

Statistical Analysis of Impact of Social Media on Customer : A Study with Reference to Bengaluru Urban Selected Area

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Abstract: *The impact of globalisation, western culture and ever dynamic demographics impacted the mindset of people and brought a revolution in the usage of social media platforms. The significant benefit of social media is online sharing of knowledge and information among innumerable groups of people. Social media platforms offered consumers a great opportunity to acquire information, share, review and recommend through appropriate phrases about the products and services. Surveys have shown that around 74% of shoppers make their purchase decision based on social media. It is helpful not only to B2C but also B2B companies and they are gaining from social media (Chitranshi Verms, 2019).*

Consumers of all ages are gaining advantage of innovative technology and thus in turn it facilitates the use of digital benefits. Social networking sites (SNS) are emerging as a pervasive form of communication in the society (Chitranshi Verma, 2019). Against this background an attempt is made to understand reasons behind using social media, factors impacting consumer behaviour and factors impacting companies and marketers keen on social media.

Key Words: *Social media, consumer behaviour, platform review, recommend, share.*

1. INTRODUCTION:

The dynamics of consumer behaviour made the marketers to be alertful while designing innovative strategies. Social media has opened 'Pandora Box' on the part of marketing houses who spreads wrong information with an intention of captioning sales and other benefits. Social media has emerged in India as a powerful tool in educating the customers of generation XX and X and others. The availability of internet has given individuals the opportunity to use social media from email to twitter and facebook, and to internet without the need for physical meetings (Gruzd et al., 2011). Social media has become an indispensable part of life in the modern day era especially among young consumers (teenagers and adolescents) known as Generation Z (James & Livina 2015). Through social media brand awareness, generating customers demand, providing information & service to customers and thus would like to enhance sales of the organisation (Thomas, L, 2011).

Social media in India has brought revolutionary changes and impacted very much the Generation XX, Generation Y and Generation Z and others. Social media is capable of creating awareness among the customers. Through social media platforms consumers are sharing, acting, reviewing, reacting and recommending the product and services. The growing impacts of globalisation, impact of western culture and ever dynamic enhance of demographics has alerted the modern marketers through social media platforms. At present companies are investing more and more to lure the consumers and potential consumers to strengthen brand and sales.

The previous studies show that the Internet and social media usage is changing consumer behavioural in developing nations (Fitore Jashari, 2017). The head honches of the business groups tries to maintain a healthy relationship with their valid customers and social media platforms are now seen as a promising means of publicity (Trisha Dowerah Baruah, 2012).

2. REVIEW OF LITERATURE :

Armstrong et al., (2014) expressed that the consumer behaviour is impacted by social factors like small groups families and the social status of consumers. Further, the researcher stated that family, friends also influence significantly the consumer behaviour.

Indahingwati (2017) in his research work stated clearly that the drivers of purchasing a product or service is a critical factor for the company in designing the product, its price, distribution channels and effective promotional policy.

Putri and Fitrah (2017) found that online marketing campaigns had a positive effect and influenced the differently the behaviour of consumers in decision making and intention to buy. In addition to this the researcher said that trustworthiness, attractiveness and expert knowledge on purchasing decision also shape the behaviour.

Shang, Pei, & Jin (2017) reported that the family is the most crucial in customer purchasing in the community and husband, wife and friends of the community drive the buying process.

Leader James, (2018) in the paper has concluded that social networking sites are so designed as to make the consumers addicted to medias in such a way that they establish feeling of overseas.

3. RESEARCH METHODOLOGY:

The study conducted on individual customers in order to understand the dynamics of social media and its impactness. The study was conducted through questionnaires. The informant belongs to residents of Urban Bengaluru (90%), although the research lured same global customers. The research developed a questionnaire with 3 point Likert scale from strongly agree to neutral. The statements covered in the questionnaire were taken from previous research work to increase the validity of the study.

3.1 Sources of data and data collection

The present research is based on primary and secondary sources. The primary data was collected through questionnaire. A total 230 questionnaires were collected back with insist and strong appeal. Out of 230 questionnaires 200 found to be usable and thus formed 87% of efficiency of questionnaire supervision and administration. Secondary sources include e-journals, books and unpublished sources.

3.2 Sample and sampling technique

200 samples were considered for the present study and the basis of allocation is shown below. Communal sampling technique was followed while collecting the required data.

Sl.	Area	Population background	Sample
1.	Jayanagar	38151	71
2.	Malleswaram	36321	67
3.	Rajajinagar	33231	62
	Total	107703	200

3.3 Objectives of the study

- 1) To analyse and measures the reasons behind using social media.
- 2) To analyse and measure factors impacting consumer behaviour.
- 3) To analyse and measure, factors impacting companies and marketers keen on social media.

3.4 Hypotheses

- 1) There are no reasons behind using social media.
- 2) Factors are not impacting the consumer behaviour.
- 3) Factors are not impacting companies and marketers of social media.

3.5 Limitations

- 1) To study is confirmed to a few areas of Bengaluru urban.
- 2) Constructs like finance, travelling and impact of Covid-19 felt.
- 3) Any generalisation requires further indepth study.

3.6 Survey findings

Table - 1 reveals data about reasons behind using social media. 124 respondents (62%) expressed strongly agree over the reasons followed by 50 (25%) agree and 26 (13%) stood neutral. Kendall's concordance (W) calculated value is higher than the TV and hence, it is concluded that Kendall's coefficient if concordance quantitative tool fails to accept H0 and accepts H1. Since the variables are more than 7, chi-square statistic is performed.

Table - 2 highlights data about impacting factors on customer behaviour. 130 respondents (65%) said strongly agree over the drivers of consumer behaviours followed by 43 (21.5%) neutral and 27 (13.5%) disagree over the statements. Kendall’s coefficient concordance an important non parametric measure of relationship being higher than the TV amounts failure of accepting H0 and accepts H1. Therefore, it is concluded there exist relationship between drivers or factors and consumer behaviour.

Table - 3 relates to the factors impacting companies and marketers keen on social media. Garrett values are arrived by referring to Garrett Ranking conversion table after calculating concerned value. The calculated value using the formula is shown in the Table-4. F and X values expressed in the table and fx is obtained by multiplying f and x. X values are obtained from conversion table. Mean score is obtained by dividing total score. First rank is award to information sharing with 66.74 highest mean score; second rank is given to the second highest mean score facilitating word of mouth with 65.45 mean score and third rank awarded to social information with 65.17 mean score. The remaining ranks are awarded ranks based on the strength of mean score.

Table - 1: Reasons behind using social media

Reasons	SA	A	N	RT	RT ²
Entertainment	8	6	2	16	256
Spending leisure time	7	5	3	15	225
Information seeking	18	8	4	30	900
Social interaction	17	8	5	30	900
Online shopping	21	5	3	29	841
Comparison with other information sources	16	6	4	26	676
Recommending to others	14	5	2	21	441
Developing global consumerism	13	4	1	18	324
Gaining global knowledge about products & services	10	3	2	15	225
Total	124	50	26	200	4788

Source: Field Survey

$$SSR = \text{Sigma } RT^2 - [(\text{Sigma } RT)^2 / N]$$

$$= 4856 - [(200)^2 / 9] = 4788 - 4444.44 = 343.56$$

$$W = 12 \times SSR / [k^2 n (n^2 - 1)]$$

$$= 12 \times 343.56 / 9 \times 9(81 - 1) = 4122.72 / 6480 = 0.63622$$

χ^2 = Test for the significance of w using χ^2 statistic

$$\chi^2 = k(n-1)w \text{ with } n-1 \text{ df} = 3(9-1) 0.7021 = 3 \times 8 \times 0.636222 = 15.269$$

Decision: At 8 at 0.05 level of significance TV = 15.507. The calculated valued being 15.269 lesser than the TV accept the H0 that there exist no significant relationship between consumers and impacting factors of behaviour. Therefore it can be concluded that consumer behaviour might be affected by some more factors other than stated above.

Table - 2: Factors impacting consumer behaviour

Drivers of consumer behaviour	SA	N	DA	RT	RT ²
Trustworthiness	14	6	3	23	529
Attractiveness	19	4	2	25	625
Expert knowledge on purchase decision	10	5	3	18	324
Peer groups and social class	8	4	2	14	196
Perceptions and attitudes	9	6	3	18	324
Enhancement of knowledge about products	10	5	1	16	256
Impact of online marketing campaigns	15	3	2	20	400
Impact of globalisation	23	5	4	32	1024
Quality of the products	22	5	7	34	1156
Total	130	43	27	200	4834

Source: Field Survey

$$SSR = \text{Sigma RT}^2 - [(\text{Sigma RT})^2 / N]$$

$$= 4834 - [(200)^2 / 9] = 4834 - 4444.44 = 389.56$$

$$W = 12 \times SSR / [k^2n (n^2 - 1)]$$

$$= 12 \times 389.56 / 9 \times 9(81 - 1) = 4674.72 / 6480 = 0.7214$$

χ^2 = Test for the significance of w using χ^2 statistic

$$\chi^2 = k(n-1)w \text{ with } n-1 \text{ df} = 3(9-1) 0.7214 = 17.3136$$

Decision: At 8 df at 0.05 level of significance TV = 15.517. The calculated valued being 17.3136 higher than the TV rejects the H0 that there exist no significant relationship between consumers and impacting factors of behaviour and accepts alternative. Hence, it is concluded that there exist significant relationship between the driving factors and consumer behaviour.

Table - 3: Factors impacting companies and marketers keen on social media - Garrett Ranking Technique

Ranks	Scale & Score value of ranks											Total Mean Score	Rank	
	Scale Value (x)	I	II	III	IV	V	VI	VII	VIII	IX	X			XI
Enhancing brand	f 60 fx492029	41	21	22	14	10	15	8	4	3	2	200	65.01	v
Increasing sales and customer attraction	f 62 fx508423	33	20	20	10	15	10	13	8	6	3	200	63.33	vii
Enhancement of management reputation	f 58 fx359624	34	20	28	18	8	9	4	6	7	8	200	57.20	xi
Customer service	f 59 fx483829	41	15	21	9	12	10	9	8	9	7	200	62.55	viii
Research on customers	f 55 fx451026	38	22	15	18	9	12	8	10	7	6	200	62.27	x
Changes in demographics	f 62 fx508435	50	15	16	10	8	10	7	8	9	5	200	64.2	vi
Engaging customers	f 55 fx451026	38	24	22	8	10	11	8	9	7	8	200	62.3	ix
Social Interaction	f 65 fx533031	45	24	13	10	8	12	5	6	8	4	200	65.17	iii
Facilitating word-of-mouth through photos	f 56 fx495232	46	20	18	14	10	8	9	8	6	5	200	65.45	ii
Trust building	f 60 fx492030	43	25	21	9	14	7	8	6	4	3	200	65.15	iv
Information sharing generation of reviews and rating	f 65 fx533036	52	30	15	5	6	7	5	6	4	5	200	66.74	i

Source : Authors compilation

Note: x - Scale value; f - Number of customers
 fx - Score value; R - Ranks

For Garrett values refer to Garrett rank conversion table.

Table - 4: Percent position and Garrett Values

Sl.No.	100 (Rij - 0.5)/Nj	Calculated value	Garrett Value
1.	100(1-0.5)/11	4.55	82

2.	100(2-0.5)/11	13.63	71
3.	100(3-0.5)/11	22.72	65
4.	100(4-0.5)/11	31.81	59
5.	100(5-0.5)/11	40.90	54
6.	100(6-0.5)/11	50.00	50
7.	100(7-0.5)/11	59.09	45
8.	100(8-0.5)/11	68.18	40
9.	100(9-0.5)/11	77.27	35
10.	100(10-0.5)/11	86.36	28
11.	100(11-0.5)/11	95.45	17

Source: Dhanavandan, S. (2016). Application of Garrett ranking technique. Practical approach, *International journal of library and information studies*, 6(3), 135-140.

4.CONCLUSION

The Bangalore consumers use social media greatly online shopping, information seeking, social interaction, comparison with other information sources. It is observed that the reasons behind use of social media might be limited and some more other reasons may be impacting the Bangalore consumers. Innumerable factors impact consumer behaviour. Bangalore consumers are impacted by globalisation and insist on quality of the products, attractiveness of the products and insist on online marketing campaigns. The first rank was awarded to social media usage for information sharing and second rank for facilitating electronic word of mouth and the third rank preferred by consumers on social interaction. The study concludes that social media strongly impacting the Bangalore consumers because of existing different social media platforms and technology.

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