Influence of Digital Technology on Advertising Methods: A Review

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Abstract:
Advancement intechnology has influenced media houses including newspapers, television and radio. This indicates that technology has spared none of the media genre including advertising. Advertising the paid communication format is an essential form of information content for various media formats as publishing it brings revenue to the media houses. Media apart from its primary function of education, information and entertainment also creates a platform for buyers and sellers and purposely advertising plays an important role in the process of marketing communication. As media channel is a central element in the communication between advertiser and consumer, any change in media will also bring in change in advertising format. The advancement of technology has altered the nature of media and it is important to see how it has affected advertising methods. The purpose of this study is to provide a comprehensive review on how digital technology has changed the media platforms in creating and publishing the advertising message. This change has resulted in new ways of publishing advertising content. The knowledge derived out of the studywill enable the methods, advertising professionals have adopted in understanding consumer's new methods of buying, and incorporating new methods of interaction with consumers. This paper certainly focuses on the developments in media landscape which has inadvertently brought change in advertising methods.

Keywords: *Advertising, Media, Publishing content, Digital technology.*

I. INTRODUCTION

Success of any business depends on marketing activities. Marketing enables businesses to increase their profit through various ways. Advertising being the subset of marketing helps in achieving corporate goals. Advertising is a tactic used by organizations to convey message about their brand. It is a tool either in audio or visual form used for promoting products or services. (Belch and Purani 2011).

Basic functions of advertising are to attract consumers, provide them with information, and influence their purchase intentions. These functions can be achieved only if advertisers use a right channel of communication, which could be print media, television, radio or any internet based medium. Medium works as mediator to exchange information and make consumers aware of company's products and services and depending on the media format the information can be framed ex: text, images, audio or video. Depending on the target audience and advertiser's budget, advertising agencies strategize media planning not only to choose a right

medium to share the information but also to optimize the investment (Belgaonkar and Dash 2013). Advertising helps businesses to invest in a right medium that can have a competitive advantage over others. This indicates that the key factor for an advertising firm is not only to keep updated with technology present in the market but also update the advertising technology to suit the changing needs of the media.

Awareness towards technological developments is essential for any advertiser. This is because technology facilitates the development of methods or tools used to deliver the solution of problems and to satisfy the necessary needs of the community. The use of technology has become the requirement of life as it offers necessary services, improves standard of living, and brings people closer by improving communication and relationships (Younes and Al-Zoubi2015). Since advertising is an effective tool of marketing where technology is termed as a medium that helps marketer to communicate with their consumers and to deliver them with product, we can understand that knowledge of

technology helps to provide new forms of communication with consumers which are changing the media landscape.

Among various formats of media that are being used by the consumers, New media offers opportunity to implement new strategies to attract consumers (Jain and Yadav 2017). Since, technological development brings new dimensions to the traditional advertising by changing the method of publishing content; the present study focused on how the technology has changed the media over the period of time becomes essential.

II. Media Platforms and Advertising

Advertising is no new phenomenon. A glance through the pages of history, details us that before industrialization and technological developments advertising existed in variety of forms such as clay tablets, papyrus, announcements by town criers, wall inscriptions etc. Babylonian clay tablets were found having messages inscribed on them from 3000 B.C. Egyptians used a papyrus as a writing material which is considered as a form of Egyptian advertising. Public announcements of ship arrival by town criers in Greece are considered as a form of oral advertising. In Rome painted wall signs are considered as early form of outdoor advertising which was found in Pompeian ruins.

It is important to note here that advertising from the time immemorial was used not just as medium of connecting the business to consumers but also by the rulers to proclaim their achievements and announcements.

It can be noted here that arrival of various formats of mass media facilitated manufacturers to market their products to a greater number of public. The publication demand for each medium was different. It can be recollected that the Boston News Letter was the first American newspaper with advertising, which came out with "two notices in 1704 offering rewards for the return of merchandise stolen from an apparel shop and wharf" (Lewis 2015).Industrialization not only helped growth in production of goods but also introduced marketing system. Parallel to the marketing system, innovativeness in distribution was achieved through advertisements using newspapers. Media formats be it Newspapers, Radio or Television were eager to publish advertisements as this paid form of communication reduced the burden of cost of production. (Daymette and Montenegro 2017), (Belgaonkar and Dash 2013), (O'Barr2010). Elaborating from today's perspective, in all these media formats we

not only observe direct placement of products in mass media but also indirect Product Placements Ex: Films. Actual demonstration of product by actors is also possible in serials or movies or mentioning of company name either at the beginning of program or at the end of it (Babacan, Akcal and Baytekin2012). Product placement can also be done in video games, virtual / online environments, and online games (Williams's et. al.2011). The technological revolution in the traditional media formats improved the presentation methods, new vistas opened with the arrival of internet based media platforms.

III. Advertising in the Digital Media

Internet opened new opportunities for marketers to attract customers. It includes search engine optimization (SEO), web banner ads, rich media ads, social networking ads, interstitial ads, email marketing etc. These ads provide better results compared to the ads posted by traditional media as specific group of audience can be targeted. The content in internet or online advertising can be immediately published without the limitation of any geography or time. Another benefit of internet was customization of advertisement which allowed consumers to have easier access to product information. (Belgaonkar and Dash 2013).

Advertisers find online advertising more suitable as it cater to larger interest of the customers. Advertising can use various techniques like display or web banner with the help of graphics, logos, videos, and animation. "Advertisements can also be made interactive with the help of forms, buttons, animations created using different languages and animation software. The new advancing technology allows advertisers to increase the visibility of their client's product in search engines such as Google or Yahoo using SEO / SEM (Pawar 2014).

Among the internet based advertising Email based advertising appears to be one of the popular methods. Advertising through Email is not only low cost. This platform has gained popularity among business owners as it provides better return on investment (Jamalzadeh, Behravan and Masoudi2012). The advertisement can be made more personal by adding consumer's name, workplace etc. (Sahni, Wheeler and Chintagunta2016). The relevant content that is consistent with consumer's profile can also be sent. Email also provides autoresponder tool which allows to send a message automatically on special occasion (Fariborzi and Zahedifard2012).

Inventions of 'Smart phones' probably changed the dimension of advertisements. Mobile phones are extensively used by people irrespective of their socio economic and educational differences. Smart phones also facilitate internet banking, shopping, investments and many other business transactions using e-commerce applications. Though Mobile advertising provides a platform for customized, interactive and persuasive messages in the form of SMS, MMS, applications, advergame, QR code, NFC (Shan et.al. 2016), since they are personal devices care should be taken while marketing the products. The publication of advertisements here is based on permission, incentive and location– based. "Permission based advertising is meant for those customers who are ready to receive the messages whereas in incentive - based promotions customer get reward for listening to advertisement. Location based ads provides content to customer based on his / her location". (Tsang, Ho and Liang 2015). Using phones a person can not only make and receive calls but also access mails and connect himself/herself to other Social Networking Sites(SNS). Various platforms of SNS like Facebook, Twitter and others which enable people to connect to others without any barriers have been considered as blessing in disguise for marketers. Marketers make use of such network to increase the exposure and to increase customer reach. One of the advantages of social media is interactivity which helps both advertisers and customers to communicate with each other which results in achieving better customer relationship (Iblasi, Bader and Al-Qreini 2016). Social Media such as Facebook, Twitter or any other internet forum, blogs provides sharing option which benefits marketers in viral marketing. It also allows company to create their own community or page and can inform customers about the latest developments of products through blogs, tweets and articles. It helps in communicating with influencers and through them customer base can be increased (Neti2011).

Advertisers have explored Influencer marketing using New Media platforms. The focus in influencer marketing is on individual rather than entire target market. Here the influencers are identified based on the number of followers on their social media platform. Companies make use of these individuals as a marketing tool to reach out to their target audience in an effective way. These individuals can be potential buyers or they can influence the purchase intentions of others (Ranga and Sharma

2014). An influencer can be celebrity, industry expert, bloggers, content creators, or micro influencers. Influencers use blog posts, pictures, short or detailed videos to inform about the brand to their followers (Léa, Malek and Runnvall2018).

Search engine optimization (SEO) has changed the existing ways of marketing. It provides ways to increase product's visibility on search engines like Google. It improves the position of product or company's website in search engine results for a predefined keywords (Khraim2015). Marketers makes use of two strategies either paid or unpaid results. Search engine algorithm provides a platform for advertisers to use specific keywords related to their product. When internet user uses these keywords advertisements appear on his / her search results. This approach allows advertisers to target their customers at relatively lower cost.(Chan 2014). Research has shown that about 73% of internet users do not go beyond the first page of results. As a result, in order to have more visitors to company's website, company's ranking should be high enough to be published on the first page of results (Jansen and Spink2006).

IV. ADVERTISING FOR THE PRESENT AND THE FUTURE

When we look to present day advertising, there appears the growth of advertising is going beyond imagination. Technological evolution has brought drastic change in the method of Out Of Home (OOH) method of publication for example billboards, exteriors and interiors of public transport, bus shelters, telephone booth, wall painting, kiosks, sidewalk posters, shopping mall displays, in-store displays etc. Since OOH are believed to catch larger consumer's attention, conversion of traditional methods into newer digital forms are considered essential. The new platform in Digital Out of Home (DOOH), allows consumers to interact with it, when used with technologies like motion detection, image capture, and touch screen. Displaying video content is also possible with DOOH (Gurumoorthy2015).

Hologram is a 3D image created with the help of various light patterns. This 3D holographic projection is becoming a rapidly growing technology which gives a chance to advertisers to display their products. In advertising world, this technology is termed as holo-promotion. Combining high definition projection and Computer Generated Imagery (CGI) technology with 3D

holography provides eye catching audio-visual displays. It also allows marketers to have interactive booths and vending machines (Elmorshidy2010).

Modern innovation that has influenced advertising is Augmented Reality (AR). It provides applications which allow to blend virtual world with real world (Jin and Yazdanifard2015). It makes use of smart phones, computers and allows user to have a unique experience of interaction of virtual product in real environment (Connolly et. al., 2010). Since it helps user in visualizing how the product will look or can be used in real world, it provides better interaction with that brand (Ng and Ramasamy2018). Although this cutting edge technology has advantage over traditional media, it can be used with print medium which is called as Augmented Reality Hypermedia. It is nothing but a combination of AR technology and print advertisements. This hypermedia allows to use hand held devices as a viewfinder which scans the printed advertisement containing hyperlink, converting 2-D image from printed ad into a virtual image of product. AR technology can also be used in point of sale applications (Yaoyuneyong et.al. 2016). Other AR advertising applications include navigation using GPS system in smart phones and virtual product try outs. Companies like Google are currently working on wearable devices with AR which in future can be used for advertising purpose (Jensen 2013).

Another such medium which has revolutionized advertising is Virtual Reality. It generates 3-D virtual environment where user can interact with the help of special electronic equipment such as VR headsets. This technology gives user a realistic experience of product without going to actual physical store. It creates a high impact as it engages consumer when the virtual world is very close to the reality. VR also enhances the experience of marketing where advertisers can create theme based events or situations. Futuristic VR technologies such as Teslasuit and Virtusphere will enable user to feel the objects in virtual world which will increase interactivity. VR combining with artificial intelligence and gamification technique will help in collecting consumer's data which in future will help in designing advertising message (Barnes 2016).

Digitization of television has allowed marketers to make advertisements which combine traditional TV advertisements with internet. This new format of ads is termed as Interactive TV ads (ITV) as it allows consumers to response immediately after watching an ad.

This platform offers a variety of interactivity which ranges from clicking on link to access website, offering free sample of product to viewer to direct ordering of product and after sales support (Pramataris et.al. 2001). ITV ads also include bookmarking system, where a viewer can bookmark an ad and watch it later for more information. Another technique that can be combined with ITV is gamification where a viewer can be engaged with product through quiz type games. With ITV it is also possible to share the same information on social media (Almeidaa et.al. 2013).

Nowadays everyone express their ideas, opinions, necessities using different media channels such as internet based platforms, mobile phones in terms of tweets, blogs, emails etc. or even face to face by discussions or conversions,. This consumer's data in the form of written text, images, videos, transaction records, and web browsing history can now be saved which marketers can access with the help of Artificial Intelligence (AI). AI provides opportunities to study consumer's behaviour using this data as a basis. It uses techniques like Natural Language Processing, Image Recognition, Speech Recognition, Problem solving and Reasoning, and Machine Learning. These techniques help to understand the consumers' buying behaviour, their need, perception towards a brand. And thereby, AI provides a suitable and persuasive content to consumers and guides them in buying a product (Kietzmann, Paschen and Treen2018).

V. CONCLUSION

This review paper focuses on how the developments in media landscape has brought change in advertising methods. It is noted that although traditional media remains integral part of marketing, it is no longer pre-eminent as rapidly changing technology explores new ways of creating an advertising content. Various platforms available on New Media, has made a strong attempt to bring advertiser closer to the consumer. The platforms not only customise the advertisements but also make it interactive. It is important to note that though advertisers are reformulating their strategies to adapt to newer media forms, the traditional methods co-exist. Advertising media is changing with the evolving digital technology to suit the newer platforms such as augmented and virtual reality, artificial intelligence can be seen as methods of taking the products to the customer of tomorrow.

VI. REFERENCES

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