Global Technology Trends and the Future of Digital Marketing

Sonika Suman

Birla School of Commerce, Birla Global University, Bhubaneswar, India

sonika.dorado@gmail.com

Basheer Ahmed Khan

School of Management, Pondicherry University, India

drmbakhan@gmail.com

ABSTRACT

Digital technology has not only come to stay, but also on its way to climb greater heights what with the exploding developments leading to new physics, new advances in computing in terms of speed and extant and the continuous changes leading to wide ranging applications both in desktop computers, mobile hand phones, wearable, locational and moveable variety of devices including Television, Display Boards, Public kiosks etc. utilizing Artificial Intelligence, Virtual Reality, Augmented Reality and Mixed Reality etc. Along with these evolutions and enlargements, marketing as an activity takes newer shapes and forms and marketing itself is becoming digital technology oriented and is termed as digital marketing. A study of the global trends is of timely and topical import and an attempt is made in the following to discuss these for drawing comprehensive insights based on this evolutionary progression. The narrative that follows provides the picture of the phenomena leading for further future activities in these two areas-technology trends and marketing in the future. Different forms of digital marketing are in vogue. The digital marketers have to be abreast of the developments on a time based manner being affected by the FOMO syndrome (Fear of Missing Out) in the arena of digital explosion.

Keywords: Computing, desktop computers, digital technology, mobile hand phones

I.   INTRODUCTION

To keep up with the accelerating speed and pace of change occurring year after year and the sweep of digital marketing expanding,   digital marketers have to be constantly working to enhance their knowledge and skill to know more about the possibilities of digital marketing, utilizing the various up-gradations and new advancements in the frontier areas of digital technology. Such skill up-gradations will go a long way in understanding the method of working and developments in algorithms which in turn will increase the profits of the company through reaching out to a larger clientele with the assistance of digital technology. Digital marketing thus will be a mode and method of capturing a larger market place and alluring a variety of customers. Technology explosion is on a day-on-day basis. The younger generation is becoming more and more tech savvy and turning inventors and innovators and the world of organizations and startups are developing policies to engage them to gain from their dynamic brains. A recent case in point in India is that of recruiting youth of the age group of 17 to 21 even in the military forces motivating them with an inspiring name as "Agniveer"   or "fire-braves". It is to train them in frontier digital areas catching young and putting them to penetrating military fields. Digital marketing is also such a penetrating field where young marketers are trained in the theory and practice of marketing along with operation of digital apps pertaining to marketing of products and services. In the context of these trends, it can be observed that there are developments in Chatbot, personalization and the Search Engine Optimizations. Appropriately trained marketers can operate with heavy search algorithm and can customize the marketing of the innumerable products and services. The global trends belong to various categories of areas such as search, social, website, lead nurturing and many more upcoming areas and applications. As of now, any item in a mobile relating to news, snippets, product launch, start up, expansion of business, university and college admissions, hospitals, travels and tours and for that matter any human activity that is displayed, when attempted to access is instantly connected to Chatbot which would allure one to further deeply plunge into the advertisement . This leads to a win-win situation for the business and consumer. Accessing the detailed information of the business helps the consumer to look for what meets the consumer needs and mind   and the detailed information of the consumer interests helps the business to

provide customized products and services as also help invoke interests for the services and products of the business in the minds of the customers.

II. OBJECTIVES

This paper aims to achieve the following objectives:

1. To understand the technology trends in the frontier areas of application globally.
2. To understand the conceptual works in the field of digital marketing.
3. To understand the issues in digital marketing and,
4. To infer the developments in the fast changing scenario of digital marketing.

III. METHODOLOGY

For the purpose of this study, secondary data sources have been accessed from the web and printed material and appropriately analysed to reach logical conclusions about the various trends as mentioned in the objectives.

IV. BRIEF REVIEW OF LITERATURE

Analyzing the trend with which the Digital Marketing is occupying the marketing space, specific Marketing Strategies with special reference to Digital and other interactive technologies to create and mediate marketing have been suggested (Y. Kamal, 2016). Internet marketing involves the usage of the Internet to market and sell goods and services. Some current and future trends in internet marketing and Digital marketing for the use of technologies to help marketing have been studied (M Bala, D Verma, 2018). Assessing the trends in the application of digital marketing technology and digital marketing, it is viewed that businesses has been adopting artificial intelligence since 2019 which will be able to save costs and accelerate growth, getting an edge over their competitors (I Kotare, D Znotina, S Hushko, 2019). Digital marketing as a process of fulfilling marketing and business aims by using digital technologies must be prioritized in the marketing and application of new digital marketing trends (M Slijepčević, I Radojević, N Perić ,2020). Digital marketing has been reviewed. Marketing campaigns are becoming more prevalent and understanding

of digital marketing is an imperative. How digital marketing helps today's business can be understood by observing that digital marketing is inseparable from technology (V. Desai, 2019). The customer base of traditional marketing agencies and departments has been given way to digital marketers who have gained the ground widely. We are in the digital era; the choice is to adapt or lag behind the technology (PJMAJ Malar, 2016). The development of Internet marketing is closely related to the spread of the Internet and its wide ranging applications and uses. The challenges of using digital technologies in digital marketing are currently one of the biggest. (NM Nabieva, 2021). Digital marketing is linked to the latest technology trends. Thus, there is a shift from digital marketing to intelligent marketing through the use of higher algorithms (D Dumitriu, MAM Popescu, 2020). Structural Marketing Models (SEM), video marketing through you tube and websites are some types of digital marketing which are currently being used in the hospitality industry.(SJ Pervez, HM Moyeenudin, S Arun, 2018). Among the main trends and trends in the development of digital technologies in the world, there are prospects for the development of digital technologies in marketing. The information platform for technologies is very important (HA Al-Ababneh, 2020). The impact of social media on marketing can be judged by comparing marketing before social media and marketing after the introduction of social media and the type of technologies used (SS Ibrahim, P Ganeshbabu , 2018). The term digital marketing has become popular thanks to the inclusion of a wider range of digital and network communication technologies, including mobile phones and even wearable devices(M Slijepčević, I Radojević , 2018).According to introductory features of new technologies and digital marketing, we need to pay special attention to obvious advantages of technologies in branding a destination (N Parlov, D Perkov, Ž Sičaja, 2016). The development of enterprises started to require a new technology process in marketing and the digital marketing took a new role of classic marketing. Brands consider digital marketing as a useful tool in enhancing sales (A Morzhyna, M Oliinichenko, and Y Postykina 2019).

Thus, these studies throw greater scientific light on the use and propagation of the digital technologies and the expanding role of technologies in the future of marketing per se which everyone concerned with marketing and business need to ponder over.

V.   TECHNOLOGY TRENDS AND DIGITAL MARKETING

The technology trends made use of by digital marketers are amazing. Currently, globally long lists of such trends are available. Some such trends that can be mentioned here are Artificial Intelligence, Meta Verse, NFTs, Crypto, Live Stream Commerce, Augmented Reality, Voice Search Optimization, Programmatic Advertising, Chat Bots, Personalization, Automated and personalized Email Marketing, Marketing Automation, Micro-influencers, Video Marketing, You Tube Shorts, International Ads, Instagram Reels, Shoppable Content, User-generated Content, Influencer Marketing, WhatsApp Marketing, Geofencing (Location Based Marketing), Hyper-local SEO, Quora Marketing, Content Marketing and BERT update, Personalized re-marketing, Social Media Stories, People Also Ask, Omni channel Marketing, Personalized Pop-Ups, Progressive Web Apps, Interactive Content, Browser Push Notifications, Personalized SMS Marketing, Google Ads Smart Bidding, Vernacular SEOs, B2B Digital Marketing Trends. A brief description of each of these will help realize the role of each of these trends in the digital marketing arena.

a) *Artificial Intelligence***:** To begin with the role of Artificial Intelligence can be discussed. Currently, 60% of internet users have already interacted with an AI Chabot for solving queries across multiple apps and websites. The content on the social media platforms is fine-tuned by AIs to engage the visitors longer. It is projected that the AI technology is expected to be a $190 billion industry by 2025. The digital marketers can extract the best out of it and enjoy the benefits of this high-tech tool   now and the time ahead as well.

b) *Metaverse:* Facebook which owns Metaverse is a world within a world. It is digital space where the Virtual and Augmented Realities exist simultaneously. Though it is new, lot has been done to use it. Yet it is not yet fully tapped and potential opportunities galore in the time to come. This helps social commerce possible with a network of realities and virtual universes and can be a robust tool of digital marketing.

c) *Non-Fungible Tokens***:** These are digital assets which can be used in trade. NFTs which have disrupted the art and technology world have started penetrating the marketing world as well.

d) ***Crypto currency:***   The crypto has entered the industry and is shouting aloud "vini, vidi, vici" in the financial world. It is estimated that there are 10-12 million active crypto investors in India. They are consistently increasing, especially the younger generation, as the returns are massive.

e) ***Livestream Commerce:*** It is something which helped   China a billion-dollar market; though in India its usage is not very popular yet. Brands choose the social media platforms for showcasing the brands live and the products are traded live.

f) ***Augmented Reality:*** It produces an interactive experience of a real-world environment with real objects enhanced by the computer generated virtual and real objects.

g) ***Virtual Reality:*** It provides scientific fiction ideas for display and demonstration. Augmented Reality is comparatively better used for digital marketing purposes. The following diagram provides a comparison of both VR and AR.

Source: CROWD
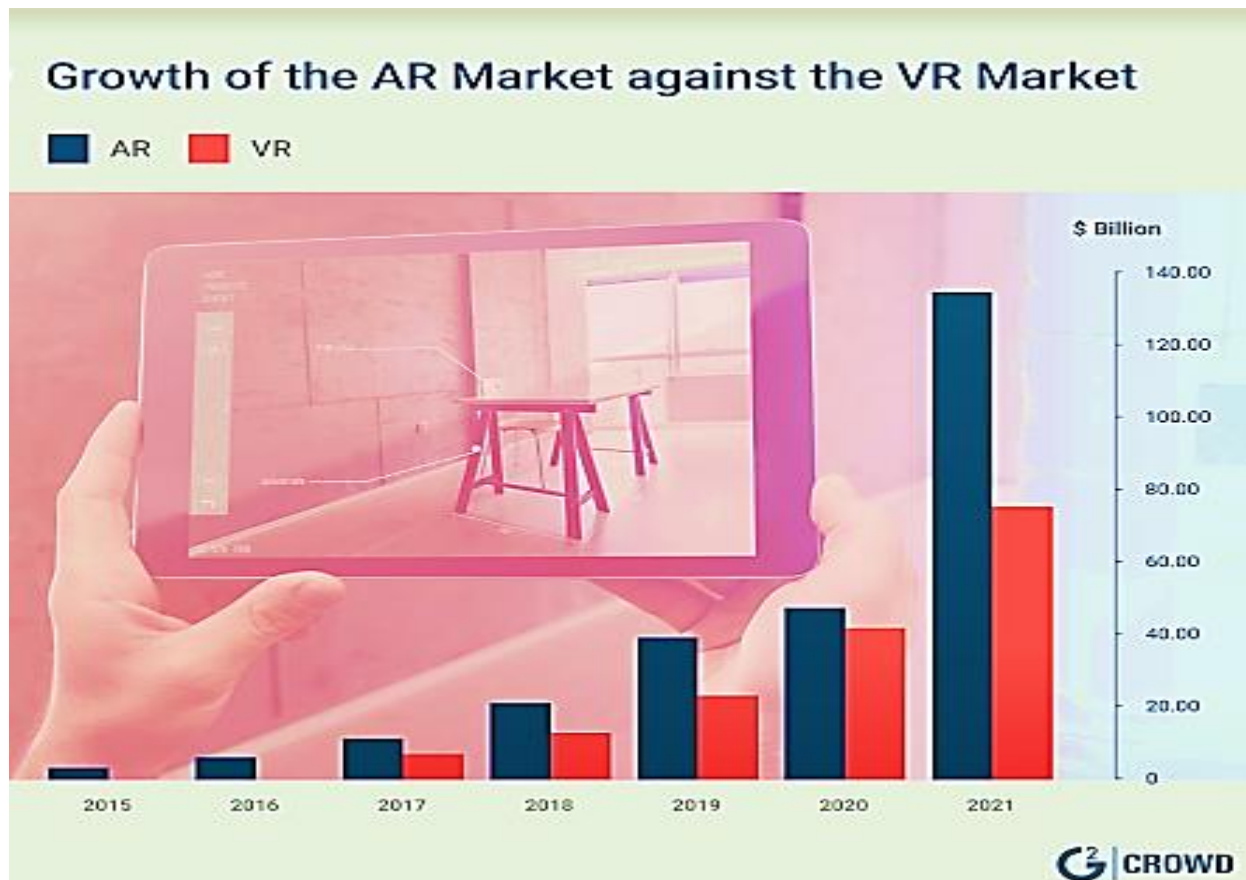
As can be seen in the above diagram, over a period from 2015 to 2021, while AR grew to the extent of 138 billion dollars, VR grew almost half of it. This shows the popularity of Augmented Reality in digital marketing.

h)   *Voice Search Optimization:* This is a very popular method especially among the younger generation as 55% use it on a daily basis and it will gain much more popularity in the future.

i) *Programmatic Advertising:* This uses software to pursue digital advertising. Human interaction is minimal and algorithms are used for the advertising and will be customized to address the audiences of the advertisements.

j)   *Chatbots:* It helps in instant messaging and chats with the customers who ask for answers to their questions. Instead of human personal attention, the Chatbots answer the customers. It has the disadvantage that all queries may not be addressed unless very meticulously programmed.

k) *Personalization:* This is helpful in understanding the customers and addressing their concerns in a personalized manner in respect of all the needs and demands of the customers. Some statistics suggest that the customers are not enthused by the generic advertisements as 60 percent feel that they are agonized. Most of the customers-80 percent – will be encouraged to do business with organizations that cater to personalized requirements. A convincingly large number-90 per cent- is interested only in personalization.

l)   *Automated and Personalized Email Marketing:* This sends out emails to customers in a customized and convincing manner considering the expected customer needs and requirements.

m) *Marketing Automation:* With a view to lead collection and nurturing, this streamlines the processes and automates the relevant material for effective, smooth and speedier communication.

n) *Micro-Influencers:* Though not a method exploited to its full potential, this holds great scope and opportunities for the future of digital marketing.

o) *Video Marketing:* This is also not fully exploited currently in digital marketing and holds a great scope for the future.

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x) *YouTube Shorts:* The You Tube has been popular for some years now. But the platform has added its "shorts", for a content of 15 seconds or less. It is an excellent opportunity for digital marketers where the attention of the viewers can be attracted and retained in such a short time.

y) *Instagram Reels:* Digital marketers have observed that Instagram Reels are providing double engagement rates than a normal video especially after the ban of TikTok Videos and is a great opportunity to market products and services.

z) *Shoppable Content:* This is a content of picture or video or article that is directly linked to buy out portal. The process of a customer getting aware of a product through content

marketing and making a decision to buy the product on an e-Commerce platform is far simpler and direct.

aa) *User-Generated Content or UGC:* User-Generated Content or UGC benefits from the customer appreciation and induce them to create their own out of personal ideas and share with the world. It helps with the promotion of creativity of product users.

bb) *Influencer Marketing:* It is a mode of word-of-mouth marketing, which is one of the oldest forms utilizing the celebrities who have large following on social media, yet can be helpful in word-of-mouth promotion. It is expected that this industry is to grow by about 13.8 billion US dollars.

cc) *WhatsApp Marketing:* A WhatsApp Business Account helps customers trust the business' credibility. Regular WhatsApp is also used to spread information and market products and services.

dd) *Geofencing (Location Based Marketing):* It is a location-based service marketing in which an application or other software programs use radio frequency identification (RFID), GPS, Wi-Fi, and cellular data to provide a targeted marketing action like a text, social media advertisement, email, or an application notification. As soon as the mobile device enters or exits a geographic boundary, it is known as geo-fence and it is adaptable with over 90 percent smartphones.

ee) *Hyper-local SEO:* This is a digital marketing technique useful for the small business startups. It has an algorithmic push giving personalized results.

ff) *Quora Marketing:* Quora has a Question and Answer Platform. Though it has limited advertising scope, some experts write detailed descriptions gaining attention of the audiences. It has now become favorite of Google and digital marketers. Quora information has gained credibility and trust of the readers.

gg) *Content Marketing and BERT update:* Key words are important when content is created. BERT (Bidirectional Encoder Representations from Transformers) is a Google AI of deep learning model which is able to identify the content even without key words.

hh) *Personalized Remarketing:* This is another critical digital marketing technique inducing customers to buy products and services as repeat buyers.

ii) *Social Media Stories:* Utilizing micro-videos, content and images will assist leverage the brand in real-time, thereby increasing engagement among people that establishes the authenticity of your brand.

jj) *People Also Ask (PAA):* People do ask all kinds of questions and internet has to be ready for answers. Therefore, Google has introduced this feature of PAA where product and service related queries can be answered.

kk) *Omni channel Marketing:* It is a process of marketing across numerous platforms in order to have gained multiple touch points. Omnichannel marketing strategies allow a business to use multiple ways of representing their brand or business to the audience. More than 65% of consumers use various platforms before their purchase.

ll) *Personalized Pop-Ups:* These are really effective and when deadlines or freebies are added to it, and most of the time people act on the pop-ups.

mm) *Progressive Web Apps:* These are not real applications, but are websites that look like native applications, but are not. Progressive Web Apps are 90 percent smaller than native mobile apps.

Source: (https://iide.co/blog/digital-marketing-trends-india/)
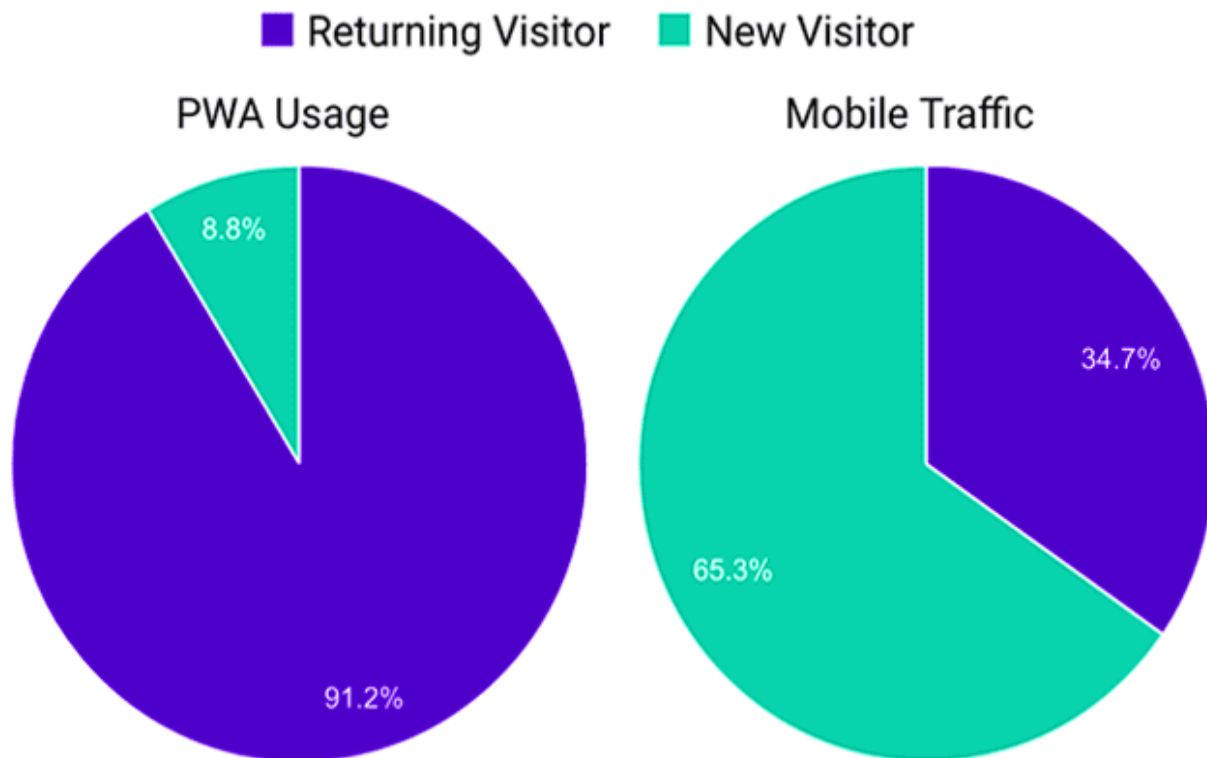
From the above diagram, it can be seen that PWA usage is 91.2 % while native app of the mobile is only 65.3 %. The returning visitors are more for PWA compared to the native Apps.

VI. CONCLUSION

Different forms of digital marketing are in vogue. The digital marketers have to be abreast of the developments on a time based manner being affected by the FOMO syndrome (Fear of Missing Out) in the arena of digital explosion. The ultimate goal of all marketing is to reach out to the customers to address the customer needs not only by what the customers already know, but also making the customers their already existing ignorance or even generating a psychological need for products and services which the customers are not aware of, but can be injected into their minds and thereby creating additional customers out of the existing customers. Digital technology can be made use of effectively in this game and also and seek the assistance of digital marketing. The trends that are seen are only the tips of the iceberg while much more are in the offing in the future.

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