

Quantum Marketing: A New Paradigm to revolutionize the Marketing Strategy & awareness of Indian Consumers.

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ABSTRACT

Marketing 4.0 is concerned with the confluence of both offline & online marketing strategy and includes digitalization to increase the flexibility. Technological Advancement & positive and negative aspect of Digitalization is the main reason that led to Marketing 5.0. Marketing 5.0 materializes against the backdrop of three major challenges- Generation Gap, Prosperity & Digital Divide. Marketing 5.0 that integrate the marketing 3.0 & 4.0 it means integrating the human centric approach with digital or technological marketing techniques. Quantum Marketing includes the application of human mimicking technology to create, communicate & deliver or enhance value to customer.

The Study aim to analyze the different Quantum Marketing strategy it can be Artificial Intelligence, Machine Learning, Virtual Reality, and sensor, Augmented Reality or Big Data Analytics. There are many significant changes which take place in the strategies of Marketing & to enhance the awareness of Indian Consumer on the same.

The study is entirely based on Primary & Secondary Data and it is Exploratory. The method used to find research gap is content analysis. The study aims to identify the current marketing strategies and paradigm shift of Marketing.

Keyword:- Quantum marketing, Marketing Strategies, Consumer Awareness, Consumer Data Analysis.

INTRODUCTION

Quantum Marketing is the application of Quantum Mechanics to marketing strategies. It is how sub atomic particles can be used in the Marketing Strategies. This Marketing Concept makes use of the fact that subatomic particles are capable of existing in more than one state at a time. Quantum Marketing targets multiple demographics with a single campaign. Quantum Marketing Business uses the advanced computing system to gain deeper insight into consumer preference,

behavior & trend. It creates a decision tree and holds the potential to redefine how the business connect with consumers & drive growth in the future. Quantum Marketing uses advanced technology like Artificial Intelligence, sensors, augmented & virtual reality, Internet of Things.

The Research Gap of the Topic is revolutionizing the different Quantum Marketing Strategies and the awareness of Indian Consumers regarding these strategies used by the marketer. Earlier research paper on the same topic take into account enhancing the knowledge of marketer & Businessman regarding the future marketing Strategies

Marketing 5.0 i.e. Quantum Marketing centre around three interrelated application- a) Predictive Marketing b) contextual Marketing c) Augmented Marketing. These application are built on two approaches- Firstly, Data Driven Marketing here the data are analyzed from various internal & external sources and building a suitable ecosystem to take marketing decisions. Secondly, is Agile Marketing which uses decentralized teams to design, develop the product and marketing campaigns. The application used in Quantum Marketing are:-

- 1) Predictive Marketing which is used to predict the result of various marketing activity before there launch thoughts.
- 2) Contextual Marketing allows marketer to perform real time one to one marketing through the use of sensors & digital space.
- 3) Augmented Reality is using of digital technology to improve customer responses by the use of chat bots & virtual assistants.

LITERATURE REVIEW

The word Quantum Marketing was coined by Raja Rajamannar in his book with the title “Quantum Marketing: - Mastering the new marketing mindset for tomorrow’s Consumers”. According to the author of the title Focus is on the evolution of marketing, clarity’s on the right marketing strategy, gaining perspective from top marketers. Quantum Marketing is considered as fifth paradigm not is an evolution but revolution ([Rajamannar, 2021](#)). Quantum Marketing is a paradigm shift to the marketing because it creates a revolution in marketing. Creating the value for the customers together with Quantum Marketing strategies plays a significant role in the relationship between value innovation & creating a new Marketing space ([Ozkan & Keskin 2020](#)). As we all known Quantum Marketing involve the use of Artificial Intelligence, Machine Learning, Internet of Things, sensors, robotics, Augmented Reality, Virtual Reality & Block Chain through this they try to explain how marketers can use the technology to address customer needs & make difference in the world ([Kotler 2021](#)). It is a symbiosis between human & technology. This Paradigm is the peak of human capabilities because we are able to amplify our abilities through the use of technology ([Kuryliak, 2021](#)). According to him modern companies should understand that there should be a balance between human and computer intelligence. Although technology is at the focal point of Marketing 5.0 yet human retains their central role when it comes to financial decisions. Quantum Marketing is all about broad, probabilistic thinking. In Quantum Marketing we don’t reach exactly the right buyer. We reach anyone who could potentially in the short term or in the long term. We don’t design specific creative for specific buyer. We design creative for that is potentially relevant to a massive set of customers

(Weinberg 2022). Marketing 5.0 is the integration of human centric experience 3.0 with the technology driven marketing 4.0. One of the virtual themes in the marketing 5.0 is the next tech a group of technology that aims to emulate the capability of human marketer. Marketing 5.0 also include polarization of society without which they cannot survive (Khalid, 2023). In Quantum Marketing the buying process is unpredictable. It is all about broad, probabilistic thinking we don't reach exactly the right buyer but we reach anyone who could potentially buy in either the short term or long term. We don't deliver the message at a specific point of time. We deliver it all the time. This is Quantum Targeting, Quantum Marketing & Quantum Timing (Weinberg, 2023). Artificial Intelligence & Machine learning have already started to play a big role in Digital Marketing but their influence is set to increase in coming years. From Chat Bots to personalized content recommendation, Artificial Intelligence will help brands to provide a more tailored & efficient experience for their customers (Hwangi, 2023). A chart shows the percentage of the Companies using Quantum Marketing Strategy where Internet of Things connected devices, Marketing Automation, Social Listening Tools & Customer assessment have a percentage more than 60% (Omega Consulting, 2023) Through Quantum Marketing, following changes will be occurred Personalized Experience, ethics & values, speed replace size, loyalty concept transformed and there is use of advanced technologies (Japer, 2024). With the increasing popularity of Smart speakers and voice activated assistant like Amazon Alexa and Google assistant optimizing for voice search is an essential thing. Marketers are adopting their SEO strategies to include natural language processing by which the content is easily discoverable through voice searches (Khurana, 2024). Quantum Marketing works on Social Media activity, Buying Behavior, Multi Sensory Branding, Superposition concept, Real time insight, Data Set analysis etc (Saleem, 2024). The literature review focus on the content related to Quantum Marketing and their Strategies.

Research Methodology

This study aims to elucidate the concept Quantum marketing which has the capability to revolutionize the marketing strategy and enhances the awareness of Indian Consumers regarding the future Marketing Strategies. The research paper will help the following sectors:-

- 1) Through Quantum marketing marketers can extract meaningful Insight.
- 2) Help the consumer by getting awareness of Different Quantum Marketing Strategies used by the marketers.
- 3) Provide edge to research institution, stakeholders in technology & expertise.

In order to create awareness among the consumer regarding the Quantum Marketing strategies we have to collect Primary Data which involve fitting the Questionnaire from respondents.

As the research is basically Exploratory & Descriptive in nature. In order to assess the different strategies we have to depend on the Secondary Data. It is collected from the available literature- Textbooks, Journal, Magazine and Newspaper.

Data Collection and Analysis

In order to analyze the data Quantitative study is used, a well-structured Questionnaire is made to test the relationship between the Quantum marketing strategy and awareness of Indian Consumer on the strategies on Likert scale and some of them are closed Ended. The Questionnaire comprises of two sections: - First section deals with the demographic details of the customer which include names, age, gender, education. The second section deals with the awareness of Customer related to its strategies like Artificial Intelligence, Machine Learning, and Quantum Marketing is used in place of Traditional Marketing.

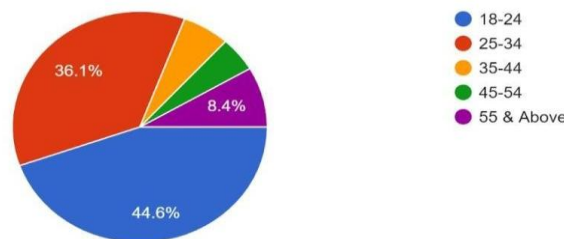
Data was collected from educated segments of the consumers (age 18 & above) through self-administered Questionnaire. Therefore, the respondents are contacted among them some are students and other are professionals who are working in any educational institutions. However, the respondents were also assured that information are kept confidential & would be for academic purpose only. Total 85 Questionnaire were administered using purposive sampling method out of these 83questionnaire were found to be appropriate. Demographic characteristics of the respondents are as follows- 36% are male & 63.9% female are there and all the respondent are adult (Age 18 & above). Education wise characteristics are 38.6% have Master's Degree, 25.3% have completed their Intermediates, and 19.3% are doctorates and 14.5 % having Bachelor's Degree. All such items were operationalized by taking a 5 point Likert scale along with some questions is closed ended. In Likert scale one denoted strongly Disagree & five denoted Strongly Agree. The Questionnaire was send via messages to different respondents through different online platforms.

Demographic Information

1) Age

Brackets	No. of Respondent	Percentage
18-24	37	44.6%
25-34	30	36.1%
35-44	05	6%
45-54	04	4.8%
55 & above	07	8.4%

Age Bracket
83 responses



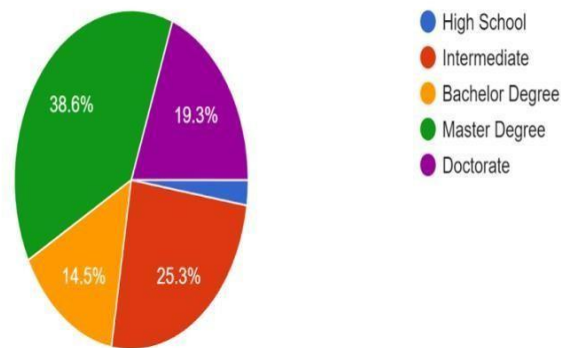
Majority of the respondents are in 18-24 age groups i.e. 44.6%, followed by 25-34 which is 36.1%. The contribution of respondents between age groups 45-54 is very low.

2) Educational Qualification

Qualification	No. of Respondent	Percentage
High school	02	2.4%
Intermediate	21	25.3%
Bachelor Degree	12	14.5%
Master Degree	32	38.6%
Doctorate	16	19.3%

Educational Qualification

83 responses



The Educational Qualification of the Respondent are shown with the help of table & pie chart where largest 38.6% respondent who have completed their Master degree are largest followed by doctorates 19.3% and then intermediates with 25.3%..

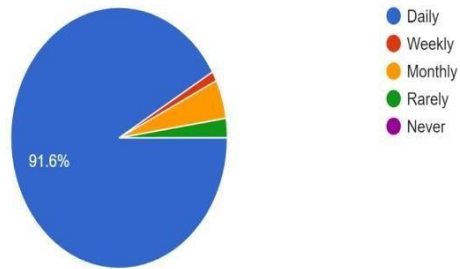
Consumer Awareness of Quantum Marketing Strategies

3) Access to Smart phones

Accessibility	No. of Respondent	Percentage
Daily	76	91.6%
Weekly	01	1.2%
Monthly	04	4.8%
Rarely	02	2.4%
Never	00	0%

Do you have access to a Smart Phone or Computer with Internet Connectivity?

83 responses



A Question was asked from the respondents regarding the access of Smart phone where 91.6% of the respondents have daily access of smart phone or computer.

4) While watching any video, an advertisement disrupts

Scale	No. of respondent	Percentage
Very Annoying	33	39.8%
Somewhat Annoying	33	39.8%
Neutral	12	14.5%
Somewhat not annoying	01	1.2%
Not very Annoying	04	4.8%

While watching any Interesting Video, you may come across an Advertisement. Do you find it annoying or not?

83 responses

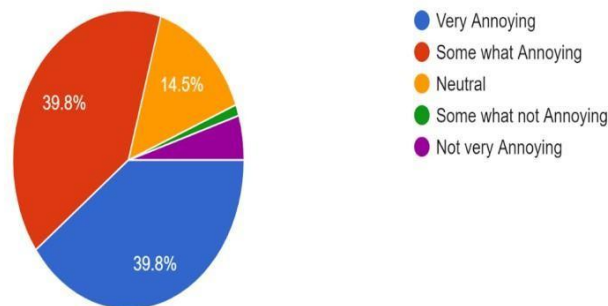


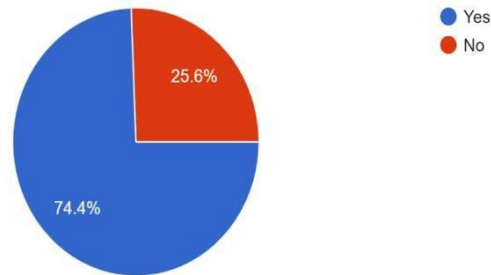
Table and Pie chart shows that an advertisement disruption feels very annoyed by 39.8% and shows somewhat annoyed by 39.8% which have the equal share. It means that they feel annoyed by the presence of Advertisement.

5) 360 Degree view of the Product Feature

Responses	No. of Respondents	Percentage
Yes	61	74.4%
No	41	25.6%

While Purchasing any Product online . Have you come across a 360-degree view of the Product feature?

82 responses



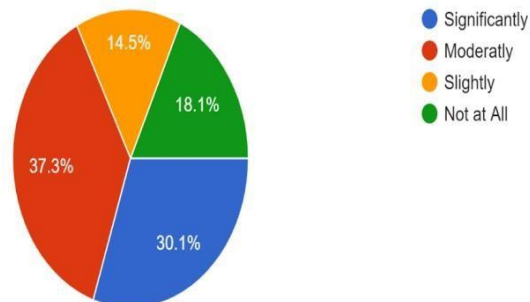
A Question was asked regarding the awareness of 360 degree view of the product feature where 74% are aware of this feature and 25.6% are unaware of this feature.

6) Subscription adopted to avoid Ads.

Scale	No. of Respondent	Percentage
Significantly	25	30.1%
Moderately	31	37.3%
Slightly	12	14.5%
Not at all	15	18.1%

To what extent do you think that Subscription is taken from Websites like Netflix, and Jio Cinema to avoid ads?

83 responses



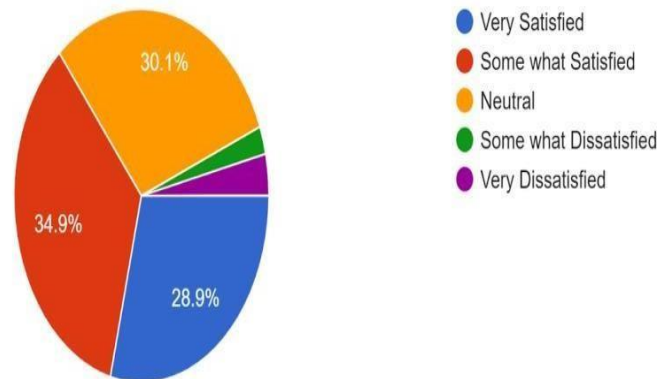
A Question was asked from the respondent that do you take subscription from various platforms to avoid ads where 37.3% responded moderately followed by significantly scale 30.1%.

7) Satisfaction regarding Artificial Intelligence powered Chat Bots.

Scale	No. of Respondents	Percentage
Very Satisfied	24	28.9%
Somewhat Satisfied	29	34.9%
Neutral	25	30.1%
Somewhat Dissatisfied	02	2.4%
Very Dissatisfied	03	3.6%

Do you use the feature of AI-powered Chat Bot and find it Satisfied?

83 responses



34.9% of the total Respondent feels that feature of AI powered Chat Bots in any application give feasible answer according to the Queries raised.

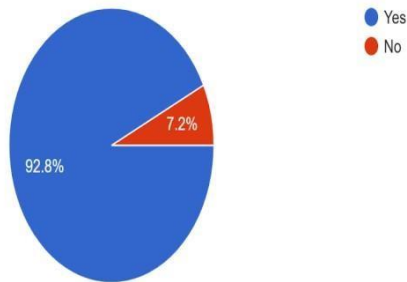
8) Change in Strategies after Fourth i.e. Digital Marketing Paradigm

Responses	No. of Respondents	Percentage
Yes	77	92.8%
No	6	7.2%

Have you noticed any changes in Marketing Strategies after the Fourth Paradigm of Marketing i.e.

Digital Marketing?

83 responses



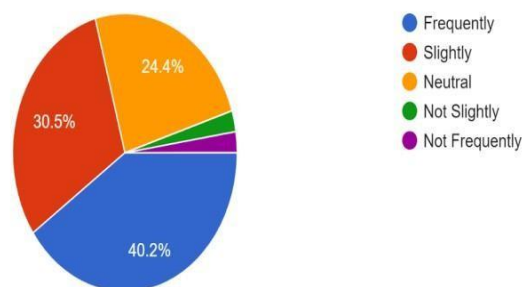
92.8% of the Respondents have the awareness regarding changes in Marketing Strategies after the fourth Paradigm.

9) Automated Email Strategies Awareness

Scale	No. of Respondents	Percentage
Frequently	33	40.2%
Slightly	25	30.5%
Neutral	20	24.4%
Not Slightly	2	2.4%
Not Frequently	2	2.4%

Now Automated E-Mail Strategies are used to strengthen Customer Engagement, Retention & Loyalty. Are you aware of this Strategy & how often do you come across it?

82 responses



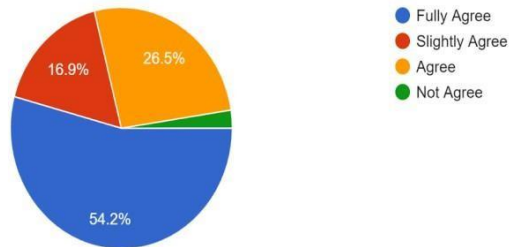
40.2% of the respondent has the awareness regarding Automated Email strategies used by the marketed and they frequently come across this strategy followed by 30.5% who are slightly aware of this strategy.

10) Online Shopping based on Behavior Preference.

Scale	No. of Respondents	Percentage
Fully Agree	45	54.2%
Slightly Agree	14	16.9%
Agree	22	26.5%
Not Agree	02	2.4%

Are you aware as a Customer that Online Shopping is based on the Behaviour Preference of the Customer?

83 responses



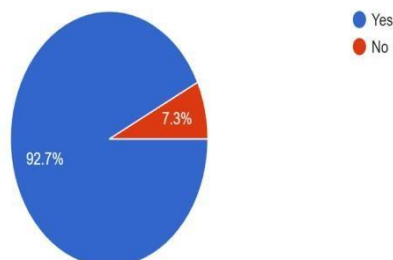
A Question was raised regarding the awareness of Online Shopping based on the behavior preference where 54.2% of the respondent feels that online shopping based on behavior preference followed by Agree with 26.5%.

11) Speech Recognition device works on NLP, AI & ML.

Responses	No. of Responses	Percentage
Yes	76	92.7%
No	6	7.3%

Do you as a Customer know that Speech Recognition Device Alexa works on Natural Language Processing, Artificial Intelligence & Machine Learning?

82 responses



92.7% of the respondents are fully aware that speech recognition device works on NLP, AI & ML. Only 7.3% of respondents are not aware of this Strategy.

Result or Finding of Study

Different Quantum Marketing strategies used by the researcher in order to create personalized experience to customers are speech recognition device based on sensor, Data Collection Analytics, Behavior Preference of Customer, Automated Email Strategies based on AI & 360 degree feature. Among them customer have the awareness of different Quantum Strategies like Speech Recognition device strategy + Behavior Preference through online shopping + 360 degree feature receive the highest awareness of the respondents.

Awareness of Automated Email Strategies and advertisement strategies used by the marketer received mixed responses of the respondents. By analysis we came into knowledge that consumer are aware of these strategies when we are explaining these concepts to the respondents. Still knowledge of different Quantum Marketing Strategies is required. Quantum Marketing represents a transformation shift in the field of the marketing, offering unprecedented opportunities to understand engage and connection with the consumer is an innovative way.

Conclusion

Quantum Marketing represents a groundbreaking approach that transcends the limit of the Traditional Marketing methods by harnessing the power of Quantum Computing. Quantum Algorithms can analyze vast amount of data by enabling marketers to uncover hidden patterns, optimizing marketing strategies and delivering personal experience at scale.

Consumer behavior and awareness is undergoing a transformation in the age of Quantum Marketing as marketer gain deeper insights with the customer preference and behavior they can deliver more personalized & targeted market experience by embracing and encouraging customer to be part of the marketing by adopting Quantum Strategies so that marketer create personalized experience, tailor messaging & offers, one to one relationship in real time, anticipate customer needs.

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