

SMARTPHONE USE COMPETENCE OF FARMERS

Ravi Chaudhari¹, D.D. Patel² and K.G. Khadayata³

1 Ph D. scholar, Dept. of Agril. Extension and Communication, AAU, Anand-388110

2 Associate Extension Educationist, EEI, AAU, Anand-388110

3 Research Associate, Sardar Patel Agricultural Educational Museum, DoEE, AAU, Anand-388110

E-mail : ravichaudhari1627@gmail.com

ABSTRACT

Telecommunication in agriculture is an emerging field focusing on the empowerment of agricultural and rural development in India. The advancements in telecommunication can be utilized more smartly using smart mobile phone technology for providing accurate, timely, relevant information and services by user friendly ways to the farmers. The research study was conducted among random sample of 120 farmers of Anand district of Gujarat state who having smartphone. Ex-post research design was used and the data were collected through personal interview technique. The study revealed that massive number (94.16 per cent) of the respondents had strongly favourable to favourable attitude towards use of smartphone for agricultural profession, majority (85.00 per cent) of the them had medium to high level of knowledge about smartphone applications use, majority (83.33 per cent) of the respondents had medium to high level of skill about smartphone applications use and more than half (56.67 per cent) of the respondents had high to medium level of smartphone utilization for agricultural applications. Based on the result of above components, overall vast majority (89.99 per cent) of the respondents had high to medium level of smartphone use competence.

Keywords: smart phone, competence, application, telecommunication

INTRODUCTION

The 21st century agriculture is highly knowledge based. Not only but in all aspects of human life, to make efficient decision and for securing best opportunity information is must. In today's situation all the data are on the tip of your finger, you can collect them in a fraction of moment. Information and Communication Technologies (ICTs) can play a significant role.

There is realization that ICTs should be integrated to be effectively used in agriculture development as facilitating tools to boost its impact to the lives of farmers. ICTs have shown evidence for easier access to markets and information resources. Agriculture extension workers do not reach every farmer and every farmer cannot contact extension workers on regular basis. Hence, there is limited flow of information about the latest agri-technologies. However, there are multiple channels available for the transfer of knowledge from the laboratory to farmers. With the availability of multi-disciplinary information for integrated agricultural development and availability of technology-based multi-media information systems, opportunities are available for

easy transfer of knowledge from the information generators to the information users. The experts of ICT have realized that smart phone is the most suitable gadget for creating general awareness amongst the farmers, rural and urban people. The medium is extremely convenient for all-purpose communication and mainly at the time of crises and urgent situations.

Competence is a combination of a body of knowledge, skills and attitude that an individual possesses to perform a given task effectively and efficiently. Thus in order to perform any task effectively and successfully including establishing and running farm unit and getting high profit by using new innovative ideas, a farmer needs to possess a set of knowledge, skill and attitude which could be together labelled as 'competencies'.

OBJECTIVE

To study the smartphone use competence of farmers

METHODOLOGY

The present study was conducted in Anand District.

Total 120 farmers of Anand district of Gujarat state who having smartphone were selected by random sample method. Total four items were selected to measure smartphone use competence, viz; attitude of farmers towards use of smartphone for agricultural profession, knowledge about smartphone applications use, skill about smartphone applications and utilization of smartphone for agricultural applications In order to compute weightage values for each of identified component, their relative importance to overall smartphone use competence was obtained by seeking expert's judgment. Overall smartphone use competence Index was calculated by following formula.

Overall Smartphone use competence Index =

$$(R1/M1) \times W1 + (R2/M2) \times W2 + \dots + (Rn/Mn) \times Wn$$

Where,

R1, R2 Rn = Score received by respondents for each indicator

M1, M2Mn = Maximum score one can get for each indicator

W1, W2 ...Wn = Weightage score of each indicator received from expert

RESULTS AND DISCUSSION

Attitude towards use of smartphone for agricultural profession

Table 1: Distribution of farmers having smartphone according to their attitude towards use of smartphone for agricultural profession n=120

Sr. No.	Category	Frequency	Percent
1	Strongly Unfavourable (up to 14)	00	00.00
2	Unfavourable (14.01 to 28)	00	00.00
3	Neutral (28.01 to 42)	07	05.84
4	Favourable (42.01 to 56)	52	43.33
5	Strongly Favourable (above 56.00)	61	50.83

The data presented in Table 1 show that slightly one-half (50.83 per cent) of the respondents have strongly favourable attitude towards use of smartphone for agricultural profession followed by 43.33 per cent and 5.84 per cent of the respondents had favourable and neutral attitude, respectively.

None of them had unfavourable and strongly unfavourable attitude towards use of smartphone for agricultural profession.

Knowledge about smartphone applications use

Table 2: Distribution of farmers having smartphone according to their knowledge about smartphone applications use n=120

Sr. No.	Category	Frequency	Percent
1	Very low (< 4)	00	00.00
2	Low (5 - 8)	14	11.66
3	Medium(9 – 12)	61	50.83
4	High (13 - 16)	41	34.17
5	Very high (> 17)	04	03.34

Keen observation of Table 2 indicate that slightly one-half (50.83 per cent) of the respondents had medium level of knowledge about smartphone applications use followed by 34.17 per cent and 11.66 per cent of the respondents had high and low level, respectively. Only 3.34 per cent of the respondents had very high level of knowledge about smartphone applications use.

Skill about smartphone applications use

Table 3: Distribution of farmers having smartphone according to their skill about smartphone applications use n=120

Sr. No.	Category	Frequency	Percent
1	Very low (up to 2.80)	00	00.00
2	Low (2.81 to 5.60)	11	09.17
3	Medium(5.61 to 8.40)	54	45.00
4	High (8.41 to 11.20)	46	38.33
5	Very high (11.21 to 14.00)	09	07.50

It is clear from Table 3 that, more than two-fifth (45.00 per cent) of the respondents had medium level of skill about smartphone applications use. This was followed by 38.33, 9.17 and 7.50 per cent of the respondents who had high, low and very high level of skill about smartphone applications use, respectively.

Utilization of smartphone for agricultural applications

Table 4: Distribution of farmers having smartphone according to their utilization of smartphone for agricultural applications

n=120

Sr. No.	Category	Frequency	Percent
1	Very low (up to 4.8)	00	00.00
2	Low (4.81 to 9.60)	36	30.00
3	Medium(9.61 to 14.40)	31	25.83
4	High (14.41 to 19.20)	37	30.84
5	Very high (19.21 to 24)	16	13.33

It was apparent from Table 4 that less than one-third (30.84 per cent) of the respondents had high level of smartphone utilization for agricultural applications followed by 30.00 and 25.83 per cent of them had low and medium level, respectively. Only 13.33 per cent of the respondents had very high level of smartphone utilization for agricultural applications.

Overall smartphone use competence

Overall smartphone use competence of farmers was measured by knowing and summing various components viz; attitude of farmers towards use of smartphone for agricultural profession, knowledge about smartphone applications use, skill about smartphone applications and utilization of smartphone for agricultural applications. Based on overall smartphone use competence index of the respondents were categorized into five groups as shown in Table 5.

Table 5: Distribution of farmers having smartphone according to their overall Smartphone use competence

n=120

Sr. No.	Categories	Frequency	Percent
1	Very Low (Up to 20 score)	00	00.00
2	Low (21 to 40 score)	07	05.84
3	Medium (41 to 60 score)	44	36.66
4	High (61 to 80 score)	64	53.33
5	Very High (Above 80 score)	05	04.17

The data presented in Table 5 reveal that more than one-half (53.33 per cent) of the respondents belonged to high level of smartphone use competence category.



Whereas, 36.66 per cent, 05.84 per cent and 04.17 per cent of them belonged to medium, low and very high level of smartphone use competence category, respectively.

CONCLUSION

In a developing country like India, technology shows its trace in the smallest of villages. Almost everywhere now, there is a mobile tower in sight and people can be seen using mobile phones. From the above study it can be concluded that slightly half per cent each of the respondents have strongly favourable attitude towards use of smartphone for agricultural profession and medium level of knowledge of about smartphone applications. Majority of the respondents had medium to high level of skill about smartphone applications use and (56.67 per cent) of the respondents had high to medium level of smartphone utilization for agricultural applications. Vast majority of the respondents had high to medium level of smartphone use competence.

REFERENCES

Asif, A. S., Uddin, M. N., Dev, D. S. and Miah, A. M. (2017). Factors affecting mobile phone usage by the farmers in receiving information on vegetable cultivation in Bangladesh. *Journal of Agricultural Informatics*. 8(2):33-43

Joshi, N.H., Prajapati, S.M. and Barasara, Bhaumik (2018) Usefulness of latest social media in veterinary field as felt by veterinarians. *Guj. J. Ext. Edu. Special Issue*:98-101.

Mittal and Tripathi (2009). Role of mobile phone technology in improving small farm productivity. *Agricultural economics research review*, Vol. 22, pp: 451-459.

Shukla A. (2016). View of extension educationists regarding application of mobile technology in transfer of agricultural innovations. Phd (Agri.) thesis, AAU, Anand

Tikariha Nidhi (2017). Entrepreneurial behavior of potato growers. M.Sc. (Agri.) thesis AAU, Anand.