

## Utilization pattern of social media by orange growers

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### ABSTRACT

The present study was conducted in Amravati and Nagpur districts of Vidarbha region in Maharashtra state where orange is grown on large scale. The ex-post-facto research design of social research was used for present investigation with 300 respondents, out of which, 150 respondents were considered as social media users and 150 social media non user orange growers were selected from 30 villages of six selected talukas of two districts by simple random sampling method. Utilization pattern of social media was measured on the basis of three parameters, frequency of use, extent of reach and perceived satisfaction. 53.33 per cent of the social media user orange growers utilized the WhatsApp on daily basis. 69.33% of the respondents had medium frequency to utilize the social media. The higher proportion of the social media user respondents received per day by message delivered in the form of text, audio and video. 64.00 per cent of the respondents had medium extent of reach of social media. 46.67 per cent of the social media user respondents were highly satisfied with services provided by social media are timely, followed by services provided by social media are highly useful (42.00%). 59.34 per cent of them had medium perceived satisfaction followed by 37.33 per cent respondents were perceived high level. 70.00 per cent of the respondents had high index of utilization pattern of social media. High level of utilization may be due to provision of agro based advisories in addition to other services as per their mandates.

**Key words:** Utilization Pattern, Social Media, frequency, orange growers

### INTRODUCTION

Social media are interactive computer-mediated technologies that facilitate the creation or sharing of information, ideas, career interests and other forms of expression via virtual communities and networks. Recent developments in the mobile, computing and networking technologies provide new ways of technology transfer have been used for disseminating agricultural information on larger proportion since last few years. With the abilities of reaching large number of people individually and simultaneously, Social media are assuming a greater role in the extension work. The number of social media users in India are 450 million as in 2020. All

these statistics proved the huge potential that social media can be for extension practitioners to reach out to the people (www.statista.com, 2019). India is a huge market for social media that is constantly expanding into the rural areas and that improves the scope of reaching not only the farmers but the farm families and youth altogether for higher impact.

The daily life of people are restructuring due to internet based services, instead of dividing them into on-line and offline experience. Rural people are using social media for connecting with friends and family, reading current news, to get information from peers. Connecting that to agriculture and leveraging it to bridge the farmer-

extension gap can prove to be a boon to the agriculture sector and the farm families. Focusing on specific platforms based on clients' preferences and engage them continuously rather than engaging in a number of platforms but failing to engage properly. Keeping holistic view in mind while sharing information rather than focusing on single enterprise as most smallholders have multiple enterprises on their farm. Tagging individual clients to whom the information might be specifically useful and share for all so that the intended audience receives it personally while others can also be benefited.

## **METHODOLOGY**

An ex-post-facto research design of social research was used for present study. The present research investigation was carried out in Amravati and Nagpur districts of Vidarbha region of Maharashtra state. In the present study, 75 social media user and 75 social media non user orange growers were selected from each district. Thus, for the proposed study 150 orange growers from Amravati district and 150 orange growers from Nagpur district were selected. Total 300 orange growers were selected purposively by simple random sampling method from 30 villages of six selected talukas namely; Warud, Morshi and Achalpur from Amravati district and Katol, Kalmeshwar and Narkhed from Nagpur district on the basis of maximum area under orange cultivation. The data were collected by personally interviewing the purposively selected respondents with the help of structured interview schedule. Interview for data collection with the help of interview schedule was generally conducted at the orange grower's farm and occasionally also at their houses when they were free to talk with researcher. Study was conducted during the period of December 2019 to December 2022. In the present study, the extent of utilization was referred as the degree to which social media services were utilized by the orange growers. An index of extent of utilization was developed for this purpose.

It is well known fact that efforts with all the

possible media of communication are being made in order to reach rural mass specifically in the field of agriculture with the varied features. Social media plays a vital role in making the farmers to realize the need for adopting new practices and technology with new skills and promote attitude of mind conducive to economic growth. Social media have due importance in agricultural development, but very few researches are available on utilization pattern of different social medias by the orange growers.

Although there has been tremendous development and expansion of social media, we still do not know to what extent orange growers utilize available social medias with them. Thus in this study, efforts were made to access the utilization pattern of social media by the orange growers in the study area. Utilization pattern of social media was measured on the basis of three parameters, frequency of use, extent of reach and perceived satisfaction.

## **RESULTS AND DISCUSSION**

### **1. Frequency of use of the social media**

The data in the table 1 showed that 53.33 per cent of the social media user orange growers utilized the whatsapp on daily basis while 35.33 percent respondents were using whatsapp with frequency more than two times a week, 8.00 per cent of the respondents were using whatsapp once in a week, 0.67 per cent of the respondents were using whatsapp once a fortnight and 00.00 per cent, 00.00 per cent of the respondents uses whatsapp with the frequency of occasionally and rarely, respectively.

In case of You Tube, proportionately high per cent of social media user orange growers utilized the social media with the frequency of daily (45.33%) followed by 36.00 per cent of them utilizing it more than two times a week while 7.33 per cent of them utilizing YouTube with frequency of once a week. Only 2.00 per cent of the social media user orange growers utilized the YouTube with frequency of once a fortnight, respectively. In case of search engines, 8.66 per cent, 5.33 per cent, 3.33 per cent,

3.33 per cent, and 1.33 per cent of the social media user respondents utilized the social media with the frequency of more than two times a week, once a week, once a fortnight, rarely and occasionally, respectively. Majority of the respondents (24.67%) were utilizing the Kisan SMS portal with the frequency once a fortnight, while 15.33 per cent, 11.33 per cent, 6.66 per cent and 1.33 per cent of the social media user respondents utilize with frequency of occasionally, once a week, more than two times a week and daily respectively. 30.66 per cent of the social media user respondents utilized the Facebook on daily basis, while 18.00 per cent, 14.66 per cent, and 11.33 per cent of the social media user orange growers had frequency to utilize social media, more than two times in a week, once a week and once a fortnight, respectively. In case of Twitter, 8.67 per cent, 6.67 per cent, 3.33 per cent, 2.67 per cent, 2.00 per cent and 0.66 per cent of the social media user orange growers had frequency of once a fortnight, once a week, daily, occasionally, more than two times a week and rarely, respectively. Nearly one third of the respondents (25.33%) had utilized Telegram on daily basis while 18.66 per cent, 12.66 per cent, 8.66 per cent 2.66 per cent and 1.33 per cent of the social media user orange growers had frequency of use with more than two times a week, once a week, once a fortnight, occasionally and rarely, respectively.

In Morshi and Warud tahsils of Amravati district there was Telegram groups of orange growers information from which they were using for orange cultivation and other agricultural practices. In case of Snapchat 20.00 per cent of the respondents utilizes social media once a fortnight while 10.67 per cent, 6.00 per cent, 5.33 per cent, 4.66 per cent and 1.33 per cent of the social media user orange growers had occasional, rarely, once a week, daily and more than two times a week, frequency of social media utilization, respectively.

In case of other applications like (Bharat Agri, Kastakar, Agrovan, PM Kisan, Krishi Network, Nutri clinic, NRCC, Plantix, e-Krishi, Agrostar and Krushik) frequency of use of social media was 14.67 per cent, 13.33 per cent, 8.00 per

cent, 5.33 per cent and 2.67 per cent had once a fortnight, occasionally, once a week, rarely and more than two times a week, respectively.

It is concluded that majority of the information in audio-visual form attracts the individual towards frequent use of it. Facts regarding orange cultivation and other farm related queries are shared through social media which are interesting and easily accessible and affordable to social media user orange growers through YouTube, WhatsApp and Facebook.

From Table 2 it is found that majority of the social media user respondents (69.33%) had medium frequency to utilize the social media. Whereas, 30.66 per cent of them had high social media utilization. None of them had low social media use frequency.

It is concluded that, the reason behind the result was the awareness about the availability of good quality and practical utility of literature and messages on social media regarding agriculture.

## **2. Extent of reach of social media**

From Table 3 it is concluded that, higher proportion of the social media user respondents received per day by message delivered in the form of text, audio and video and also messages received by orange growers were 37.33 per cent followed by per day message utilized by orange growers (21.33%), number of helpline services availed (15.33%), number of phone calls made (9.33%), number of call back facilities availed (3.33%) and number of online programmes/ workshops participated per day was 2.00 per cent, respectively.

From Table 3 in case of per week messages received found that, 26.66 per cent of the social media user respondents availed the number of helpline services followed by number of phone calls made (25.33%), number of online programmes/ workshops participated (24.66%), message delivered in the form of text, audio and video (19.33%), messages received per week (17.33%), messages utilized by them (14.00%) and number of

call back facilities availed per week was 13.33 per cent, respectively.

From Table 3 it is also concluded that 30.66 per cent of the respondents per fortnightly made the phone calls, followed by 29.33 per cent of them had reached messages delivery in the form of text, audios and videos per fortnightly. In case of per fortnightly messages received to social media users were messages received (28.00%) followed by messages utilized (25.33%), no of online programme/ workshop participated (25.33%), no of call back facility availed (18.66%) and no of helpline

services per fortnightly (15.33%), respectively.

From Table 3 it is showed that 52.66 per cent of the social media user orange growers were making number of phone calls per month followed by number of online programmes/ workshops participated (48.00%), number of call back facilities availed (46.66%), number of help line services availed (42.66%), messages delivered (14.00%), messages received by orange growers (13.33%) and messages utilized by orange growers per month was 8.67 per cent, respectively. There was organization of online session by RAMETI (Regional Agriculture

*Table 1*  
*Distribution of the social media user respondents according to frequency of use of the social media*

SI. No.	Statements	Availability of social media	Frequency of use of the social media (n=150)					
			Daily (6)	More than 2 times a week (5)	Once a week (4)	Once a fortnight (3)	Occasionally (2)	Rarely (1)
1	WhatsApp	146 (97.33)	80 (53.33)	53 (35.33)	12 (8.00)	01 (0.67)	00 (00.00)	00 (00.00)
2	YouTube	136 (90.66)	68 (45.33)	54 (36.00)	11 (7.33)	03 (2.00)	00 (00.00)	00 (00.00)
3	Search engines	33 (22.00)	00 (00.00)	13 (8.66)	08 (5.33)	05 (3.33)	02 (1.33)	05 (3.33)
4	Kisan SMS portal	89 (59.33)	02 (1.33)	10 (6.67)	17 (11.33)	37 (24.67)	23 (15.33)	00 (00.00)
5	Facebook	112 (74.66)	46 (30.67)	27 (18.00)	22 (14.66)	17 (11.33)	00 (00.00)	00 (00.00)
6	Twitter	36 (24.00)	05 (3.33)	03 (2.00)	10 (6.67)	13 (8.67)	04 (2.67)	01 (0.66)
7	Telegram	104 (69.33)	38 (25.33)	28 (18.67)	19 (12.66)	13 (8.66)	04 (2.66)	02 (1.33)
8	Snapchat	72 (48.00)	07 (4.67)	02 (1.33)	08 (5.33)	30 (20.00)	16 (10.67)	09 (6.00)
9	Other	66 (44.00)	00 (00.00)	04 (2.67)	12 (8.00)	22 (14.67)	20 (13.33)	08 (5.33)

*Table 2*  
*Distribution of the respondents according to overall index of frequency of use of social media*

SI. No.	Index of frequency of use of social media	Social media user respondents (n=150)	
		Frequency	Percentage
2	Low (Up to 50.77)	00	00.00
3	Medium (50.78 to 71.73)	104	69.33
4	High (Above 71.73)	46	30.67
<b>Total</b>		<b>150</b>	<b>100.00</b>

Mean= 61.25

SD=10.48

Extension Management Training Institute, Nagpur) on first Friday of every month for orange growers on the subjects related to month wise orange cultivation practices and standard operating procedure were shared by experts and farmers discussion with question answer session. Orange growers from both Amravati and Nagpur districts were taking benefit of this online session.

Therefore, it may be revealed that, the extent of reach through message delivery per day, number of help line services availed per week, no of phone calls made per fortnight and number of phone calls made per month was more in case of most of the

social media user orange growers as they are actively using social media by searching on their own doubts in concern to the orange production. Though, it needs to be focused by the authorities regarding provision of better services for agriculture purpose.

From Table 4, It is concluded that majority of the social media user orange growers (64.00%) had medium extent of reach of social media, followed by 22.00 per cent of the respondents had high level of extent of reach of social media. Only 14.00 per cent respondents had low level of extent of reach of social media, respectively.

*Table 3*  
*Distribution of the social media user respondents according to extent of reach*

SI. No.	Statements	Extent of reach of social media (n=150)			
		Per day (4)	Per week (3)	Per fortnight (2)	Per month (1)
1	Messages delivered in the form of text, audio and video	56 (37.33)	29 (19.33)	44 (29.33)	21 (14.00)
2	Messages received by orange grower	56 (37.33)	26 (17.33)	42 (28.00)	20 (13.33)
3	Messages utilized by the orange grower	32 (21.33)	21 (14.00)	38 (25.33)	13 (8.67)
4	No of phone calls made	14 (9.33)	38 (25.33)	46 (30.66)	79 (52.66)
5	No of online programmes/ workshops participated	03 (02.00)	37 (24.66)	38 (25.33)	72 (48.00)
6	No of call back facilities availed	05 (3.33)	20 (13.33)	28 (18.66)	70 (46.66)
7	No of help line services availed	05 (15.33)	40 (26.66)	41 (15.33)	64 (42.66)

It is concluded from the results that, majority of the extent of reach of social media is from medium to high level. The probable reason behind

this availability of social media near about with all of the orange growers.

*Table 4*  
*Distribution of the respondents according to overall index of extent of reach of social media*

SI. No.	Index of extent of reach of social media	Social media user respondents (n=150)	
		Frequency	Percentage
1	Low (Up to 52.53)	21	14.00
2	Medium (52.54 to 69.53)	96	64.00
3	High (Above 69.53)	33	22.00
	<b>Total</b>	<b>150</b>	<b>100.00</b>

Mean= 61.03

SD= 8.50

### 3. Perceived satisfaction

From Table 5 It is found that in case of perceived satisfaction, 46.67 per cent of the social media user respondents were highly satisfied with services provided by social media are timely, followed by services provided by social media are highly useful (42.00%), advices provided by social media are worth paying (38.66%), social media services provide all needed information (28.00%), social media provides problem specific advisories (24.00%), social media contain enough knowledge to solve field problems (20.66%) and advices provided by social media are highly relevant (18.00%), respectively. The majority of respondents (52.00%) were satisfied with the social media contains enough knowledge to solve field problems, followed by services provided by social media are highly useful (51.33%), social media services provide all needed information (50.00%), advices provided by social

media are worth paying (49.33%), social media provides problem specific advisories (40.00%), advices provided by social media are highly relevant and 20.67 per cent were satisfied with services provided by social media are timely respectively.

The respondents were undecided about the social media messages, 32.00 per cent of the social media user orange growers were undecided about social media advices are highly relevant followed by services provided by social media are timely (28.00%), social media provides problem specific advisories (24.00%), it contain enough knowledge to solve field problems (22.00%), advices provided by social media are worth paying (10.66%), social media services provide all needed information (8.00%) and services provided by social media are highly useful (5.33%), respectively

**Table 5**  
*Distribution of the social media user respondents according to perceived satisfaction*

SI. No.	Statements	Satisfaction Level (n=150)				
		HS (4)	S (3)	UD (2)	U (1)	HU (0)
1	Services provided by social media are timely	70 (46.67)	31 (20.67)	42 (28.00)	01 (0.66)	06 (4.00)
2	Social media services provide all the needed information	42 (28.00)	75 (50.00)	12 (08.00)	18 (12.00)	03 (2.00)
3	Services provided by social media are highly useful	63 (42.00)	77 (51.33)	08 (5.33)	00 (00.00)	02 (1.33)
4	The Social media contain enough knowledge to solve field problems	31 (20.66)	78 (52.00)	33 (22.00)	05 (3.33)	03 (2.00)
5	Social media provides problem specific advisories	36 (24.00)	60 (40.00)	36 (24.00)	18 (12.00)	00 (00.00)
6	Advices provided by social media are highly relevant	27 (18.00)	58 (38.66)	48 (32.00)	15 (10.00)	02 (1.33)
7	The advices provided by social media are worth paying	58 (38.66)	74 (49.33)	16 (10.66)	01 (0.66)	01 (0.66)

Figures in parentheses indicate percentage HS- Highly satisfied, S- Satisfied, UD- Undecided, U- Unsatisfied, HU- Highly Unsatisfied

In these cases user respondents were undecided. Whereas, 12.00 per cent of the respondents were unsatisfied as social media services provide all the needed information followed by the social media provides problem specific advisories (12.00%), advices provided by

social media are highly relevant (10.00%), social media contains enough knowledge to solve field problems (3.33%), services provided by social media are timely (0.66%) and the advices provided by social media are worth paying (0.66%) and 4.00 per cent of them were highly unsatisfied with statement

services provided by social media are timely, respectively.

Due to usefulness, timely availability and affordability of the social media, social media user respondents are highly satisfied while satisfied with social media contains enough knowledge to solve field problems. It might be due to active use of social media content in the field and regular access to the social media information.

From Table 6. Majority of the social media user respondents (59.34%) had medium perceived

satisfaction followed by 37.33 per cent respondents were perceived high level and only 0.33 per cent of respondents had low level of satisfaction, respectively.

As social media platforms are not only confined to transfer and sharing of agricultural information but also provide farmers with holistic knowledge about ongoing developments in their surroundings. It may be concluded from result that, medium to high level of perceived satisfaction in case of social media user respondent due to their purpose of use of social media.

*Table 6  
Distribution of the respondents according to overall index of perceived satisfaction*

Sl. No.	Index of perceived satisfaction	Social media user respondents (n=150)	
		Frequency	Percentage
1	Low (<27.71)	05	03.33
2	Medium (27.72 to 72.43)	89	59.34
3	High (>72.43)	56	37.33
	<b>Total</b>	<b>150</b>	<b>100.00</b>

Mean= 50.07

SD= 22.36

From Table 6. Majority of the social media user respondents (59.34%) had medium perceived satisfaction followed by 37.33 per cent respondents were perceived high level and only 0.33 per cent of respondents had low level of satisfaction, respectively.

As social media platforms are not only

confined to transfer and sharing of agricultural information but also provide farmers with holistic knowledge about ongoing developments in their surroundings. It may be concluded from result that, medium to high level of perceived satisfaction in case of social media user respondent due to their purpose of use of social media.

*Table 7  
Distribution of the respondents according to overall utilization pattern index of social media*

Sl. No	Utilization pattern	Social media user respondents (n=150)	
		Freq.	%
1	Very Low (Up to 46.07)	00	00.00
2	Low (46.08 to 54.5)	00	00.00
3	Medium (54.6 to 62.93)	29	19.33
4	High (62.94 to 71.36)	105	70.00
5	Very High (Above 71.36)	16	10.67
	<b>Total</b>	<b>150</b>	<b>100.00</b>

From Table 7 It is depicted that more than half of the social media user respondents (70.00%) had high index of utilization pattern of social media

followed by 19.33 per cent had medium index of utilization pattern, 10.67 per cent of them had very high index of utilization pattern while none of them

had very low and low index of utilization pattern respectively.

### **CONCLUSION**

From the findings it is concluded that high level of utilization may be due to provision of agro based advisories in addition to other services as per their mandates and medium level of extent of utilization of social media by the orange growers could be due to the fact that their limitation in potential use of

social media such as call back facilities (which involves cost on part of the individuals), help line facilities and quiz programmes provided by the social media applications which limits the extent of utilization of social media. Many times it is experienced that the practices which have been adviced by social media sources may not be practicable in the part of orange grower in specific area which inhibits the proper utilization of those advices like high cost machineries, inputs others,.

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