

Original Research Article

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## Attitude of Farmers Using Mobile Phone Services in Transfer of Agricultural Technology

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### ABSTRACT

The present study was conducted in Latur district of Marathwada region of Maharashtra state with an objective to analyze Attitude of farmers using mobile phone services in transfer of technology. From selected district four talukas namely Latur, Renapur, Chakur and Ausa were randomly selected from Latur district. From each talukas three villages were selected and from each selected village ten respondents of mobile phone user were randomly selected to comprise 120 respondents. Ex-post-facto research design was used for the study. The results revealed that, majority (45.00%) of the respondents belong to young aged group, 39.16 per cent were educated up to secondary school level, 60.00 per cent were having medium size of family, 50.00 per cent were having medium i.e. 4.01 to 10.00 ha land holding, 61.68 per cent were having medium annual income, 62.50 per cent were having medium social participation, 74.16 per cent were having medium Cosmopolitaness, 75.84 per cent were having medium innovativeness, 60.84 per cent were having medium mass media exposure, Whereas Attitude of the respondents revealed that majority (70.00%) of the respondents were having moderately favourable attitude while using mobile phone services in transfer of agricultural technology.

#### Keywords

Attitude of farmer,  
Mobile phone use &  
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### Introduction

Allopart (1935) defined attitude as a mental state of readiness, organization through experience, exerting a directive and dynamics influence upon individuals response to all objects and situations with which it is related. Mobile phone technology has rapidly expanded all over the world as well as in developing countries. Mobile phone services should be in use to access agriculture market information and knowledge, increase the agriculture business by improving the

productivity, especially for developing countries. Mobile phones which are normally in use to communicate with family and friends could be used for agriculture business stakeholders.

Phone could be good device to make strong relationship with all agriculture business stakeholders by communication, SMS, email thus benefiting farmers by timely market information to increase the income and decrease the poverty. Farmers could also get veterinarian consulting advices through

mobile phones so they can improve health of their animals. In this way mobile phone can improve the livelihoods of farmers. Therefore for the present study following specific objectives was undertaken

Profile of farmers using mobile phone services.

Attitude of farmers towards use of mobile phone services.

### **Materials and Methods**

The present study was carried out in Latur district of Marathwada region in Maharashtra state. From selected Latur district four talukas namely Latur, Renapur, Chakur and AUSA were randomly selected. From each selected talukas three villages were selected and from each selected village ten respondents of mobile phone user were randomly selected to comprise 120 respondents for the study. Ex-post-facto research design was adopted for research purpose. Keeping in the view the objectives of the study a structured interview schedule was prepared. After finalizing the research design and interview schedule, the data were collected by using the personal interview method. Collected data were classified, tabulated, analyzed by using frequency, percentage, Correlation coefficient were used for analysis.

### **Results and Discussion**

#### **Profile of farmers using mobile phone services**

##### **Age**

It can be seen from Table 1 that, 45.00 per cent of the respondents were from young group followed by 40.84 per cent and 14.16 per cent respondents from old age group and middle age group respectively.

##### **Education**

It is evident from table 1 shows that, 39.16 per cent respondents were educated up to secondary school level, followed by 25.00 per cent higher secondary school level and 14.18 per cent respondents were educated up to graduation level.

It was further noticed that 08.33 per cent of them were only able to read and write, followed by 06.66 per cent of them were educated up to primary school, 02.50 per cent respondents were illiterate and 02.50 per cent were educated up to post graduation and only 01.67 per cent of respondents were diploma holders.

##### **Size of family**

It is seen from Table 1 that, majority (60.00%) of respondents were from medium size of family followed by 24.16 per cent and 15.84 per cent respondents were having small family size and Big family size respectively.

##### **Land holding**

It is evident from Table 1 that, most of the respondents (50.00%) were having medium i.e. 4.01 to 10.00 ha land holding, 38.34 per cent were having big i.e. 10.01 and above ha land holding, which is followed by 07.50 per cent were having small land holding i.e. 1.01 to 2.00 ha and only 04.16 per cent respondents were having semi-medium land holding of 2.01 to 4.00 ha.

##### **Annual income**

It is seen from the Table 1 that, majority (61.68%) of the respondents were having medium annual income followed by 19.16 per cent of the respondents had high annual income and 19.16 per cent of the respondents had low annual income

### **Social participation**

It is noticed from Table 1 that, majority (62.50%) of respondents were from medium social participation group.

Followed by 23.34 per cent from low social participation group and 14.16 per cent of the respondents were from high social participation group.

### **Cosmopolitaness**

It is noticed from Table 1 that, most of the (74.16%) of the respondents were having medium Cosmopolitaness, followed by 20.00 per cent were having low Cosmopolitaness and 05.84 per cent were having high Cosmopolitaness.

### **Innovativeness**

It is noticed from Table 1 that, most of the (75.84%) of respondents were having medium innovativeness, followed by 15.83 per cent were having low innovativeness and 08.33 per cent were having high innovativeness.

### **Mass media exposure**

The data presented in Table 1 revealed that, 60.84 per cent had medium mass media exposure followed by 24.16 per cent had low and 15.00 per cent had high mass media exposure

### **Knowledge level**

It is seen from Table 1 that, majority (44.18%) of the respondents had high knowledge level towards use of mobile phone services in transfer of agricultural technology

Followed by 36.66 per cent of respondents had medium and 19.16 per cent respondents had low knowledge level.

### **Extent of use**

From Table 1 revealed that, 99.16 per cent of the respondents were daily users of mobile phone followed by only 0.84 per cent of respondents were rarely users. It was further noticed that no respondents were found as weekly, fortnightly and monthly users of mobile phone.

### **Attitude of farmers towards use of mobile phone services**

It was observed from the Table 2 almost 56.66 per cent of the respondents were agreed and 35.83 per cent were strongly agreed to "Knowledge of Mobile and Internet is essential for farmers". 51.66 per cent and 30.85 per cent of the respondents were agreed and strongly agreed respectively to "I would feel comfortable in using Mobile Phone". 34.16 per cent, 29.16 per cent and 29.16 per cent respondents were agreed, strongly agreed and neutral respectively to the statements that "Internet is easier to use". 33.33 per cent were neutral whereas 27.50 per cent and 28.33 per cent of the respondents were strongly agreed and agreed to the statement that "I find the internet to be as informative as teachers".

50.00 per cent of the respondents were agreed to "I like to learn more about mobile phone". 37.50 per cent of respondents were agreed and 30.83 per cent respondents were neutral to "I use (Mobile) Internet as learning fun". 30.83 per cent of the respondents were neutral and 30.00 per cent of the respondents were agreed to "I enjoy getting information more from Internet than written material". 23.33 per cent of the respondents were agreed and 47.50 per cent of the respondents were disagreed to "I involve mobile to my life at all fields". 39.16 per cent, 36.66 per cent and 18.33 per cent of the respondents were neutral, agreed and strongly agreed respectively to "Internet is important like other research tools".

**Table.1** Distribution of respondents according their profile

Sl. No.	Category	Respondents (N=120).	
		Frequency (F)	Percentage (%)
<b>1.</b>	<b>Age</b>		
1.	Young	54	45.00
2.	Middle	17	14.16
3.	Old	49	40.84
<b>2.</b>	<b>Education</b>		
1.	Illiterate	03	02.50
2.	Only read and write	10	08.33
3.	Primary education	08	06.66
4.	Secondary education	47	39.16
5.	Higher secondary education	30	25.00
6.	Diploma	02	01.67
7.	Graduated	17	14.18
8.	Post graduate	03	02.50
9.	Ph.D.	00	00.00
<b>3.</b>	<b>Size of family</b>		
1.	Small	29	24.16
2.	Medium	72	60.00
3.	Big	19	15.84
<b>4.</b>	<b>Land holding</b>		
1.	Small	09	07.50
2.	Semi-medium	05	04.16
3.	Medium	60	50.00
4.	Big	46	38.34
<b>5.</b>	<b>Annual income</b>		
1.	Low	23	19.16
2.	Medium	74	61.68
3.	High	23	19.16
<b>6.</b>	<b>Social participation</b>		
1.	Low	28	23.34
2.	Medium	75	62.50
3.	High	17	14.16
<b>7.</b>	<b>Cosmopolitaness</b>		
1.	Low	24	20.00
2.	Medium	89	74.16
3.	High	07	05.84
<b>8.</b>	<b>Innovativeness</b>		
1.	Low	19	15.83
2.	Medium	91	75.84
3.	High	10	08.33
<b>9.</b>	<b>Mass media exposure</b>		
1.	Low	29	24.16
2.	Medium	73	60.84
3.	High	18	15.00
<b>10.</b>	<b>Knowledge level</b>		
1.	Low	23	19.16
2.	Medium	44	36.66
3.	High	53	44.18
<b>11.</b>	<b>Extent of use</b>		
1.	Low	30	25.00
2.	Medium	73	60.84
3.	High	17	14.16

**Table.2** Statement wise distribution of the respondents according to their attitude towards use of mobile phone services

(N=120)

Sl. No.	Statements	SA		A		N		D		SD	
		F	%	F	%	F	%	F	%	F	%
1.	I would feel comfortable in using Mobile Phone	37	30.85	62	51.66	10	08.33	06	05.00	05	04.16
2.	I find the internet to be as informative as teachers	33	27.50	34	28.33	40	33.33	12	10.00	01	00.84
3.	I enjoy getting information more from Internet than written material	26	21.66	36	30.00	37	30.83	20	16.66	01	00.85
4.	I like to learn more about Mobile Phone	33	27.50	60	50.00	07	05.84	20	16.66	00	00.00
5.	I use (Mobile) Internet as learning fun	28	23.33	45	37.50	37	30.83	10	08.34	00	00.00
6.	I involve Mobile to my life at all fields	22	18.33	28	23.33	11	09.16	57	47.50	02	01.68
7.	I access the Mobile Phone more for field than others	17	14.16	43	35.83	08	06.66	51	42.50	01	00.85
8.	Internet is important like other research tools	22	18.33	44	36.66	47	39.16	07	05.85	00	00.00
9.	Internet is easier to use	35	29.16	41	34.16	35	29.16	08	06.66	01	00.86
10.	Knowledge of Mobile and Internet is essential for farmers.	43	35.83	68	56.66	03	02.50	04	03.33	02	01.68
11.	Mobile is difficult to use	09	07.50	19	15.83	04	03.33	81	67.50	07	05.84
12.	Internet contains useless information	05	04.18	08	06.66	30	25.00	51	42.50	26	21.66
13.	I feel aggressive and hostile towards Mobile Phone	04	03.34	06	05.00	17	14.16	78	65.00	15	12.50
14.	It is not interesting to solve problems with Mobile Phone	10	08.33	32	26.66	19	15.83	55	45.83	04	03.35
15.	Learning Mobile is only loosing time for me	06	05.00	14	11.66	06	05.00	86	71.66	08	06.68
16.	I hate Mobile Phone	03	02.60	06	05.00	05	04.16	94	78.33	12	10.00
17.	Engaging with Mobile Phone makes me angry	06	05.00	43	35.83	11	09.16	52	43.33	08	06.68
18.	Using Mobile and accessing, surfing and browsing the Internet confuses me	06	05.00	23	19.16	32	26.66	42	35.00	17	14.18
19.	I get sinking feeling when I think of trying to use a Internet	04	03.35	16	13.33	25	20.83	52	43.33	23	19.16
20.	I believe that I will not be a good user at Mobile Phone	02	01.67	19	15.83	09	07.50	63	52.50	27	22.50

**Table.3** Distribution of the respondents according to overall attitude towards use of mobile phone services

Sl. No.	Category	Respondents (120)	
		Frequency	Percentage (%)
1.	Less favourable	21	17.50
2.	Moderately favourable	84	70.00
3.	Highly favourable	15	12.50

35.83 per cent respondents were agreed and 42.50 per cent of respondents were disagreed to “I access the mobile phone for field than others”.

Data from Table 2 noticed that, 45.83 per cent respondents were disagreed, 26.66 per cent were agreed, 15.83 per cent were neutral and 08.33 per cent were strongly agreed and only 03.35 per cent respondents were strongly disagreed to “it is not interesting to solve problems with mobile phone”. 67.50 per cent of the respondents were disagreed and 15.83 per cent were agreed to “mobile is difficult to use”. 71.66 per cent of the respondents were disagreed to “learning mobile is only losing time for me”. 43.33 per cent of the respondents were disagreed and 35.83 per cent of the respondents were agreed to the statement that “engaging with mobile phone makes me angry”. 35.00 per cent of the respondents were disagreed to the statement that “using mobile and accessing, surfing and browsing the internet confuses me”. 42.50 per cent of the respondents were disagreed to “internet contains useless information”. 65.00 per cent of the respondents were disagreed to “I feel aggressive and hostile towards mobile phone”. 19.16 per cent of the respondents were strongly disagreed, 43.33 per cent of the respondents were disagreed, 20.83 per cent were neutral, 13.33 per cent were agreed and only 03.35 per cent were strongly agreed to “I get sinking feeling when I think of trying to use an Internet”. 78.33 per cent of the respondents were disagreed to “I hate mobile phone”. 52.50 per cent respondents were

disagreed and 22.50 per cent were strongly disagreed to “I believe that I will not be a good user at mobile phone”.

The data manifested from the Table 3 shows that, more than half 70.00 per cent of the respondents were having moderately favourable attitude while using mobile phone, 17.50 per cent of the respondents were having less favourable attitude and 12.50 per cent of the respondents were having highly favourable attitude towards the use of mobile phone services.

Mobile communications technology has become the world’s most common way of transmitting voice, data, and services, and no technology has ever spread faster. Mobile phones which are normally in use to communicate with family and friends could be used for agriculture business stakeholders. Phone could be good device to make strong relationship with all agriculture business stakeholders by communication, SMS, email thus benefiting farmers by timely market information to increase the income and decrease the poverty. Farmers should have basic knowledge of mobile phone handlings, various mobile phone apps. The Study indicated that, respondents belong to young aged group, educated up to secondary school level, medium size of family, medium i.e. 4.01 to 10.00 ha land holding, medium annual income, medium social participation, medium Cosmopolitaness, medium innovativeness, medium mass media exposure, Whereas moderately favourable attitude while using

mobile phone services in transfer of agricultural technology.

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