An Analysis of Factors Influencing use of Digital Opinion Leaders (DOL) in Marketing: An Indian Perspective

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Abstract:-

Purpose – The purpose of this paper is to find out the factors that contribute to the effectiveness of using digital opinion leader in social media marketing to create purchase intention

Design/methodology/approach – The paper's findings are based on a systemic review of the literature of academic studies and primary research conducted on companies who are using digital opinion leader (DOL) in social media marketing

Findings – The major factors which have a significant impact on purchase intention (PI) are quality of content (QC), frequency of activity (FA) and engagement with followers (EF).

Practical implications – This paper identifies the factors that have a significant impact on influencing the purchase intention (PI) of the buyer when digital opinion leader is used in social media marketing.

Originality/value – The data collected for conducting primary research has been collected from 236 companies that are actually engaged in using digital opinion leader for social media marketing. Hence, this research paper gives a fresh insight onto how the power of digital opinion leader can be successfully leveraged for social media marketing for creating purchase intent(PI).

Keywords:- Digital Opinion Leader(DOL), Influencer Marketing, Digital Marketing 2.0, Social Media Marketing, Purchase Intention(PI)

I. INTRODUCTION

There are two methods of marketing prevalent in the Industry – Push Marketing and Pull Marketing (Urban,2005). In the case of push marketing, the companies pay commissions or margins to the dealers, distributors or retailers to influence the buyer to buy the product. In the case of pull marketing, the company uses strategies like advertising, public relations, personal selling or sales promotion to induce the potential buyer to buy the product. Although there has been many debates and research articles on whether push marketing is better or pull marketing is better, companies normally use a combination of both push marketing and pull marketing to ensure that their sales targets are achieved (Lyon, 2009).

Due to the Covid19 pandemic that has disrupted normal business operations across many countries, we have now seen prevalent use of digital marketing by companies to reach out to the customers and influence them to buy their products and services (García,2021). Many companies are relying on traditional digital marketing tools like SEO (Search Engine Optimization), SEM (Search Engine Marketing), SMM (Social Media Marketing) and E-Mail Marketing to reach out to customers (Burghate,2018). However, with a huge number of companies using these traditional tools, the market is getting cluttered and it becomes very difficult to create a distinct positioning in this clutter.

This has given rise to the demand for a new set of tools which are clubbed under Digital Marketing 2.0. The strategies of Digital Marketing 2.0 are Social Listening, Online Reputation Management (ORM), Electronic Word of Mouth(eWOM), Artificial Intelligence (AI) based marketing, Growth Hacking and Influencer Marketing (Chahal,2018).

Social Listening uses tools like Twitter, Facebook, LinkedIn and Hootsuite to capture and analyse the feedback of customers regarding a particular brand which maybe a product or a service. When a customer is happy or unhappy about a particular brand, she will probably reach out to a social media platform to voice the happiness or concerns. The marketer captures the opinion or feedback of the customer and addresses the same in a satisfactory manner to get the confidence and goodwill of the customer.

Online Reputation Management (ORM) is based on social listening and proactively uses social platforms like Quora, Glassdoor and YourStory to build up a credible image about the company. Today, consumers are not only interested in the features, price and benefits of a product or service, they are also concerned about the reputation of the company from whom they are buying. So, we are seeing that companies are adopting high standards of corporate governance, corporate social responsibility, triple bottom line and green marketing to carve out a credible image among the consumers. ORM helps to reinforce the image

and give assurance to the customer that they a re buying products or services from a good company.

Word of Mouth (WoM) has always been an inexpensive but powerful tool of marketing for marketers. A good word of mouth can fetch a large number of customers through referrals. This hardly entails any substantial investment for the marketer. Today, with the prevalence of online marketing and extensive use of Social Media, companies are adopting eWOM, which is electronic word of mouth. Electronic word-of-mouth communication (eWOM) is any positive or negative statement made by potential, actual or former customers about a product or company which is made available to multiples of people and/or institutions and is spread over the internet (Cheung et al, 2010). Companies are now encouraging customers to spread positive eWOM by enticing them with incentives and gifts to do so.

Marketing, in today's world has become very competitive and precision driven where a single minute of delay or a minute mistake might have a huge repercussion in terms of cost and profits. To streamline the process with quick response and high accuracy, companies are now using artificial intelligence-based marketing systems. One example of AI based digital marketing is chatbots. A chatbot is a computer program that simulates human conversation through voice commands or text chats or both. A chatbot can answer queries of customers, guide them through steps or processes to obtain what they want and can also undertake almost all functions of marketing from order taking to delivery.

Growth hacking is a strategy that has been popularized by Sean Ellis. Growth hacking (also known as 'growth marketing') is the use of resource-light and cost-effective digital marketing tactics to help grow and retain an active user base, sell products and gain exposure. Growth hacking makes an effort to turn customers into brand ambassadors by giving them some incentives. This is in sharp contrast to running huge and expensive marketing campaigns with celebrity brand ambassadors. Companies like Dropbox, Airbnb, Ola and Uber have successfully used growth hacking to amass a large number of users and increase the customer base with growth hacking and bare minimum costs.

One significant strategy used by digital marketers is influencer marketing. This is different from using celebrities as brand ambassadors. Here, people who are popular and enjoy high degree of credibility are signed up to do influencer marketing. People like Dr Devi Shetty, NR Narayanamurthy, Ratan Tata, Oprah Winfrey and Deepak Chopra have an aura or trust and credibility around them. There are also other personalities like Rujuta Diwekar (Nutrition Expert), Deanne Pandey (Fitness Expert), Shenaz Treasurywalla (Travel Blogger), Chetan Bhagat (Novelist), Sanjeev Kapoor (Master Chef), Sandeep Maheshwari (Motivational Speaker) and Kumar Vishwas (Poet), who enjoy a huge fan following. People hold their opinion in high regards and follow their advice and opinions.

A variant of influencer marketing is the use of digital opinion leaders (DOL). They might not be big celebrities but they have their own niche of fan following and can significantly impact the buying decision of consumers. Thanks to apps like TikTok, Smule, Dubsmash, MX TakaTak and Josh, these digital opinion leaders are now found even in small towns and semi-urban areas. Companies are now rapidly adopting the idea of utilizing the services of these DOLs to cash in on their popularity and influence buyers to buy their products and services. This research article makes an endeavour to understand the factors influencing use of digital opinion leaders (DOL) in marketing from an Indian perspective by analysing primary and secondary data.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Social Network Analysis (SNA)

Opinion leaders have always played a key role is shaping up the decision making of the buyers of products and services. Different authors and researchers have used different techniques to identify the opinion leaders who can make a significant impact in influencing the purchase decision. One of the techniques used is Social Network Analysis (SNA) using text mining. This follows a four-step process. In step one, text mining is used to obtain the opinions of the consumers. In step two, the relationship between the buyers are established using text based relationship mining methods. In the third step, a graphical representation is made of the social network that is formed with users, opinions, and the relationships between them. The graph comprises of nodes and edges, where the nodes represent the consumers and the edges represent the relationship between the consumers. The attributes of the nodes represent the opinions of the consumers and the attributes of the edges represent the frequency of communication between the consumers. The opinion leaders and opinion trends are identified by determining the position of the consumers and the opinion trends in the graph (Riquelme et al.,2019).

2.2 Whale Optimization Algorithm (WOA)

Another technique used for identifying digital opinion leaders is Whale Optimization Algorithm (WOA). This algorithm is based on the bubble-net hunting behaviour of humpback whales. In this method, the right influencers are identified based on similarity index which is computed from neighbour similarity and clustering coefficient. The analysis is done based on accuracy, precision, recall and F1 score (Jain et al.,2019).

2.3 Rank-after-Clustering (RaC)

There are other authors who have proposed other methods like Rank-after-Clustering (RaC) Algorithm. This uses a phased-clustering perspective with K-means algorithm to identify the opinion leaders. The ranking is done based on activeness and influence and the degree of attention that they get from the followers (Zhang, et al.,2020).

2.4 Hypothesis Development

2.4.1 Quality of Content (QC)

The followers in social media tend to follow those digital opinion leaders who post credible and quality content in their social media handles (Walter, 2020). The content may be informative, humorous or entertaining, but it should have value which makes it worthwhile for the followers. An element of controversy or debatable content is also acceptable provided it does not violate the law or code of conduct administered by the social media channels (Bala,2018). Digital opinion leaders who post uninteresting, useless or low-quality content generally see a dwindling number of followers (Flores,2013). Hence, we can hypothesize:

H1: Quality of Content (QC) delivered by the DOL has a significant impact on the purchase intention (PI) of the buyer

2.4.1 Frequency of Activity (FA):

In Social Media, regular posting is a must or otherwise the decay effect sets in. The decay effect causes followers to get a lower visibility of the posts and hence a lower amount of engagement (Lee,2014). Hence, it is not only important that the DOL posts quality content in their social media handles, but also posts at regular intervals so that the popularity does not go do down and the decay effect does not set in (Murthy,2012). Hence, we propose the following hypothesis:

H2: Frequency of Activity (FA) of the DOL has a significant impact on the purchase intention (PI) of the buyer

2.4.2 Engagement with Followers (EF):

In social media, we consider the quality of the post as length, the number of posts done as the breadth and the engagement with the followers as the depth (Shawky, et al.,2019). Engagement is measured by the following formula:

Engagement = (Likes + Comments + Shares)/Total Reach x 100   (Chakraborti & Chahal,2018)

A DOL with less number of posts per day or month can be more effective if the quality of content and engagement with followers is high. Hence, we propose the following hypothesis:

H3: Engagement with Followers (EF) by the DOL has a significant impact on the purchase intention (PI) of the buyer.

By using Purchase Intention (PI) as the construct and the Quality of Content (QC), Frequency of Activity (FA) and Engagement with Followers (EF) as the variables, we propose the following framework of conceptual model:
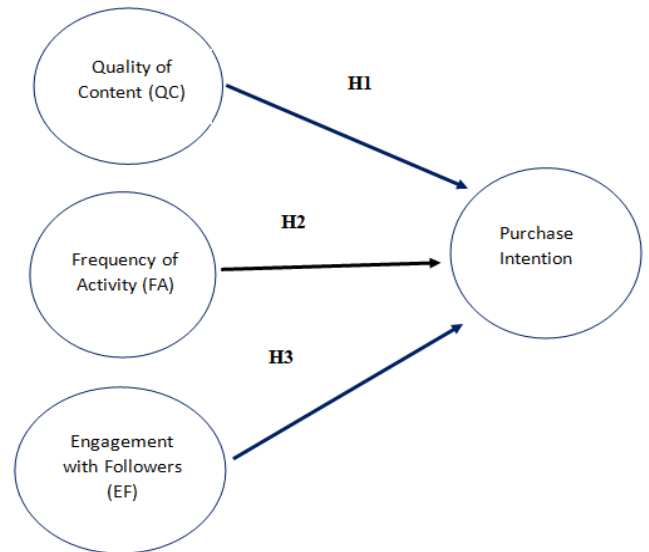

Figure-1: Conceptual Framework Model

III.   RESEARCH METHODOLOGY

3.1 Research Instrument

We conducted a descriptive research using quantitative technique. A structured and scaled questionnaire was constructed with 16 scale items where responses were sought on a 7 point Likert scale (Dawes,2008). The questionnaire was made on the basis of knowledge obtained from extant literature review, and construct items were identified based on previously validated scales. The questionnaire was pre-tested on 30 respondents to check the accuracy and validity of data captured through the questionnaire. We have used reflective measures in the constructs as the data would be analysed using SmartPLS software (Hair *et al.*,2012a, b).

3.2 Sampling Design and Data Collection

Due to the pandemic and restrictions like social distancing, we have used snowball sampling method to identify and collect data from targeted respondents. We reached out to 250 companies who were using DOL for their digital marketing initiatives. The questionnaire was administered using Google Forms. Out of the 250 companies, we got correct and complete responses from 236 companies. For PLS-SEM (partial least square-structural equation modelling) analysis, the sample size should be ten times the number of indicators (Hair *et al.*,2012). In our case, we have sixteen scale items and a sample size of 236, which justifies the sampling. The demographics of the sample is given in the following tables:

Table-1: Demographic Profile of the Respondents (Gender Wise)

		Frequency	Percentage
Age	Male	124	52.54
	Female	112	47.46
	Total	236	100.00

Table-2: Demographic Profile of the Respondents (Size of the Company)

		Frequency	Percentage
Size of Company	Small Size Company (Turnover<Rs 50 lakhs)	88	37.29
	Mid Size Company (Turnover Rs 50 lakhs to Rs 5 Crore)	81	34.32
	Large Size Company (Turnover> Rs 5 Crore)	67	28.39
	Total	236	100.00

Table-3: Demographic Profile of the Respondents (City Wise)

		Frequency	Percentage
Area	Delhi	37	15.68
	Chandigarh	22	9.32
	Mumbai	35	14.83
	Pune	24	10.17
	Bengaluru	26	11.02
	Chennai	24	10.17
	Hyderabad	21	8.90
	Kolkata	27	11.44
	Guwahati	20	8.47
	Total	236	100.00

IV. RESULTS

4.1 Measurement Model

In our analysis, we can see that the factor loadings are above the value of 0.5, which is a minimum requirement (Gefen, 2002). The AVE (Average Variance Extracted) is also above 0.5, which satisfies the conditions of reliability and validity. The CR (Composite Reliability) scores are found to be above 0.7, which is satisfactory (Nunnally and Bernstein, 1994). The values of CR (Composite Reliability) are also higher than the values of AVE (Average Variance Extracted). Thus we can say that the discriminant validity, convergent validity and internal consistence reliability has been established (Hair *et al*.,2012a, b).

Table – 4: Reliability and Validity Measures

Latent Construct	CR	AVE	Discriminant Analysis			
			QC	FA	EF	PI
QC	0.789	0.557	*0.735*			
FA	0.804	0.576	0.536	*0.711*		
EF	0.871	0.697	0.321	0.743	*0.492*	
PI	0.925	0.797	0.732	0.643	0.611	*0.534*

4.2 Structural Model Assessment

The data analysed through SmartPLS Software is given in Table 6. We can infer from the table that the path coefficients support the significance of all the causal paths of the conceptual model. It is found that Purchase Intention (PI) is significantly predicted by QC (Quality of Content), FA (Frequency of Activity) and EF (Engagement with Followers). QC (β=0.565, t=8.131, p<0.05), FA (β=0.521, t=3.468, p<0.05), EF (β=0.532, t=5.223, p<0.05), has a significant impact on PI. As per the data obtained from analysis, we can say that the hypotheses H1, H2 and H3 are all confirmed.

Table – 6 : Results of PLS-SEM Analysis

	Proposed Hypothesis	Coefficient (β)	T-Statistics	p-value
H1	QC--> PI	0.565	8.131	0.01
H2	FA --> PI	0.521	3.468	0.01
H3	EF--> PI	0.532	5.223	0.01

V. DISCUSSION

Companies and brands have traditionally used tools like advertising, public relations, personal selling and sales promotions to influence the buyer to buy their products and services. These tools are expensive and does not score very high in terms of accountability. The famous marketing expert John Wanamaker said that 'I know that half of my advertising is wasted, but I do not know which half'.

Digital Marketing has given the marketers a viable alternative where they can reach out to a large number of

potential customers at bare minimum cost. There are 3.8 million searches that happen in Google per minute (Source: seotribunal.com). There are 2.5 billion active users in Facebook. There are 350 million active users in Twitter. There are 750 million users and 50 million companies registered in LinkedIn. There are over four and a half lakh hours of video uploaded on YouTube every day and five billion videos are watched every day. The power and reach of the social media is simply too humongous to be ignored.

There are various strategies and approaches that are used in digital and social media marketing. While there are traditional strategies like SEO (Search Engine Optimization), SEM (Search Engine Marketing), SMM (Social Media Marketing), Affiliate Marketing and E-Mail Marketing, it is the new age tools like Social Listening, Online Reputation Management (ORM), Growth Hacking, Artificial Intelligence (AI) driven marketing and Influencer Marketing that is gaining predominance because of the high level of accuracy and effectiveness.

In influencer marketing, companies initially depended on celebrities and high-profile personalities to persuade the customer to buy the products and services. But now there is a paradigm shift as companies are looking at social influencers who have expertise in a particular domain area like travel, food, fitness and healthcare. This has led to the rise of the phenomena called digital opinion leaders (DOL). Digital opinion leaders are influencers who influence the buying behaviour of the potential customers through their digital posts. They have a high credibility and acceptance among their followers and a cult following because they post interesting content which is useful to the followers.

Our research objective was to find out the factors that make a digital opinion leader useful and effective in influencing the purchase intention. From extant literature, we found that there are several methods like Social Network Analysis (SNA), Whale Optimization Algorithm (WOA) and Rank-after-Clustering (RaC) to identify digital opinion leaders who are effective in influencing purchase intention.

We have conducted a primary research to identify the factors that significantly the purchase intention (PI) of the buyer. Out of the 250 companies we reached out to, who were using digital opinion leaders in their marketing campaigns, we got complete and valid responses from 236 companies. The data was collected using a structured questionnaire where the responses were sought on a 7-point Likert scale. By analysing the data with SmartPLS software, we came to the conclusion that factors like quality of content (QC), frequency of activity (FA) and engagement with followers (EF) have a significant impact on success and efficacy of running social media campaigns through digital opinion leaders (DOLs).

VI. IMPLICATIONS

6.1 Theoretical Implication

Digital marketing is gaining in importance because of the business disruption caused by Covid19 and the rising importance of social distancing, travel restrictions, work-from-home and other measures. The research work on digital marketing has also increased to a large extent with a special focus on Digital Marketing 2.0 strategies like social listening, online reputation management (ORM), growth hacking, artificial intelligence (AI) driven marketing and influencer marketing. There are many experts like (Riquelme et al.,2019), (Jain et al.,2019) and (Zhang, et al.,2020), who have done exhaustive and path breaking research to identify methods and approaches to identify digital opinion leaders who can effectively create a significant impact in the brand equity and growth. Our research identifies factors like quality of content (QC), frequency of activity (FA) and engagement with followers (EF) that make a significant impact in the purchase intent (PI). So, we can say that our research has created a new approach which can be taken forward to identify more factors that make a significant impact in the purchase intent (PI).

6.2 Managerial Implication

Traditional modes of business promotion like advertising, public relations, personal selling and sales promotions are quite expensive and do not always yield the desired outcomes. And with disruptive conditions like Pandemic and Covid19, the traditional strategies become very difficult to implement. Hence, we are now seeing companies using digital marketing and social media marketing in a big manner. However, the strategies of Digital Marketing 1.0 like SEO, SEM, SMM, E-mail Marketing and Affiliate Marketing are also not yielding the desired outcomes. Hence, most of the companies are now looking at innovative strategies of Digital Marketing 2.0 like social listening, online reputation management (ORM), growth hacking, artificial intelligence (AI) driven marketing and influencer marketing. Our research covers an aspect of influencer marketing called digital opinion leader that is now becoming a significant force in driving digital marketing leading to purchase intention. We have also identified factors like quality of content (QC), frequency of activity (FA) and engagement with followers (EF) that make a significant impact in the purchase intent (PI). This will help corporate strategists to implement social media marketing strategies using digital opinion leaders in the right manner.

VII. LIMITATIONS AND FUTURE RESEARCH

The objective of this research work was to find that factors that can be used by digital opinion leaders to create a significant influence in purchase decision of the customer. Though we have identified three factors, namely, quality of content (QC), frequency of activity (FA) and engagement with followers (EF) that make a significant impact in the purchase intent (PI), a more detailed study can bring out more factors that influence the purchase intention. A

longitudinal study will help to get more incisive and logical inferences. We have also not used mediation and moderation among the factors, the use of which could have brought out more better analysis and understanding about the relationship between the factors. Any future study carried out in this area must take these points into consideration.

REFERENCES

[1]. Burghate, D. M. (2018). Digital Marketing and its Techniques for Online Businesses. *International Journal of Commerce and Management Studies (IJCAMS) Vol*, 3.

[2]. Bala, M., & Verma, D. (2018). A critical review of digital marketing. *M. Bala, D. Verma (2018). A Critical Review of Digital Marketing. International Journal of Management, IT & Engineering*, 8(10), 321-339.

[3]. Chakraborti Jayanta; Chahal, Dr Rushen Singh (2018): *"Digital Marketing 2.0",* Himalaya Publishers, ISBN: 978-93-5299-414-4

[4]. Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5-point, 7-point and 10-point scales. *International journal of market research*, 50(1), 61-104.

[5]. Flores, L. (2013). *How to measure digital marketing: metrics for assessing impact and designing success*. Springer.

[6]. García-Santiago, L. (2021). Digital Marketing in Times of COVID-19: An Analysis of the Communication Strategies of Spanish SMEs Through the Web and Social Media. In *Innovative Perspectives on Corporate Communication in the Global World* (pp. 98-121). IGI Global.

[7]. Gefen, D. (2002). Customer loyalty in e-commerce. *Journal of the association for information systems*, 3(1), 2.

[8]. Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of marketing science*, 40(3), 414-433.

[9]. Nunnally, J.C. and Bernstein, I.H. (1994), Psychometric Theory, Tata McGraw-Hill Education, New Delhi.

[10]. Riquelme, F., Gonzalez-Cantergiani, P., Hans, D., Villarroel, R., & Munoz, R. (2019). *Identifying Opinion Leaders on Social Networks Through Milestones Definition. IEEE Access, 7, 75670–75677.* doi:10.1109/access.2019.2922155

[11]. Lee, D., Hosanagar, K., & Nair, H. S. (2014). *The effect of social media marketing content on consumer engagement: Evidence from Facebook* (pp. 1-51). Stanford, CA: Stanford Graduate School of Business.

[12]. Lokesh Jain , Rahul Katarya , Shelly Sachdeva , Opinion Leader detection using Whale Optimization Algorithm in Online Social Network, *Expert Systems With Applications* (2019), doi: https://doi.org/10.1016/j.eswa.2019.113016

[13]. Lyon, E. (2009). Digital marketing: The new push/pull dynamic. *Branding Strategy Insider, Available: http://www. brandingstrategyinsider. com/2009/06/digitalmarketing-and-the-new-push-pull-dynamic. html [4/07/2009]*.

[14]. Murthy, D. (2012). Towards a sociological understanding of social media: Theorizing Twitter. *Sociology*, 46(6), 1059-1073.

[15]. Shawky, S., Kubacki, K., Dietrich, T., & Weaven, S. (2019). Using social media to create engagement: A social marketing review. *Journal of Social Marketing*.

[16]. Urban, G. L. (2005). Customer advocacy: a new era in marketing?. *Journal of public policy & marketing*, 24(1), 155-159.

[17]. Walter, S., & Brüggemann, M. (2020). Opportunity makes opinion leaders: analyzing the role of first-hand information in opinion leadership in social media networks. *Information, Communication & Society*, 23(2), 267-287.

[18]. Zhang, B., Bai, Y., Zhang, Q., Lian, J., & Li, M. (2020). An opinion-leader mining method in social networks with a phased-clustering perspective. *IEEE Access*, 8, 31539-31550.