

Role of Artificial Intelligence in Social Media Marketing with Reference to Impact on Consumer Behavior

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Abstract

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In the contemporary world, where technology is taking all walks of life, social media is grasping the retail market to encourage the retailers to attract a variety of customers. Social media is growing at a faster pace. This has been a significant revolution in the communication system, where the virtual world has emerged in its own way. All this is influencing the purchase decisions of the consumers. Various social networking platforms are associated with social media, which are used to make online trading. These platforms may include Facebook, LinkedIn, Twitter, YouTube, Google+, etc. The future aspect lies in the aspect of providing knowledge to the academicians to justify the influence of social media strategies along with Artificial Intelligence on consumers. However, the most basic interest of the study is to improve the knowledge on various aspects related to marketing through social media and machine learning and its ability to capture the consumer base. The study will also be helpful to the consumers to make an in-and-out survey of the products, while making their purchases. The strategies suggested in the researcher will help them do so. The present study will focus on the potential relation of social media marketing and consumer behavior and the role of artificial intelligence in it.

Keywords: Artificial Intelligence, Social Media Marketing, Technology Transformation, Consumer Feedback Mechanism

1. Introduction

1.1 Role of Artificial Intelligence In Social Media Marketing

Recently, it has been seen that social media activity has almost erased the usage of emails. These activities are used for connecting with people, sharing information, sharing opinions and thoughts about multiple aspects and building businesses. It is also seen that many consumers use social media for exchanging their ideas about the product and related information. Many scholars have also mentioned that all the major decisions about the purchases of the

consumers are impacted greatly by social media. People are switching themselves to online mode of purchases than the traditional ones to get an in-depth sight of the product information. They usually have more faith on the reviews and recommendations of other customers, which they use before making any purchase decisions. People are now using social media platforms to share information about the products and brands. Today the city breed population represents the new generation to use the social media platforms to make their purchases and bloom in the global competitive market with their rising activity. Social media has supported them with the web, which they are using to establish connectivity

with their friends and family. There is increasing proliferation of social media, making an impact on the professional and personal capacities of the consumers. The youth needs to be targeted by these social media platforms, so that the customer base can be attracted. These youths are using social channels very frequently. Most of the consumers, who are attached to the social networking sites, are using the internet with three basic motives: gaining insight of the situation, for entertainment purposes and managing their social lives. Social media accelerates the functioning of online trading by adding up the feedback from the users. There is a strong notion that the factors such as attitudes of the people regarding brands and the purchase decisions are dependent upon how associated consumer decision is with social media. It is thus, rightly said that consumers' behavior in different scenarios is highly impacted by social media. The most significant change has been witnessed in the consumption pattern of the consumers. All the social media platforms are seeking for consumer's engagement via social interactive tools. Social media platforms are creating space for conversation between the consumers, where they speak on brands, products, prices, quality, etc. The spread of this conversation is often word-of-mouth, but also sometimes digitally. Consumers finalize their decision by creating and disseminating data of the online products via these platforms. The most significant fact the marketers need to know are the factors that influence the consumer's decisions of purchases through marketing using social media to improve their online strategies.

1.2 Role of Artificial Intelligence In Social Media Marketing

Artificial Intelligence refers to the technology of creating intelligent machines that have the human-like aptitude and intelligence to perform certain functions such as understanding, rea-

soning, interpreting and learning from past experiences. These machines that are loaded with artificial intelligence have the intellectual, cognitive and physical human characteristics and so these machines are considered to be smart or intelligent machines. In today's world, Artificial Intelligence has become a powerful tool that is used in various domains of life and likewise, social media which is a portal to produce and share content also makes use of artificial intelligence for marketing and profit making purposes. The usage of artificial intelligence in social media marketing has been proved fruitful for the entrepreneurs of the current postmodern era. Artificial intelligence has influenced social media to quite a great extent. Analysis and in-depth study of huge and complicated data of the consumers is the work of social media marketing. Various machine learning models are used by social media portals for job suggestions, displaying accounts of the people to be followed, recognizing visual data and tracing present activities of the people on social media. Most of the marketers are aware about the significance of artificial intelligence but in certain cases there is scarcity of knowledge and training of artificial intelligence technology among people. With the help of artificial intelligence, the marketers get complete knowledge about the people using social media.

1.3 Usage of Artificial Intelligence Application In Social Media

Various artificial intelligence applications are put to use by different businesses. First is natural language processing. It is one of the AI applications that makes the machine understand the language of humans. In this, the knowledge of linguistics as well as computer science is combined to make smart technological systems that have the capacity to comprehend and analyze language related aspects like syntax, semantics and meaning of the printed textual and oral discourses. It has a

feature known as sentiment analysis which helps the entrepreneurs to study the product reviews, posts and online surveys. Moreover, it helps them to categorize the aforementioned things into neutral, negative and positive. The next app is speech recognition. This AI Technology transforms speech into digital text. It possesses the capability to identify people in relation to their voice. The next is the real-time recommendations app. Entertainment as well as retail portals adopts neural networks for the purpose of recommendation of extra purchases to a consumer. This depends on his or her past choices, the time of purchase and even the weather. Images of the objects become more noticeable to the consumers because of recommendation algorithms and thus, the possibility of buying the products or services increases. The next is the image recognition technology. This can help to recognize images of things, people, actions and writing. Machine learning technology is used here. It is accelerated with the use of trained algorithms and deep neural networks to identify the picture with the aid of a camera. The next technology is virus and spam prevention technology. This AI Technology detects various kinds of spams and viruses. Incoming messages are scanned by this technology and any objectionable matter is notified. A warning sign is displayed on the content that is spam or infected by virus and thus the user is alerted. Ride-share services app comes next. This is used to connect the drivers with their respective passengers; to reduce waiting time; manage prices and give dependable ETAs or expected time of arrival. Household robots too are embedded with AI. They are used for the sake of entertainment, cleaning and household safety. Roomba, a vacuum cleaner by iRobot has the capacity to make decisions. It can comprehend the room size, recognize and avoid hurdles on its way. Voice recognition technology is also present in the new robot. Autopilot technology is used in aircrafts and drones. It can guide the

aircrafts to move safely through the sky and for this, various technologies such as robotics, sensors, collision avoidance technology, image recognition, GPS and natural language processing is put to use. With the help of this technology, the aircraft's speed, position and orientation can be gauged. It aids in mapping the surroundings, implementing important instructions and it helps in the real-time navigation process.

2. Literature Review

Asma, et. al (2018), in their paper on "Impact of Social Media Marketing on Consumer Buying Behaviour – A Study", mentions that customers are attracted by various firms with the help of digital marketing. The role of social media marketing is very much important for the firms so that the overall profit can be increased. However, it is not only that the companies are getting the benefit of social media marketing, but even the customers are duly benefited by the advantages of getting a large range of options under one platform. The customers have got the choice to compare and evaluate wide variety of products with the help of social media. Thus, they are finally able to buy the best that suits their interest. [1]

Deshpande, M. (2019), "The Impact of Advertisement on Consumer Buying Behaviour in Electronic Industry", in their paper the authors explore the promotional channels used by the electronic industry to advertise their products. There is huge competition in the market. The authors highlight the increase in technology to influence the buying behavior of the customers. The study aims at creating awareness and building the perceptions among the consumers. [2]

Ceesay, et. al (2018), in their paper on "The Impact of Digital Media Advertising on Consumer Behavior Intentions towards Fashion and Luxury Brands: Case of the Gambia" are using the

sample from Gambia. They try to explore the impact of digital marketing on consumer intention of purchase of fashion and luxury items. The study revolves around the usage of new methods implemented in marketing with the help of digital platforms. The author carries on the research by studying various factors such as familiarity of the brands, trust, the consumers have in advertisers, privacy, how entertaining is the digital advertisement and interactivity among the consumers and the producers.[3]

Pallav (2016), in his paper on “Impact of Media Advertising on Consumer Buying Behavior”, has highlighted how various factors of advertising like presentation of products to consumers affect the buying behavior of consumers. In the paper the author explains how through effective tools of advertising consumers can be influenced to buy the products. Researchers had collected the primary as well as secondary source through observations. The main objective of the research is that factor which affects buying behavior of consumers due to media influence. There are various types of media advertising. [4]

Haider, et. al (2018), in the paper on “A Study on the Influence of Advertisement on Consumer Buying Behaviour”, highlighted the implications of advertising on Consumer buying behavior. The main objective of the paper is to study how effects of entertainment, familiarity, and advertisement and social media influence consumer buying behavior. Authors had pointed out some important factors such as entertainment, familiarity, social imaging and advertisement spending affects the consumer behavior. If all these factors are considered before each advertisement will create an effective approach. Through a random sampling method data was collected from the people of Dhaka city. Through data analysis it is found that familiarity has the most powerful impact on Consumer behavior, followed by entertainment and advertising spending. It is con-

cluded that the advertising has the most crucial role in the buying behavior of the consumers and what products they wish to buy for that it is advisable to companies to consider all the factors which make the advertisements. [5]

Harshini (2015), in her paper on “Influence of Social Media ADS on Consumer Purchase Intention”, have evaluated the influence of advertisements through social media marketing and its impact on the purchase behavior of the consumers. In the contemporary world, the growth of technology and interest is making its way in all the aspects and this hold is increasing day-by-day. This technological booster have provided a great range to the customers to make their choices. The world is coming closer when the technology has reduced the influence of traditional way of marketing via print and TV to the world of internet.[6]

Bokde et.al. (2019) in their paper on “To Study the Impact of Digital Marketing on Purchase Decision of Youth in Nagpur City” highlights the fact that the customers are easily able to access the digital advertisements with the help of their mobile phones with internet connections. The marketers are more relying on the digital marketing platforms, where interactive form of marketing is attracting more number of customers. The marketers are able to identify the preferences of the consumers and satisfy them quickly. [7]

Ahuja et.al (2003) in their paper on “An Empirical Investigation of Online Consumer Purchasing Behaviour” highlight the importance of factors and relationships that influence the buying behaviour of individual as well as shopping preference and role of internet to buy the products online. The research study targets two groups of people i.e. students and non- students. Students were considered being tech-savvy and are concerned about privacy. The study was carried out to check what they buy online, motivat-

ing factors and barriers behind online shopping and why are few people not buying online. Demographic differences may or may not affect the online shopping behaviour. From the collected data, it is found that people usually spend more on travel tickets and the least spending is done on grocery. The findings of the study also suggest that factors such as difficulty in returning the products, too much information and connection problem are the reasons, which refrain them from shopping. The author concluded that convenience and customer service could act as strong motivators. By minimising the security concerns, online shopping can take an upper hand.[8]

Vinerean, et.al (2013), in the paper on “The Effects of Social Media Marketing on Online Consumer Behaviour” mentions that the consumers are depending on social media for satisfying their requirements. The researchers have developed the model in which they have identified various set of variables and separated those based on their utility in digital marketing. For the purpose of the study a random sampling of 236 respondents were carried out by the authors. Initially the researchers begin with highlighting the characteristics of the internet and role of social media. They even mentioned about the factors, which influence consumer’s decision. The significant among them identified was social media marketing. They are of the opinion that customers tend to satisfy all the requirements under one roof without physically going to retail outlets, they prefer using social media advertisements. This influence is there buying behaviour. [9]

Goyal, et.al (2016), in their paper on “Impact of Increasing Trend of Online Marketing on Consumer Buying behaviour: FMCG Brands in Indian Scenario”, have identified several web experience components, focusing on how the influence consumer buying behaviour. Online networking has marked its own relevance against personal

connections. The authors believe that there is urgent need of identifying difference between online and offline advertising and their relevance in today’s world. With this aim, the main objectives of the present study are to determine factors responsible to drive consumers to online marketing against the traditional advertising and to highlight the impact of online marketing on the behaviour of the consumers. Non-probability sampling or convenience sampling method was applied on 200 internet users who have experience of using online marketing strategies of several FMCG companies.[10]

Harun et.al (2019) in their paper on “Is the Purchasing Behaviour of Suburban Millennials Affected by Social Media Marketing? Empirical Evidence from Malaysia”, highlighted the influence of online marketing on millennial in Suburban area of low involvement products. This study aims at highlighting influencing consumer choice of product. The authors have carried out a systematic literature review on various aspects dealing with online advertisements. Subsequently hypothesis was framed. These hypotheses were pertaining to relationship between online communities and their product purchase and behavior, and entertainment, trust largely seen among the customers and their interaction in social media marketing and millennial behaviour and consumer engagement parameters. The data was analysed using both descriptive and inferential statistics. It was concluded by the author that millennial choose their favourite online websites as per their requirements. They enjoy social media marketing because this source provides them with immense information of the product.[11]

Rao et.al (2018) in their study on “Factors Affecting Female Consumer’s Online Behaviour” highlights the fact that there is substantial increase of usage of Internet in India. The growth of online Retail Industry in India is at the rate of 45 to 48% CAGR and is estimated at USD

38.5 billion in 2017. The study is dealing with all the factors, which influence online shopping behaviour of females in India. The significance of the study lies in the aspect of benefit to the on-line retailers, marketing managers, policymakers and academicians. The authors have carried a systematic review of literature on the factors influencing female online behaviour. The main objective of the study was to highlight the demographic aspects of the online Shoppers and identify the factors. For fulfilling the objectives of the study for mother, researchers have used descriptive and exploratory research design. The sample size of 316 respondents was chosen for the study. Factor analysis was carried out. It was concluded from the study that most of the respondents for the study for the students in the age group of 21 to 25 years who were using on-line shopping platforms once in a month. The researchers highlight the importance of security and source credibility in online shopping. At the same time, trust is also an important aspect. Once the trust is established on specific site, then more often the customers tend buy from them. Overall, it can be concluded that researcher tried to highlight the significant factors influencing online behaviour of female customers. The factors such as security, reliability and effectiveness are the prominent ones.[12]

Mahalaxmi, et.al (2016), in the paper on “A Study on Impact of Digital Marketing on Customer

Purchase Decision in Trichy”, revolved around evaluating digital marketing and its role in influencing the customers. For this a total of 50 respondents were chosen from the specific area of Trichy. A structured questionnaire method was used with non-probability sampling techniques. Chi-square technique was used to analyse the data. The authors have explained the various aspects of digital marketing and how those things have merged through the time. There are various social media websites, multi-media advertising, online search engines, e marketing, etc. that have influence on the consumers. The recent inclination of middle class towards the use of mobile internet also show the trend in increasing opportunity to online marketing in the far interior area of the nation.[13]

3. Conceptual Framework

The above shows the flow of the study where the social media marketing correlates to consumer buying behavior. Figure shows independent variable that is Social Media Marketing that contains 3 indicators: Quality Content, User Experience, and Frequency of Visit and Exposure. Also, the dependent variable is Consumer Buying Behavior, that contains 5 indicators which are Purchase Decision, Online Purchase Perception, Consumer Attitude Shopping Experience, and Post-Purchase Behavior.

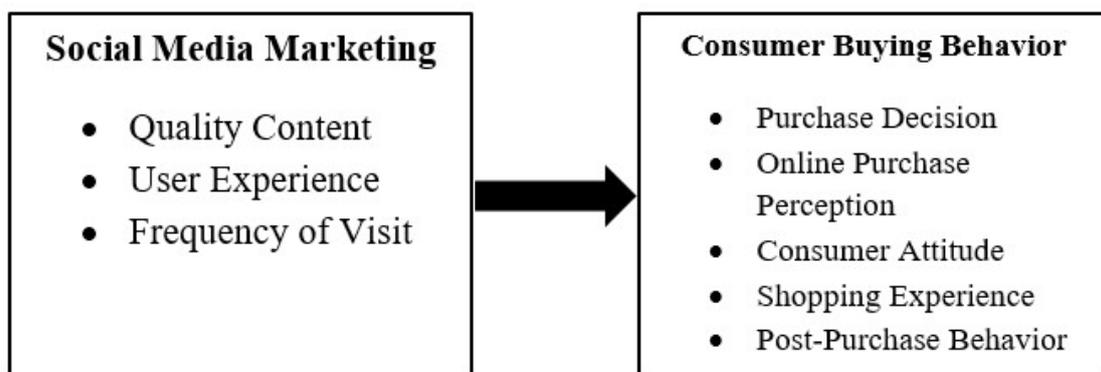


Figure 1. Conceptual Framework of the study

4. Significance of The Study

The present research work is very significant from the aspect of marketing through social media along with its impact on consumer buying patterns in the metropolitan city of Mumbai suburbs. The research deals with the influence of marketing through social media on the behaviors of the buyers. Not only positive, but also the activities through social media can lead to decline of the sales and services, if the strategies adopted are irrelevant to the market demand. This research will provide a base to examine different impacts and associated factors, those needs to be taken into consideration while carrying on the businesses. At the same time, the researcher will also gain an insight in the phenomena of marketing through social media that influences the major purchase decisions of the consumers. It is also assumed by the researcher that the study will be benefiting all those individuals who are directly and indirectly associated with social media and related marketing strategies at all levels.

5. Objectives

With the aim of analyzing the behavior of the consumers in relation to marketing associated with social media, the objectives of the present study can be listed as follows –

- a. To evaluate the perception of social media from the view of the consumers.
- b. To assess the platforms preferred by consumers in making their purchases against the rational marketing phenomena
- c. To assess the level of experience of usage of Social Media Marketing in terms of factors such as Quality Content (QC), User Experience (UE), Frequent visit (FV).

- d. To evaluate the level of consumer buying behaviour in terms of Purchase Decision (PD), Online Purchase Perception (OPP), Consumer Attitude (CA) and Shopping Experience (SE)
- e. To highlight the preferred channel by the consumers to make their purchases.

6. Research Questions

Q.1 What are the different forms of marketing through social media will enhance the content excellence, experience of the customers and even increase their usage of social media?

Q. 2 What are the different forms of buying behavior with regards to their purchases, perception of purchases, attitude related to purchases and experiences?

Q.3 What is the relationship between the Consumer satisfaction with regards to buying behavior and its influence through the social media marketing in Mumbai city?

7. Null Hypothesis

Hypothesis 1

Ho- There is low level of experience in terms of social media marketing among the consumers of Mumbai city.

H1 - There is high level of experience in terms of social media marketing among the consumers of Mumbai city.

Hypothesis 2

Ho - The level of consumer buying behaviour in terms of social media marketing is low.

H1 - The level of consumer buying behaviour in terms of social media marketing is high.

Hypothesis 3

Ho - There is no significant relationship between social media marketing towards the consumer buying behavior of Mumbai City.

H1 - There is a significant relationship between social media marketing towards the consumer buying behavior of Mumbai City.

8. Research Methodology

8.1 Participants of The Study

A total of 153 consumers of social media marketing from the Mumbai city were chosen for the present study. The researcher have used non probability sampling method for selected the respondents of the study.

8.2 Data Collection Procedure

Data was collected with the help of online survey method by google form. A standard questionnaire was used for having an efficient tool to fulfil the objectives of the study. Due to growing fear in pandemic situation and to collect relevant data in less time, the researcher have used google form as a mode of primary data collection. At the same time the researcher have interacted with few respondents personally to gain an insight over the topic.

1.3 Research Design

This study has made the use of empirical design where the primary data collected was evaluated to fulfill the objectives of the study. When there is no direct control by the researchers on the independent variables, then non-experimental research was followed. Regression analysis was used in the present research study to establish the relationship between the variables of the study “social media marketing and consumer behavior with reference to Artificial Intelligence”.

9. Results And Findings

The data was analysis by collecting the sample size of 158 (78 females and 80 males) by questionnaire method. Around 96 respondent were of age group 18 years to 20 year, followed by 26 respondent of 21 to 25 age group. Around 53.2% candidates were undergraduate and 15.2% were graduate, 17.7% were post graduate, 8.2% were professional. Around 72.8% were students, and 22.8% were working in private sector and others were from government employees, business or self-employed. Majority of respondent with 48.7% had the annual income of Rs4 lakhs and highest income range of more than Rs. 30 lakhs were 7.6%.

The most used social media platforms as per our findings was Instagram with 91.1% followed by

What are the social media accounts you have? You can choose more than one relevant option
158 responses

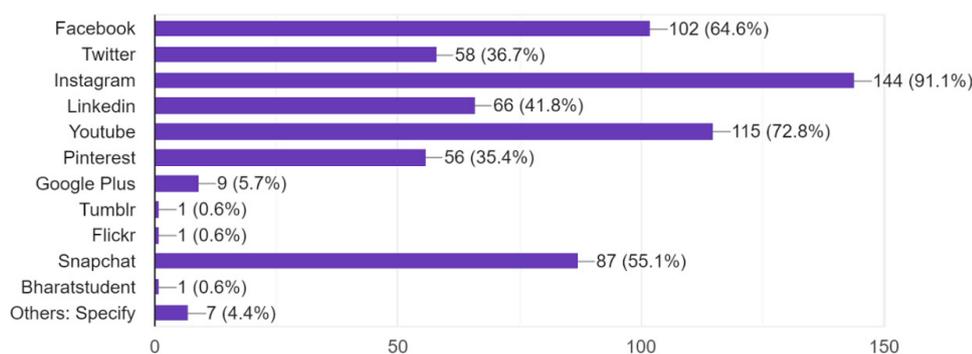


Figure 2.Respondent using various social media

What are the devices you use to access social media. Please rank in the order of their use. 1 being the most used device and 5 being the least used device.

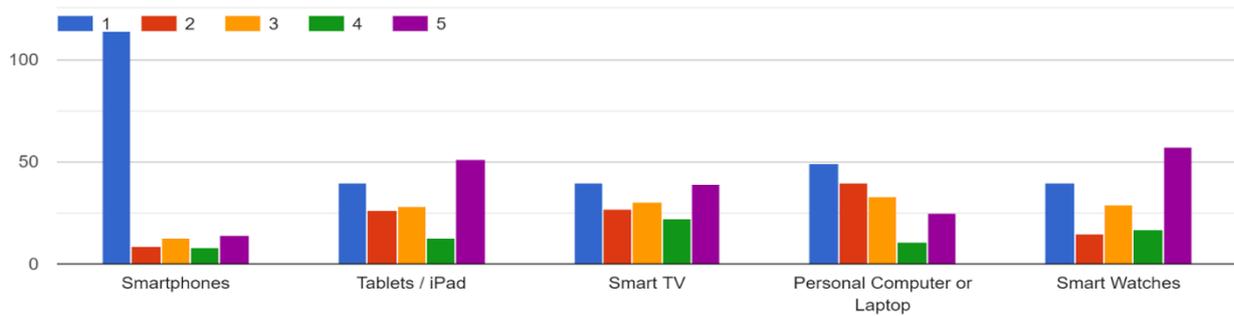


Figure 3. Devices used by the respondent for using the social media

YouTube by 72.8%, Facebook with 64.6% respondent, Snapchat with 55.1%, LinkedIn with 41.8%, Twitter and Pinterest with 36.7% and 35.4% respectively. Whereas the Google Plus was 5.7%. For Tumblr, Flickr and Bharatstudent was 1% each.

When the respondent was asked to rank the devices which they are using to access the social media. For smartphone around 114 respondents has given rank 1, 9 respondents has given rank 2, 13 respondents has given rank 3, 8 respondents has given rank 4, 14 respondents has given rank 5. For tablets/iPad around 40 respondents has given rank 1, 26 respondents has given rank 2, 28 respondents has given rank 3, 13 respondents has given rank 4, 51 respondents has given rank 5. For smart TV around 40 respondents has given rank 1, 27 respondents has given rank 2, 30 respondents has given rank 3, 22 respondents has given rank 4, 39 respondents has given rank 5. For Personal computer/Laptop around 49 respondents has given rank 1, 40 respondents has given rank 2, 33 respondents has given rank 3, 11 respondents has given rank 4, 25 respondents has given rank 5. For smart watches around 40

respondents has given rank 1, 15 respondents has given rank 2, 29 respondents has given rank 3, 17 respondents has given rank 4, 57 respondents has given rank 5. Therefore the study also reveals that majority of respondents are using smartphone for accessing social media followed by personal computer or laptop, tablets and then others.

When the respondents were asked about how much time they spent on social media in a day. Around 14.6% respondents said less than 1 hour. About 40.5% respondent said 1 to 2 hours. Around 20.3% response and said 2 to 3 hours. About 8.9% respondent said 3 to 4 hours this spend on the social media. Approximately 8.2% responded said they spent 4 to 5 hours on social media. Respondents spending 5 to 6 hours on social media were 3.2% and more than 6 hours were 4.4%.

Around 75.9% respondent said that they follow around 1 to 5 brands on the social media and responding following 6 to 10 brands were 14.6%. Only 1.9% respondent were following more than 20 brands.

How much time do you spend on your social media accounts in a day? Please choose any one option.

158 responses

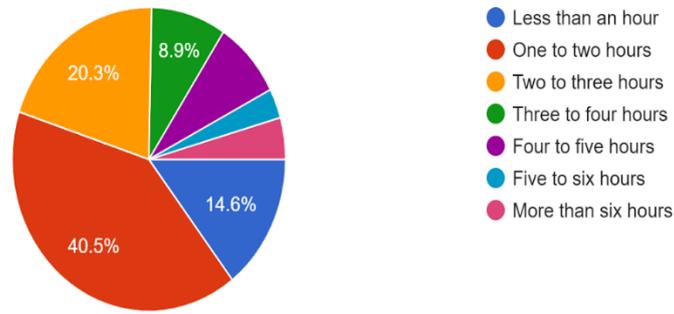


Figure 4. Time spend on social media account in a day

How many Lifestyle brands do you follow on social media?

158 responses

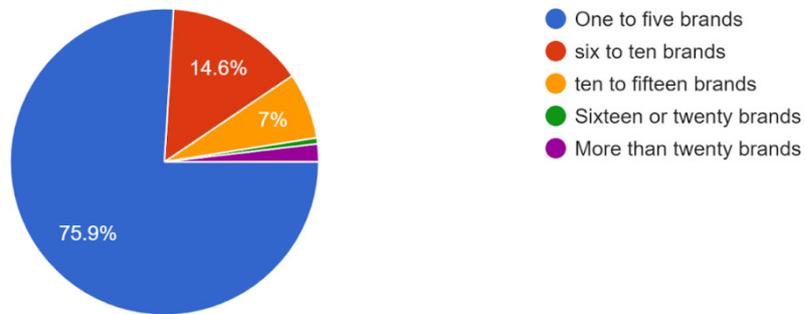


Figure 5. Number of lifestyle brands followed by the respondent

Have you ever bought a product or service after seeing it on social media?

158 responses

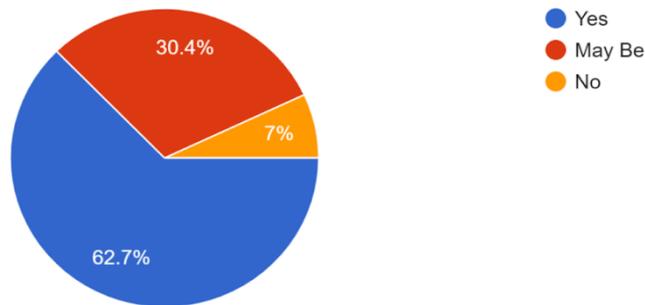
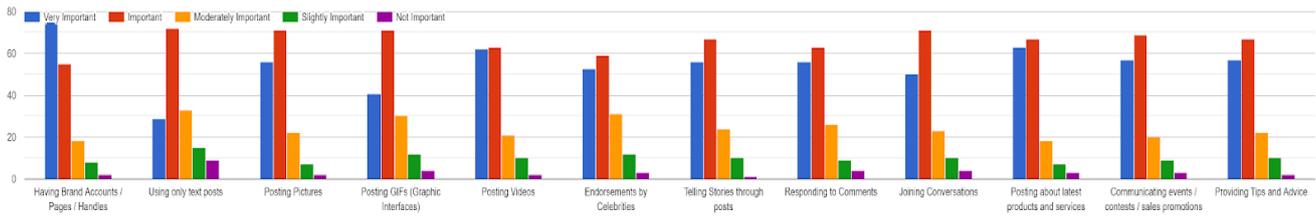


Figure 6. Number of respondent buying product or service after seeing it on social media

According to you how important are the following communication related aspects in a lifestyle brand's social media marketing strategy.



According to you how important are the following communication related aspects in a lifestyle brand's social media marketing strategy.

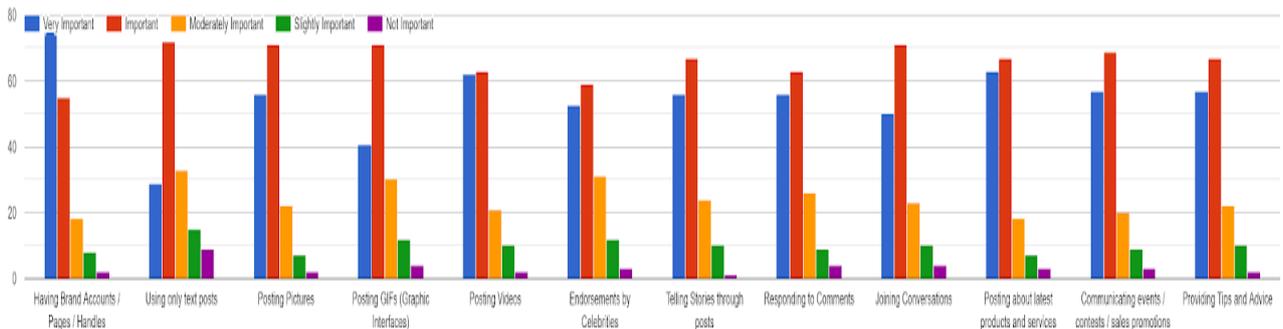


Figure 7. Perception of the respondent on communication related aspects in a lifestyle brand's social media marketing strategy

When the respondents were asked whether they have ever bought a product or service after seeing that product or service on social media, then 62.7% respondent said yes while 30.4% respondent said maybe and remaining said no.

Majority of respondents said that it is very important to have brand account, page on social media. It is also important to post pictures, videos, GIFs, Endorsing the celebrity, telling the stories via posts, responding to the comments, joining the conversion, providing tips and advice, communicating events/contest/sales promotions, etc., on the social media.

While speaking to few of the respondents, it was noticed that Facebook is using maximum types of AI techniques in targeting audience. This particularly includes the cosmetics brand and the apparels. Likewise the respondents have also noted that LinkedIn is using the platform to publish various job opportunities, thus marketing the vacancies according to the customers.

9.1 Level of Social Media Marketing

From the table 3 it is shown the collected results of level of social media marketing with respect to the quality content, user experience and frequent visit. The average level of quality content is 3.92 and standard deviations 0.50, which shows the quality content of respondents is high. It also implies that quality content, social media marketing is observed by consumer. The average level of experience is 3.70 and standard deviations is 0.70. The average level of frequency of visits was 3.90 and standard deviations 0.52 which indicated frequency of visits is high and social media marketing is often observed by the consumer. The average level of the social media marketing is 3.84 and standard deviations is 0.42 which shows the level of social media marketing of the respondents is high in the Mumbai city. Thus, the hypothesis stating that there is low level of experience in terms of social media marketing among the consumers of Mumbai city

is rejected. The consumers are highly immersed to benefits brought by the social media which draws the attention and encourages the connect, share and interact their needs.

9.2 Level of Consumer Buying Behavior

Table 4 shows the Consumer Buying Behavior with respect to the Purchase Decision, Online Purchase Perception, Consumer Attitude, Shopping Experience, and Post-Purchase Behavior. The average level of purchase decision is 3.90 and standard deviation is 0.51 which shows the level of purchase decision is high. The average level of Online Purchase Perception is 3.92 and standard deviation is 0.44 which shows the level of Online Purchase Perception is high. The average level of Consumer Attitude is 3.83 and

standard deviation is 0.51 which shows the level of Consumer Attitude is high. The average level of Shopping Experience is 3.84 and standard deviation is 0.51 which shows the level of Shopping Experience is high. The average level of Post-Purchase Behavior is 3.89 and standard deviation is 0.62 which shows the level of Post-Purchase Behavior is high.

Overall, the mean level of consumer buying behavior of the respondents is 3.88 with a standard deviation of 0.36. this helps to understand that the consumers are using social media marketing very often to purchase the products. *Thus, hypothesis stating that the level of consumer buying behaviour in terms of social media marketing is low stands to be rejected.*

Table 1. Level of Experience in usage of Social Media Marketing

| | N | Minimum | Maximum | Mean | Std Deviation |
|--------------------|-----|---------|---------|------|---------------|
| QC | 158 | 1.00 | 5.00 | 3.92 | 0.50 |
| UE | 158 | 1.00 | 5.00 | 3.70 | 0.70 |
| FV | 158 | 1.25 | 5.00 | 3.90 | 0.52 |
| SMM | 158 | 1.08 | 5.00 | 3.84 | 0.42 |
| Valid N (listwise) | 158 | | | | |

Note – QC = Quality Content, UE = User Experience, FV = frequent visit and SMM = Social Media Marketing.

Table 2. Level of Consumer Buying Behavior

| | N | Minimum | Maximum | Mean | Std Deviation |
|--------------------|-----|---------|---------|------|---------------|
| PD | 399 | 1.00 | 5.00 | 3.90 | 0.51 |
| OPP | 399 | 1.38 | 5.00 | 3.92 | 0.44 |
| CA | 399 | 1.33 | 5.00 | 3.83 | 0.51 |
| SE | 399 | 1.00 | 5.00 | 3.84 | 0.51 |
| PPB | 399 | 2.00 | 5.00 | 3.89 | 0.62 |
| CBB | 399 | 1.54 | 4.54 | 3.88 | 0.36 |
| Valid N (listwise) | 399 | | | | |

Note – PD = Purchase Decision, OPP = Online Purchase Perception, CA = Consumer Attitude, SE = Shopping Experience, PPB = Post-Purchase Behavior and CBB = Consumer Buying Behavior.

Table 2. Social Media Marketing and Purchase Behaviour of the Customers

| Consumer Buying Behavior | | | | | | |
|------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Social Media Marketing | Purchase Decision | Online Purchase Decision | Consumer attitude | Shopping Experience | Post Purchase Behavior | Overall |
| Quality Content | .304 (.000) | .371 (.000) | .369 (.000) | .323 (.000) | .217 (.000) | .451 (.000) |
| User Experience Frequency of Visit | .181 (.000) .378 (.000) | .160 (.000) .375 (.000) | .445 (.000) .350 (.000) | .239 (.000) .329 (.000) | .205 (.000) .216 (.000) | .375 (.000) .469 (.000) |
| Overall | .377 (.000) | .391 (.000) | .539 (.000) | .397 (.000) | .289 (.000) | .571 (.000) |

9.3 Social Media Marketing and Purchase Behaviour of the Customers – A Relationship

Presented in the Table 5 the significance of the relationship between social media marketing and consumer buying behavior with overall computed r-value of 0.571 which means that there is a MODERATE positive relationship in the learnability of social media marketing and consumer buying behavior of the respondents. *Thus, we reject the null hypothesis since p-value is 0.000 < 0.05.* There is a significant relationship in the learnability of social media marketing and consumer buying behavior of the respondents. Furthermore, it is shown that association between user experience and consumer attitude has the highest r-value of 0.445 which means that there is a MODERATE positive relationship in the user experience and consumer attitude of the respondents. However, online purchase decision and user experience relationship got the lowest r-value of 0.160 which means that there is a VERY WEAK positive relationship in the user experience and post consumer behavior of the respondents.

It is revealed in the correlational analysis that there is a significant relationship between the

social media marketing and consumer buying behavior. Particularly the relationship between the user experience and consumer attitude with a positive, moderate, and significant correlation. This results confirms the proposition of Vora-montri and Klieb that the consumer compares the feedback to previous experiences and perceptions and after a period of reflection, consumers move to the decision-making stage, deciding to make a purchase based on logical insight.

9.4 AI Affecting Social Media Marketing

The crux of social media marketing is in the analysis of vast and intricate client data. AI is largely influencing how social media works in the modern world. Popular social networks, such as Facebook, LinkedIn, Instagram, and others, use machine learning models to identify images, track ongoing engagements, propose users to follow, and more. Facebook uses advanced machine learning application of the artificial intelligence to do things like displaying posts similar to those one has earlier interacted with, recognising faces in the tagged photos, advertising, and sending pop ups. Facebook-owned social networking service Instagram uses AI to identify and remove fake messages from accounts.

Snapchat leverages the power of computer vision, an AI technology, to track users' features and overlay filters that move with his/her face in real-time. AI is leveraged within LinkedIn to do things like LinkedIn automated bidding, job recommendations, suggest people one might like to connect with, serving specific content in feed, help advertisers in targeting audience, and conversion tracking. Strong artificial intelligence (AI), sometimes referred to as artificial general intelligence (AGI), is a completely speculative idea that aims to build intelligent computers that can fully mimic the autonomy of the human brain. Without human input, optimists think AI will be able to solve a wide range of problems across several classes and types, and it will even select the challenges it wishes to solve.

10. Discussion

Various challenges have to be faced by social media marketers while using AI technology to reach out to the consumers. One of the major challenges faced is the insufficiency of IT infrastructure. Smaller firms lack high-tech software and machines and to implement AI, strong IT infrastructure is a prerequisite. The scarcity of IT products is a major hurdle here. The next issue is the investment of resources. High-tech hardware and software systems are costly to maintain but to solve this problem is like Google, Amazon and IBM have given a helping hand in this case. Lack of talent is another drawback. Many people develop, use and maintain artificial intelligent systems. Sometimes, insufficient or substandard data can be gained through artificial intelligence technology that can result in loss for the marketers. Artificial intelligence software is a novel technology and people who are not skilled and trained in this technology are doubtful about using artificial intelligence. Even the users' privacy cannot be maintained with regards to artificial

intelligence. Once the user becomes a netizen, his or her private life can be known to the whole .In many cases, ethics are not taken into consideration. Complete personal information can be grasped by artificial intelligence technology by tracing previous choices of the users' purchases and this can create a negative approach towards artificial intelligence in the minds of the consumers. In certain cases, some firms cannot use the services of cloud based artificial intelligence marketers because there might be some restrictions to access the data. There are prejudices in artificial intelligence algorithms because humans do not code this algorithm. Artificial intelligence does it on its own and so by observing the previous data or actions done in the past, the artificial intelligence algorithm can generalize and can acquire a biased attitude which can be perpetuated mechanically for future purposes in a negative way. Industries and companies that depend on high level artificial intelligence might not give importance to manual work as most of the work is done by artificial intelligence. Thus, people might lose their jobs. Lastly, the human instinct for creativity can be hampered because of excessive use and dependency of artificial intelligence technology. Humans can become lazy and dull and they too might start behaving like robots if they become disproportionately reliant on AI.

11. Conclusion

While concluding we can say that nearly 3.81 billion users in the world are currently using the smart phones, with which they have at least one social media application active with them. Though earlier it was thought that social media is used only for connecting with friends and family, however, many of the business tycoons are using the same for promoting their brands and attracting a lot of customers. Their business ideas have

reached the customers and the brand awareness has been increased among the customers (for e.g. Meesho). None of the business can prosper without an accurate data base, and social media is the platform where maximum data base with personal profile is available for the businesses to approach. The form of Artificial Intelligence is something which enable the machines to perceive the things as the humans do. This is enable a great scope for the marketers to evaluate different customers, their requirements, need for change according to the latest trends, frauds (if any), preferences of the customers, validation of the content on the internet, etc. In short, this is the branch of technology which enables the huge social media firms to manage their businesses by narrowing their data base and work as per the requirement of the customers. AI helps the firms to sync the data generated through user base. Thus, to conclude, artificial intelligence has helped humankind to solve various problems .It has made life easier and more comfortable for humans but if it is used in an unregulated or excessive way it can possibly deprive humans of their humanity.

12. References

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