SOCIAL MEDIA MARKETING ADOPTION BY AGRICULTURISTS: A TAM BASED STUDY

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\textbf{ARTICLE INFO} & \textbf{ABSTRACT} \\
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\textbf{Article history:} & \textbf{Abstract} \\
Received 30 Dezember 2021 & Purpose: This research is intended to identify and analyse the underlying factors in the adoption of social media among agriculturists in South India. \\
Accepted 07 February 2022 & Theoretical Framework: Marketing through social media such as WhatsApp, Facebook and YouTube, particularly in India, is not well understood due to the lack of research in agricultural marketing. This paper bridges the research gap by applying the Theory of Planned Behaviour (TPB) and TAM. \\
\textbf{Keywords:} & Design/ Methodology/Approach: A structured questionnaire is adopted for data collection. Primary data was collected from 320 agriculturists in Tamilnadu, South India. \\
Agriculturist; & Findings: Multiple regression is used to test the significance of the research model. It demonstrates that the perceived credibility, reference group, infotainment, and perceived usefulness had a significant positive impact on the adoption of social media marketing. At the same time, perceived ease of use has a negative effect on attitude towards the adoption of social media marketing. \\
Attitude; & Research, Practical \& Social Implications: The implication drawn from this study helps the researchers and agriculturists use social media to increase farm product marketability. \\
Social media; & Originality/ Value: This research adds value to the agricultural marketing literature by exploring the novel determinants of the adoption of social media. \\
Social media marketing. & Doi: https://doi.org/10.26668/businessreview/2022.v7i2.0537 \\
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ADOÇÃO DAS MÍDIAS SOCIAIS DE MARKETING PELOS AGRICULTORES: UM ESTUDO BASEADO NO TAM

RESUMO
Objetivo: Esta pesquisa visa identificar e analisar os fatores subjacentes à adoção das mídias sociais entre os agricultores do Sul da Índia.

Estrutura teórica: O marketing através de mídias sociais como a Whatsapp, Facebook e YouTube, particularmente na Índia, não é bem compreendido devido à falta de pesquisa em marketing agrícola. Este documento preenche a lacuna da pesquisa aplicando a Teoria do Comportamento Planejado (TPB) e o TAM.

Design/ Metodologia/Aproximação: Um questionário estruturado é adotado para a coleta de dados. Dados primários foram coletados de 320 agricultores em Tamilnadu, no sul da Índia.

Conclusões: A regressão múltipla é usada para testar o significado do modelo de pesquisa. Demonstra que a percepção de credibilidade, grupo de referência, infoentretenimento e a percepção de utilidade tiveram um impacto positivo significativo na adoção do marketing de mídia social. Ao mesmo tempo, a percepção de facilidade de uso tem um efeito negativo sobre a atitude em relação à adoção do marketing de mídias sociais.

Pesquisa, Implicações Práticas e Sociais: A implicação extraída deste estudo ajuda os pesquisadores e agricultores a usar as mídias sociais para aumentar a comercialização de produtos agrícolas.

Originalidade/ Valor: Esta pesquisa agrega valor à literatura de marketing agrícola ao explorar os novos determinantes da adoção das mídias sociais.

Palavras-chave: Agricultor, Atitude, Mídia social, Marketing de mídia social.

ADOPCIÓN DEL MARKETING EN MEDIOS SOCIALES POR PARTE DE LOS AGRICULTORES: UN ESTUDIO BASADO EN EL TAM

Objetivo: Esta investigación pretende identificar y analizar los factores subyacentes en la adopción de los medios sociales entre los agricultores del sur de la India.

Marco teórico: El marketing a través de medios sociales como Whatsapp, Facebook y YouTube, especialmente en la India, no se conoce bien debido a la falta de investigación en el marketing agrícola. Este artículo cubre el vacío de investigación aplicando la Teoría del Comportamiento Planificado (TPB) y el TAM.

Diseño/Metodología/Enfoque: Se adoptó un cuestionario estructurado para la recogida de datos. Se recogieron datos primarios de 320 agricultores de Tamilnadu, en el sur de la India.

Resultados: Se utiliza la regresión múltiple para comprobar la significación del modelo de investigación. Se demuestra que la credibilidad percibida, el grupo de referencia, el infoentretenimiento y la utilidad percibida tuvieron un impacto positivo significativo en la adopción del marketing en redes sociales. Al mismo tiempo, la facilidad de uso percibida tiene un efecto negativo en la actitud hacia la adopción del marketing en medios sociales.

Implicaciones prácticas, sociales y de investigación: Las implicaciones extraídas de este estudio ayudan a los investigadores y a los agrónomos a utilizar los medios sociales para aumentar la comercialidad de los productos agrícolas.

Originalidad/ Valor: Esta investigación añade valor a la literatura de marketing agrícola al explorar los nuevos determinantes de la adopción de los medios sociales.

Palabras clave: Agricultor, Actitud, Medios sociales, Marketing en medios sociales.

INTRODUCTION

In the agriculture industry, mechanisation and the green revolution have shown many developments, and yet another transformative and disruptive change is the Digital revolution. The introduction of digital marketing and the usage of smart devices became inevitable in the digital era. As per NASSCOM 2019 internet consumption report, it is evident that there is a growing rural teledensity in rural areas of India. The opportunity for using the internet to exchange information and deliver content is an added advantage for the visibility of users.
Social media (SM) is user-generated media that ease sharing of knowledge and opinion with the world (Kaplan, 2010). Increased usage of smartphones in rural India helped agriculturalists such as farmers, agribusiness, and extension officers to use social media for knowledge dissemination and social interaction (Appel et al., 2020). Also, social interaction among agriculturalists on Facebook and Youtube has increased in the recent past. The digital environment helps people to understand the strategic importance of social media marketing resources and capabilities. However, the promotion of the product is necessary to reach its potential audience to increase awareness, interest and, thereby, sales.

Social media is an effective platform to promote farm products directly to consumers and resellers, but the understanding of its usage for marketing is limited among agriculturalists. Hence this study addresses the research question: What factors influence agriculturalists’ attitude toward social media marketing? Therefore, this research helps farmers, agribusiness and extension experts use social media sites to increase the farthest marketability.

The concept of using social media has been the subject of many debates, resulting in a wealth of literature for this research to draw on. Many studies were investigated in the area from a developed country context, but limited studies have been explored in developing countries context. Notably, in India the studies related to agriculturalists’ attitude to social media marketing perspective is untapped. This research gap helps the researchers to frame the objective for the study as 1. to examine the factors determining the agriculturalist attitude towards social media marketing. 2. To propose a research model and analyse the impact of factors on attitude towards social media marketing.

This paper is organized into five sections. The first section of the paper is the introduction, the second section gives a literature review followed by the objectives of the study, while, and this section provides a note on social media marketing (SMM). Section three examines the methodology and theoretical foundations applied for this study followed by theoretical framework drawn based on Theory of planned behaviour and Technology acceptance model. The next section discusses the limitations and scope for further research, conclusions are presented in the last section.

**REVIEW OF LITERATURE**

In comparison to its global counterparts, the Indian agriculture sector has many inadequacies in the marketability of farm products (Bairwa, 2016). Adoption of updated ICT technologies such as “smartphones, mobile networks, broadband internet and cloud platforms” enables Indian agriculturalists to understand the importance of SM as an effective marketing...
tool (Irungu et al., 2015; Burke, 2010; Sharma, 2008). For long social media has been perceived as a platform for entertainment and social interaction but there is a progressive change in the assimilation of social media as a marketing tool. Similarly, a study (Berger, 2016) states that socio-psychological and cultural factors influence the perception of SMEs in agribusiness towards the usefulness of SM at the business level. Few studies reported that there is some not-so-typical cost associated (Bowen & Morris, 2019; Thakur & Chander, 2018) with the beginning and scaling up of SM usage in the agriculture sector.

**Social Media Marketing**

The penetration of social media is phenomenal and resulted in communication revolution in the way of interaction and relationships built over digital platforms. Kaplan (2010) defined Social Media Marketing (SMM) as an effective online marketing activity over other traditional marketing activities. Also, the author’s stated SMM as the use of different SM tools to promote the products and services of the firm (Li et al., 2021; Nabi et al., 2013; Miller & Lammas, 2010). According to Ontario (2008), social networking sites (SNS) are the subset of SM help the users to interact and collaborate with others present over the site. SM overcome challenges like communication over different geographies and creates communities with common interests (Alves et al., 2016). Also, users seek information from traditional media as well as from SM sites. Nowadays, agriculturalists have engaged in a role for dissemination of opinions through social networking sites such as *Whatsapp, Youtube, Instagram* and *Facebook* rather than being interacting via traditional channels (Balakrishna & Deshmukh, 2017; Stevens et al., 2016; Lathiya et al., 2015).

The Internet has had a huge impact on how farmers get their knowledge and how they interact with consumers (White et al., 2014). Consumers purchase decision are affected by users interactions on social media sites, hence use of SM as marketing tool has become an operational marketing strategy (Miller & Lammas, 2010). Social media also mentioned as new media has gained importance in green industry and its allied sectors (Yao et al., 2019). Similarly, irrespective of age, gender and education SM usage is found popular among rural users (Campbell & Bickle, 2017). Social media marketing targets Behavioural change rather than acquisition of new knowledge (Yoder & Murphy, 2012). In a study conducted among wine cultivators found that growers are accepted and understood the socio-economic and emotional advantages of using social media (Canovi & Pucciarelli, 2019). Form the presented literature survey, the researchers could understand the relevance and
importance of the determinants identified as antecedents of agriculturalist attitude towards social media marketing.

METHODS AND THEORETICAL CONTRIBUTION

The study adopted empirical research, a valid questionnaire was used to collect the data from agriculturalists in Tamilnadu, India during Agriintex Mela in 2020. Agriculturalists are the respondents chosen for the study composed of farmers, resellers, agribusiness, agriculture officers and extension officers. The respondents were users of social media and aware of social media sites such as Facebook and Youtube. The purpose of the investigation was to collect information regarding attitude of agriculturalist towards social media marketing. The questionnaire is composed of 27 questions consists of demographic profile and factors identified. The items of the constructs are adopted based on existing literature. However, reliability of the measures was assessed using cronbach’s alpha. The cronbach’s alpha is 0.76. Convenience sampling is adopted among 320 respondents for data collection and analysed those collected data by using SPSS 20.

Theoretical Framework

Attitude towards social media usage has been widely researched in the past decades (Dutta-Bergman, 2006; Durvasula et al. 1993). Attitude is an important antecedent of individual behaviour which results to acceptance and use of new system or idea or technology. Studies related to “behavioural intention”, “use behaviour”, “usage”, “and adoption” helps the researchers to understand and re-examine the impact of antecedents of attitude on SMM. Robust models of Theory of Reseaneed Action (TRA) by Fishbein & Ajzen (1975) and its extensions by various researchers contributed to the development of Theory of planned behaviour (TPB) by Ajzen (1991) and Technology Acceptance Model (TAM) by Davis (1989). This study aims to study the factors influence the agriculturalist attitude towards social media marketing. The researchers have proposed a research model in Fig.1 based on Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM) with antecedents of attitude such as perceived infotainment, perceived credibility, reference group influence, perceived usefulness and perceived ease of use. The main objective of TAM is laid upon external variables as a basis to forecast the behavioural intention . Perceived usefulness and perceived ease of use are the two basic robust constructs of TAM model (Guriting & Ndubisi, 2006). Scales for the determinants were adopted from studies, attitude towards social media marketing (Chung & Austria, 2010) perceived infotainment (Brants, 1998), perceived credibility (Moussa, &
Touzani, 2008), reference group influence (Bearden & Etzel, 1982), perceived usefulness (Venkatesh et al., 2003) and perceived ease of use (Venkatesh et al., 2003) are adopted from the previous studies. Figure 1 present the proposed conceptual model.

**Proposed Conceptual Model**

Fig. 1: Conceptual Model of agriculturalist attitude towards SMM

![Proposed Conceptual Model](image)

**Perceived Infotainment**

Entertainment value of social media platforms is an important determinant for increased usage among users (Brants, 1998). Entertainment leads users to consume more on online, create and contribute content online (Jackson, 2020). Many studies found that users perceive social media usage to be fun and exciting (Davis et al., 2020; Ahmed et al., 2018; Jebril et al., 2013). Also, some studies found that spending time on social media has positive effect on attitude towards using social media. Comparatively, engagement in social media is perceived to be informative and knowledge sharing. Hence this study proposed hypothesis as follows:  

**H1:** *Perceived Infotainment has significant influence on agriculturalist attitude towards using social media marketing.*

**Perceived Credibility**

Credibility is described as the extent to which users perceive the content shared on social media sites as believable and is largely based on the trust of users towards SM (Moussa, &
Touzani, 2008). Credibility is pursued based on individuals’ judgements on information shared and their attitudes (Newell & Goldsmith, 2001). Whereas, credibility often led to the attitude formation of an individual. Information-seeking behaviour is the reason behind the investigation of contents shared online. However, many studies found that the credibility of traditional media is more in comparison to social media (Chih et al., 2020; Breves et al., 2019; Xiao et al., 2018). Therefore, the following hypothesis is proposed as:

**H2:** Perceived credibility has a significant influence on agriculturalist attitudes towards using social media marketing.

**Reference group Influence**

Reference groups are the groups often people seen as a social influence for seeking information and normative influence. These groups include individuals or groups to influence the individual’s opinion, ideas, beliefs and attitudes (Mi et al., 2019). From the literature, it was found that the influence of reference groups has significant positive and negative influence during the decision-making process such as purchase decisions, acceptance and use of technology, and adoption of new knowledge (Rootman & Krüger, 2017; Escalas & Bettman, 2005; Bearden & Etzel, 1982). Hence the following hypothesis is formulated as follows:

**H3:** Reference group influence has a significant influence on agriculturalist attitude towards using social media marketing.

**Perceived usefulness**

Davis (1992) defined perceived usefulness as “the degree to which a person believes that using a particular system would enhance his or her job performance”. In a study conducted in Finland reported perceived usefulness is an important determinant on attitude towards acceptance and usage of online learning technology (Pikkarainen et al., 2004). There are extensive studies supported the influence of perceived usefulness on behavioural intention (Ventre & Kolbe, 2020; Raza et al., 2017; Gerrad & Cunningham, 2003; Eriksson et al., 2005; Hu et al., 1999; Venkatesh & Davis, 1996). Thus, the hypothesis is formulated as:

**H4:** Perceived usefulness has significant influence on agriculturalist attitude towards using social media marketing.

**Perceived Ease of Use**

Extensive studies argued that perceived ease of use is an extent to which an individual believes the system is easy and flexible to use or adapt (Binyamin & Zafar, 2021; Roberts et
al., 2019; Moslehpour et al., 2018, Cheng & Mitomo, 2017). Earlier, Rogers (1962) recognised perceived ease of use is “a degree to which an innovation is perceived to be easy and not complicated to understand or learn”. He further acknowledged that the same in consumer purchase behaviour studies (Rogers, 1983). Hence, the hypothesis is formulated as:

**H5: Perceived ease of use has significant influence on agriculturalist attitude towards using social media marketing.**

**RESULTS AND DISCUSSIONS**

**Descriptive Analysis**

Based on descriptive analysis the results show the demographic profile of the study respondents, it is found that majority of the respondents are male (81%) and they fall under the age category of 31-40 (34%). Among the respondents 34 % of the agriculturalist recorded 10-15 years of experience in farming and 74 % of them possess higher secondary as educational qualification. Thus, it can be inferred that most of the respondents are middle aged and there is a likelihood to get exposed to social media environment.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Attitude towards SMM</th>
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<tbody>
<tr>
<td>Perceived Infotainment</td>
<td>0.835*</td>
</tr>
<tr>
<td>Perceived credibility</td>
<td>0.918*</td>
</tr>
<tr>
<td>Reference groups influence</td>
<td>0.928*</td>
</tr>
<tr>
<td>Perceived usefulness</td>
<td>0.797*</td>
</tr>
<tr>
<td>Perceived ease of use</td>
<td>0.697*</td>
</tr>
</tbody>
</table>

* Denotes Correlation is significant at 5% level  
Source: SPSS output

Table 1 shows that there is a high positive relationship among perceived infotainment (r = 0.835, p<0.005), perceived credibility (r = 0.918, p<0.005), reference groups influence (r = 0.928, p<0.005), perceived usefulness (r = 0.797, p<0.005) and perceived ease of use (r = 0.697, p<0.005) with attitude towards social media marketing at significance level of 5%. Therefore, it is proven that attitude towards SMM has been determined by perceived infotainment, perceived credibility, reference group influence, perceived usefulness and perceived ease of use.

**Regression Analysis**

In the Table 2. R-value represents the correlation between the dependent variable i.e. attitude towards social media marketing and independent variables such as perceived
infotainment, perceived credibility, reference group influence, perceived usefulness and perceived ease of use.

From the model summary of regression analysis, R-value is 0.924. Hence, high degree of correlation exists between the dependent and independent variable. The total variance in dependent variable is explained by $R^2$ value as 0.853 i.e.85.3%. Therefore the 85.3% of total variance of the dependent variable, attitude towards social media marketing have explained by predictor variable. The difference between $R^2$ and adjusted $R^2$ is found to be minimum 0.002 which has not far from $R^2$ value 0.853. Hence, the results arrived based on data collected from the respondents found to be generalised. Generally, the study assumed 95 % as level of confidence and 5% as significance level. Also, F ratio is 457.45 with p-value less than 0.01 and it is greater than 1. Hence, the variables chosen for this study fits the model efficiently.

Table 3 shows that overall impact of perceived infotainment, perceived credibility, reference group influence, perceived usefulness and perceived ease of use on attitude of agriculturist towards social media marketing. The dependent variable is attitude on SMM ($Y$) and predictor variables are PI ($X_1$), PC ($X_2$), RGI ($X_3$), PU ($X_4$) and PEU ($X_5$). The equation of regression analysis is as follows:

$$Y = 2.726 + 0.246 X_1 + 0.486 X_2 + 0.584 X_3 + 0.160 X_4 - 0.296 X_5$$
Based on multiple regression, the predictor variables Perceived Infotainment (PI), Perceived Credibility (PC), Reference Group Influence (RGI), and Perceived Usefulness (PU) has significant positive influence on agriculturalist attitude towards social media marketing, the dependent variable. Perceived Ease of Use (PEU) also has significant negative influence on agriculturalist attitude towards social media marketing. Therefore, all the independent variables have significant impact on attitude towards SMM. Since PEU alone had negative influence on attitude towards use of social media marketing. Hence the study concluded that majority of agriculturalist fall under middle age category with higher secondary education, so those respondents have an attitude of perceiving social media usage is for social infotainment rather than for marketing their products.

Every study has its own limitations; this research is limited by the sample size chosen for the study. Future study should consider exploratory and cross-sectional studies on the same research area because participative behaviour agriculturalist differs based on geographic and cultural diversity. Similarly, many other variables can be incorporated to study the impact on dependent variable because possibility of testing more variables in this study is limited. In future study, researchers can build a robust model based on theories relevant to social media marketing.

CONCLUSIONS

The current study presented a conceptual framework with theoretical contribution of TPB and TAM. In general, most of the results supported the hypothesis framed and those results contribute to the existing knowledge on attitude towards social media marketing literature. From the extensive literature survey and results of the study, it was found that social media is increasing the enthusiasm of large number of users as well as marketers to use it as an important tool for effective marketing communication. Bridging the social media knowledge gap among various stakeholders of agriculture sector is timely mandate. This initiation helps the non-users of social media among agriculturalist to develop foresightedness in building their marketing capability on digital platforms.

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REFERENCES


Palaniswamy, V., & Raj, K. (2022). Social Media Marketing Adoption by Agriculturists: A TAM Based Study


