the 21st Century*, *57*(1), 25–47.

Etikan, I., Alkassim, R., & Abubakar, S. (2016). Comparision of snowball sampling and sequential sampling technique. *Biometrics and Biostatistics International Journal*, *3*(1), 55.

Fesenko, T., Shakhov, A., Fesenko, G., Bibik, N., & Tupchenko, V. (2018). Modeling of customer-oriented construction project management using the gender logic systems. *Eastern-European Journal of Enterprise Technologies*(1 (3)), 50–59.

Finstad, K. (2010). The usability metric for user experience. *Interacting with Computers*, *22*(5), 323–327.

Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach.* Psychology press.

Gensler, S., Völckner, F., Liu-Thompkins, Y., & Wiertz, C. (2013). Managing brands in the social media environment. *Journal of interactive marketing*,

27(4), 242–256.

Gómez-Rico, M., Molina-Collado, A., Santos-Vijande, M. L., Molina-Collado, M. V., & Imhoff, B. (2022). The role of novel instruments of brand communication and brand image in building consumers' brand preference and intention to visit wineries. *Current Psychology*, 1–17.

Gruss, R., Kim, E., Abrahams, A., Song, Y., & Berry, D. (2018). Capturing customer engagement on social media: the power of social communities' activation words. In *2018 global marketing conference at tokyo* (Vol. 894).

Gummerus, J., Liljander, V., Weman, E., & Pihlström, M. (2012). Customer engagement in a facebook brand community. *Management Research Review*.

Haeckel, S. H., & Nolan, R. (1993). Managing by wire. *Harvard business review*, *71*(5), 122–132.

Hayes, A. F., Montoya, A. K., & Rockwood, N. J. (2017). The analysis of mechanisms and their contingencies: Process versus structural equation modeling. *Australasian Marketing Journal (AMJ)*, *25*(1), 76–81.

He, Q., Wang, T., Chan, A. P., & Xu, J. (2021). Developing a list of key performance indictors for benchmarking the success of construction megaprojects. *Journal of Construction Engineering and Management*, *147*(2), 04020164.

Hoffman, D. L., & Novak, T. P. (1996). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of marketing*, *60*(3), 50–68.

Hollebeek, L. D. (2011). Demystifying customer brand engagement: Exploring the loyalty nexus. *Journal of marketing management*, *27*(7-8), 785–807.

Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of interactive marketing*, *28*(2), 149–165.

Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. *Journal of Interactive Marketing*, *51*(1), 57–71.

Jain, P., & Aggarwal, K. (2020). Transforming marketing with artificial intelligence. *International Research Journal of Engineering and Technology*, *7*(7), 3964–3976.

Jalilvand, M. R., & Samiei, N. (2012). The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in iran. *Marketing Intelligence & Planning*.

Janssens, J. (2021). It's all about creating customer value: Activating engagement through crm-driven projects. In *Insights, innovation, and analytics for optimal customer engagement* (pp. 226–256). IGI Global.

Keller, K. L. (2020). Leveraging secondary associations to build brand equity: theoretical perspectives and practical applications. *International Journal of Advertising*, *39*(4), 448–465.

Khan, Z., Yang, Y., Shafi, M., & Yang, R. (2019). Role of social media marketing activities (smmas) in apparel brands customer response: A moderated mediation analysis. *Sustainability*, *11*(19), 5167.

Koo, B., & Curtis, C. (2020). An examination of the role of internal brand management: impact of contractual models. *Journal of Hospitality Marketing & Management*, *29*(4), 503–525.

Kotler, P., & Armstrong, G. (2010). *Principles of marketing.* Pearson education.

Kotler, P., Armstrong, G., Harris, G., & Piercy, N. (2017). Principles of marketing (seventh european edition.). *United Kingdom (GB): Pearson Education Limited*.

Kwon, W.-S., & Lennon, S. J. (2009). What induces online loyalty? online versus offline brand images. *Journal of Business Research*, *62*(5), 557–564.

Lamprou, A., & Vagiona, D. G. (2022). Identification and evaluation of success criteria and critical success factors in project success. *Global Journal of Flexible Systems Management*, *23*(2), 237–253.

Lee, D., Hosanagar, K., & Nair, H. S. (2018). Advertising content and consumer engagement on social media: Evidence from facebook. *Management Science*, *64*(11), 5105–5131.

Lewis, A., Cave, P., Stern, M., Welch, L., Taylor, K., Russell, J., ... others (2016). Singing for lung health—a systematic review of the literature and consensus statement. *NPJ primary care respiratory medicine*, *26*(1), 1–8.

Li, V. K., Ongpauco, P. A., Rubante, J. T., et al. (2022). The impact of viral marketing collateral on brand image:"# kwentongjollibee" advertisement.

Journal of Business and Management Studies, *4*(1), 264–272.

Lian, S. B., & Yoong, L. C. (2018). Customer engagement in social media and tourism brand performance implications. *Journal of Design, Art and Communication*, 1186–1194.

Liu, L., Cui, T., Wu, J., Cao, R., & Ye, Y. (2021). Encouraging tourist citizenship behavior through resource uniqueness and service quality: The mediating role of emotions. *Journal of Vacation Marketing*, *27*(1), 45–60.

Lu, A. C. C., Gursoy, D., & Lu, C. Y. (2015). Authenticity perceptions, brand equity and brand choice intention: The case of ethnic restaurants. *International journal of hospitality management*, *50*, 36–45.

Lückmann, P. (2015). Towards identifying success factors for cross-cultural project customer engagement: A literature review. *Procedia Computer Science*, *64*, 324–333.

Lückmann, P. (2020). Introduction to intercultural project customer engagement. In *Engagement of intercultural project customers* (pp. 1–5). Springer.

Ma, Z., & Palacios, S. (2021). Image-mining: exploring the impact of video content on the success of crowdfunding. *Journal of Marketing Analytics*, *9*(4), 265–285.

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.

Meenaghan, T. (1995). The role of advertising in brand image development. *Journal of product & brand management*.

Merz, M. A., He, Y., & Vargo, S. L. (2009). The evolving brand logic: a service-dominant logic perspective. *Journal of the academy of marketing science*, *37*(3), 328–344.

Miller, G. J. (2021). Artificial intelligence project success factors: Moral decision-making with algorithms. In *2021 16th conference on computer science and intelligence systems (fedcsis)* (pp. 379–390).

Minbashrazgah, M. M., Garbollagh, H. B., & Varmaghani, M. (2021). Brand-specific transactional leadership: the effects of brand-building behaviors on employee-based brand equity in the insurance industry. *Kybernetes*.

Minelle, F. (2022). Paul boudreau. the self-driving project: using artificial intelligence to deliver project success. *PROJECT MANAGER (IL)*(2022/50).

Misra, S., & Beatty, S. E. (1990). Celebrity spokesperson and brand congruence: An assessment of recall and affect. *Journal of business research*, *21*(2), 159–173.

Mollen, A., & Wilson, H. (2010). Engagement, telepresence and interactivity in online consumer experience: Reconciling scholastic and managerial perspectives. *Journal of business research*, *63*(9-10), 919–925.

Newman, D., Bonilla, E. V., & Buntine, W. (2011). Improving topic coherence with regularized topic models. *Advances in neural information processing systems*, *24*.

Pan, Y., & Zhang, L. (2021). Roles of artificial intelligence in construction engineering and management: A critical review and future trends. *Automation in Construction*, *122*, 103517.

Patterson, P., Yu, T., & De Ruyter, K. (2006). Understanding customer engagement in services. In *Advancing theory, maintaining relevance, proceedings of anzmac 2006 conference, brisbane* (pp. 4–6).

Pornpitakpan, C. (2004). The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of applied social psychology*, *34*(2), 243–281.

Quynh, N. H. (2019). The moderating influence of brand image on the relationship between customer engagement and customer loyalty. *Indian Journal of Marketing*, *49*(9), 42–56.

Ramautar, V., Overbeek, S., & España, S. (2021). Human sustainability in software development. In *Software sustainability* (pp. 329–348). Springer.

Rather, R. A., Hollebeek, L. D., & Islam, J. U. (2019). Tourism-based customer engagement: The construct, antecedents, and consequences. *The Service Industries Journal*, *39*(7-8), 519–540.

Robiady, N. D., Windasari, N. A., & Nita, A. (2021). Customer engagement in online social crowdfunding: The influence of storytelling technique on donation performance. *International journal of research in marketing*, *38*(2), 492–500.

Robson, P. (2002). *The economics of international integration*. Routledge.

Rodgers, S. (2021). *Themed issue introduction: Promises and perils of artificial intelligence and advertising* (Vol. 50) (No. 1). Taylor & Francis.

Russell, S. J., & Norvig, P. (2016). *Artificial intelligence: a modern approach. malaysia.* Pearson Education Limited London, UK:.

Sauder, M., & Espeland, W. N. (2009). The discipline of rankings: Tight coupling and organizational change. *American sociological review*, *74*(1), 63–82.

Saydan, R., & Dulek, B. (2019). The impact of social media advertisement awareness on brand awareness, brand image, brand attitude and brand loyalty: a research on university students. *International Journal of Contemporary Economics and Administrative Sciences*, *9*(2), 470–494.

Schivinski, B., & Dabrowski, D. (2016). The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications*, *22*(2), 189–214.

Schmalz, S., & Orth, U. R. (2012). Brand attachment and consumer emotional response to unethical firm behavior. *Psychology & marketing*, *29*(11), 869–884.

Schultz, D. E., & Block, M. P. (2015). Beyond brand loyalty: Brand sustainability. *Journal of Marketing Communications*, *21*(5), 340–355.

Singh, J., Flaherty, K., Sohi, R. S., Deeter-Schmelz, D., Habel, J., Le Meunier-FitzHugh, K., ... Onyemah, V. (2019). Sales profession and professionals in the age of digitization and artificial intelligence technologies: concepts, priorities, and questions. *Journal of Personal Selling & Sales Management*, *39*(1), 2–22.

Szalaty, P., & Derda, I. (2020). "revolutionizing beauty industry": Co-creation and customer engagement for brand image development. *International Journal of Marketing, Communication and New Media (IJMCNM)*, *8*(14), 45–69.

Tabassum, S., Khwaja, M. G., & Zaman, U. (2020). Can narrative advertisement and ewom influence generation z purchase intentions? *Information*, *11*(12), 545.

Vander Schee, B. A., Peltier, J., & Dahl, A. J. (2020). Antecedent consumer factors, consequential branding outcomes and measures of online consumer

engagement: current research and future directions. *Journal of Research in Interactive Marketing*, *14*(2), 239–268.

Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: Theoretical foundations and research directions. *Journal of service research*, *13*(3), 253–266.

Vishnoi, S. K., Bagga, T., Sharma, A., & Wani, S. N. (2018). Artificial intelligence enabled marketing solutions: A review. *Indian Journal of Economics & Business*, *17*(4), 167–177.

Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *Journal of marketing theory and practice*, *20*(2), 122–146.

Wallace, E., Buil, I., & De Chernatony, L. (2014). Consumer engagement with self-expressive brands: brand love and wom outcomes. *Journal of Product & Brand Management*.

Walsh, G., & Mitchell, V.-W. (2010). The effect of consumer confusion proneness on word of mouth, trust, and customer satisfaction. *European Journal of marketing*, *44*(6), 838–859.

Wamba-Taguimdje, S.-L., Wamba, S. F., Kamdjoug, J. R. K., & Wanko, C. E. T. (2020). Influence of artificial intelligence (ai) on firm performance: the business value of ai-based transformation projects. *Business Process Management Journal*, *26*(7), 1893–1924.

Wu, L., Dodoo, N. A., Wen, T. J., & Ke, L. (2021). Understanding twitter conversations about artificial intelligence in advertising based on natural language processing. *International Journal of Advertising*, 1–18.

Yunika, E., et al. (2022). The influence of customer satisfaction, brand image on customer loyalty of bank syariah indonesia (bsi) in padang with customer engagement as mediation variable. *Strategic Management Studies*, *1*(1).

Zhang, Y., et al. (2015). The impact of brand image on consumer behavior: A literature review. *Open journal of business and management*, *3*(01), 58.

Appendix-A

Questionnaire

Dear Respondent

I am a student of MS degree and currently researching the topic of "**Impact of Artificial Intelligence on Brand Image and Customer Engagement with Moderating Role of Marketing**". You are one of my potential respondents and are requested to take 5 minutes of your busy schedule to fill out this questionnaire. Data is being captured anonymously and will be kept confidential. Responses will be used strictly for academic purposes and if you are interested to know the findings, you may contact the undersigned.

Sincerely,

Sitara Ali,

Faculty of Management and Social Sciences,

Capital University Science and Technology, Islamabad.

Section 1: Demographics

Gender	Male	Female	Prefer not to say	
Age	20-30	31-40	41-50	51 or Above
Qualification	Bachelors	Masters/MS	Other	
Work Experience	0-5	06-Oct	Nov-15	16 or above

Section 2: Artificial Intelligence

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Statement					
A1	The AI replied to my question properly	1	2	3	4	5
A2	E-learning provides information that is relevant to learning	1	2	3	4	5
A3	The AI technology makes this brand's website easy to use and effortless	1	2	3	4	5
A4	The AI responded in a form that I could understand	1	2	3	4	5
A5	The AI technology provides customers with specific, preferred information	1	2	3	4	5
A6	The system provides clear, easy-to-read information	1	2	3	4	5
A7	The AI response was relevant to my question	1	2	3	4	5

Section 3: Advertisement

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Statement					
AD1	This brand's advertising is entertaining	1	2	3	4	5
AD2	This brand's advertising is pleasing	1	2	3	4	5
AD3	This brand's advertising is enjoyable	1	2	3	4	5
AD4	This brand's advertising provides timely information	1	2	3	4	5
AD5	This brand's advertising supplies relevant product information	1	2	3	4	5
AD6	This brand's advertising is a good source of product information	1	2	3	4	5
AD7	This brand's advertising is credible	1	2	3	4	5
AD8	This brand's advertising is trustworthy	1	2	3	4	5

AD9	This brand's advertising is believable	1	2	3	4	5
AD10	I believe that this brand's advertising is a good reference for purchasing products	1	2	3	4	5

Section 4: Brand Image

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Statement					
B1	This brand has differentiated image in comparison with the other e-commerce	1	2	3	4	5
B2	This brand has a clean image	1	2	3	4	5
B3	This brand is a well-established e-commerce	1	2	3	4	5
B4	This brand arouses my sympathy to purchase the product	1	2	3	4	5

Section 5: Project Customer Engagement

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Statement					
CE1	The project had strong customer commitment and presence (i.e. having at least one customer representative on site working hard and full-time as a member of the project team)	1	2	3	4	5

CE2	The customer representative on the project had full authority and knowledge to make decisions on-site, such as approving, disapproving, and prioritizing project requirements and changes	1	2	3	4	5
CE3	There was a good customer relationship within the project	1	2	3	4	5

Section 6: Project Success

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No.	Project Success					
PS1	The project improved my performance as a customer.	1	2	3	4	5
PS2	The project met my requirements.	1	2	3	4	5
PS3	It is easy to use.	1	2	3	4	5
PS4	I am satisfied with this project.	1	2	3	4	5
PS5	I will come back for future work.	1	2	3	4	5