The Moderating Role of Socio-Economic Status in Digital Marketing Adoption and Agribusiness Sustainability among Rural Youth

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DOI: https://dx.doi.org/10.47772/IJRISS.2025.90400061

Received: 22 March 2025; Accepted: 28 March 2025; Published: 28 April 2025

ABSTRACT

This conceptual paper examines the socioeconomic status (SES) moderates the use of digital marketing tools in sustainable agribusiness among rural youths. By using an integrated framework based on the Technology Acceptance Model (TAM) and the Innovation Diffusion Theory (IDT), the study examines key factors influencing digital marketing adoption. The three constructs which have been included in this study are perceived usefulness (PU), perceived ease of use (PEOU), and social influence. TAM has focused on perceived characteristics in the adoption of technologies, while the IDT model has favoured the influence of the social context and community. The combination of these models is significant in offering an overall framework for understanding the individual, social and contextual antecedents of the adoption decision-making process. This paper contributes to the literature by arguing that SES plays a critical role in the moderation of the relationship between PU, PEOU, social influence, and agribusiness sustainability. The insights presented in the paper offer a valuable recommendation for policymakers, academics and other related stakeholders in addressing SES disparities among rural youths and promoting inclusive digital adoption in agribusiness.

Keywords: Socioeconomic Status, Digital Marketing Adoption, Sustainable Agribusiness, Rural Youths

INTRODUCTION

Future food security is associated with sustainable agriculture, as these two concepts depend on each other closely. Agribusiness is one of the leading sources of human nourishment and a vital economic generator. Malaysia currently depends on the agricultural sector as a major source of income through the availability of land resources and diverse wildlife. However, for sustainable exploitation of the agri-food system for food security and economic and social well-being, the practice needs to align with Malaysia's agricultural policies, rules and regulations (Abdul Sani et al.,2022).

Among them, Sabah, one of the second largest states in Malaysia, stands out as having great potential in its role toward enhancing food security in the country and creating its economic development. However, its rural agriculture communities are trapped with labour bottlenecks, limited market access, outdated technology, and infrastructural developments (Vavekanand & Dayanand, 2024). These challenges are compounded by youth reluctance to practice agriculture due to high costs, low levels of mechanisation and poor access to production inputs and facilities (Yusof & Annuar, 2022). The situation worsens due to climate change, decision-makers' lack of agricultural background, the migration of youth to urban and the ever-recurring digital gap (Sylvia, 2024).

Hence, several measures have been undertaken to improve the sector's vulnerability and encourage youth participation. Many programs are designed to encourage youth to work in the agriculture sector. Petronas has developed BeDigital programs that offer a view into the digital process of food security and market access among the youth. Hence, this study aims to establish the extent to which young rural agropreneurs have embraced digital

marketing opportunities to market their products due to perceived challenges of complexities and compatibility of digital marketing tools with traditional agriculture practices, as highlighted in Nurul et al. (2024). To fill this gap, there is a need to promote investments in youth engagement in agribusiness since technology might cause growth in rural economies, access to information, and sustainable practices, as mentioned by Jayanti and Bambang (2024).

Social influence also has a prominent effect on the perception and appropriate utilisation of ICT and sustainable practices among rural youth in agribusiness. The youth support from community heads and peers and encouragement from institutions, as well as formal incentive programs, can encourage the youth to consider agriculture as a noble and evolving career choice (Suresh, 2023). However, the level of youth participation in the use of ICTs is influenced by SES because education technology and other resources used to embrace and support modern farming are a factor of SES (Ainissyifa, 2018; Lyra et al., 2023). These disparities can be countered by targeted interventions, including the establishment of digital villages and promoting accompanying digital villages to improve the digital literacy level of the households, eliminate the digital divide and ensure that growth in digital infrastructure is inclusive among the less privileged regions (Ye & Zhang, 2024). Nevertheless, the achievement of these strategies requires fixing the infrastructure issues and familiarising the rural people, especially the farmers, with the concepts of digital change (Abdul Rahim, 2024).

This conceptual paper connects agriculture to food security and digital transformation. The study also examines how SES influences the impact of perceived usefulness, perceived ease of use, and peer pressure on a social influencer's role in promoting youth engagement in sustainable agribusiness. Digitisation and youth participation are two approaches to how the agricultural sector in Sabah can further boost its role and support in food security, the economy, and the transformation of Malaysia.

Problem Statement

Sabah has responded sharply to what it considers critical challenges in engaging the youths in the agricultural sector for the development and growth of the economy. Although the new media tools in digital marketing can increase marketing opportunities, productivity and customer outreach, youths in Sabah face challenges like inadequate access to land, capital and technology (Kote et al., 2024). Further, poor input and output infrastructure, including irrigation infrastructure, affects agricultural productivity and vulnerability, especially in rural areas (Mohamad et al., 2024). The current negative attitude towards agriculture as an unattractive profession discourages young people from participating in the sector (Kote et al., 2024). To tackle these challenges through the enhancement of infrastructure, policy reinforcement, and changing perceptions, it is crucial to support the youth of Sabah and realise the potential of the agricultural sector in driving economic growth and food security. Nonetheless, the use of digital marketing among young people within rural areas is still low (Sindakis & Showkat, 2024). This low adoption results from the perceived ease of use and perceived usefulness of using these tools to enhance performance in agribusiness operations (Sandeep et al., 2024).

One of the important and unaddressed determinants of the use of digital marketing tools that has to do with consumers' characteristics is socioeconomic status (Sacre et al., 2023). Students from a low socioeconomic status are generally in situations where they cannot afford good education, facilities, and even good quality technology, which goes hand in hand with the use of technology and effective exploitation of the same for learning (Njeri & Ahmad, 2024). Students from lower-income backgrounds frequently use outdated devices and share devices due to limited internet access and technological capabilities. Remote learning due to COVID-19 unveiled the inequalities causing many disadvantaged students to participate. Low-SES individuals who have access to technology mostly fail to use it for educational purposes due to a lack of proper guidance and a structured environment.

On the other hand, social factors, including networks, family, and community pressure, affect the willingness of the youth in rural settings to adopt technology (Ruslan & Khalid, 2023) . When such youth lack exposure to successful role models or supportive networks that encourage the use of technology for improved practices, they are locked out of viable practices in sustainable agribusiness. Despite the growing recognition of these challenges, there remains a research gap regarding the mechanisms through which SES interacts with factors such as perceived usefulness, perceived ease of use, and social influences in driving technology adoption among

rural youth in Sabah (Salleh et al., 2023; Sandun et al., 2023; Grassi, 2023; Teo et al., 2023). Filling this gap is critical to formulating effective interventions that enable rural youth to leverage digital tools without being hindered by socioeconomic constraints. Hence, this paper initially aims to explore the moderating effect of SES on the relationship between these factors and the sustainability of youth agribusinesses in Sabah. Ultimately, this research aims to promote the sustainable development of rural agribusinesses, empowering youth to overcome barriers and drive economic and social growth in the region.

Research Objective

1 To investigate the impact of perceived usefulness on the sustainability of agribusinesses among rural youth.
2 To analyse the impact of perceived ease of use on the sustainability of agribusinesses among rural youth
3 To examine the role of social influence in shaping the adoption of digital marketing tools and its impact on the sustainability of agribusinesses among rural youth.
4 To examine the moderating effect of socioeconomic status (SES) on perceived usefulness, perceived ease of use, social influence, and the sustainability of agribusinesses.

Research Questions

1 Does perceived usefulness affect the sustainability of agribusinesses among rural youth in Sabah?
2 Does perceived ease of use influence the sustainability of agribusinesses among rural youth in Sabah?
3 Does the role of social influence affect the sustainability of agribusinesses among rural youth in Sabah?
4 Does socioeconomic status (SES) moderate the relationship between perceived usefulness, perceived ease of use, social influence and the sustainability of agribusinesses among rural youth in Sabah?

Significance of The Study

From an academic perspective, this conceptual paper has practical implications for the analysis of the sustainability of agribusinesses in relation to rural youths in Sabah. It examines the relationship between perceived usefulness, perceived ease of use, and social influence on the use of digital marketing tools, which have direct implications on the economic sustainability of agribusiness among rural youths. In light of the rural context in Sabah, this paper contributes to the technology adoption and rural entrepreneurship literature, particularly in the agricultural value chain. It also examines how the strength of these relationships varies as a function of socioeconomic status (SES), emphasising the ways in which resource availability, education, and technological facilitation enable or constrain rural youth's efforts to integrate technology into more sustainable forms of living (Kote et al, 2024).

This paper also fills another gap in the literature through its emphasis on environmental and social sustainability. The social influence factor brings out the importance of community-accepted practice, fellowship, and networking in persuading rural youth to practice sustainable farming techniques and systems (Ruslan & Khalid,2023). It also discusses how such social relations might encourage better forms of business that are more sustainable and built from the community perspective. In addition, through SES analysis, the study establishes that the current disparities hamper the youth in lower SES from engaging in sustainable agribusiness practices in both economic and social aspects.

From a practical point of view, this study offers important findings for policymakers and development agencies targeting the rural youths of Sabah. It feeds into the development of policies and programs to create economic development, as well as social and environmental equity. Besides, this paper contributes to the development of educational programmes and interventions for rural youths by identifying their unique needs to address in the areas of digital literacy, market access, and sustainable business. This also emphasises the use of social influence and community-based approaches to promote the actualisation and use of technologies that will enhance economic returns and environmental conservation.

On the other hand, this paper provides practical implications for rural youth practitioners who also advocate for

ways to develop IT applications and interventions that are easy to use and socially and environmentally responsible. With an emphasis on the three dimensions of sustainability measurement, this paper provides a holistic concept to improve the stability and productivity of the agribusiness led by rural youths for the sustainable development of the agricultural sector in Sabah.

METHODOLOGY: ANALYSIS RESEARCH FRAMEWORK

Existing theoretical models, empirical research, and contextual analyses of rural agribusiness sustainability inform the development of this study's conceptual framework. The review synthesises key insights from foundational theories, comparative frameworks, and relevant literature on technology adoption and sustainability.

Technology Acceptance Model (TAM):

The TAM, brought forth by Davis in 1989, is a model created to explain the acceptance of technology in the lives or workplaces of a given population. According to TAM, two key factors influence the acceptance and use of new technologies which are perceived usefulness (PU) and perceived ease of use (PEOU). All these have been acknowledged and have been deemed to hold significance in multiple studies in relation to the innovation and adoption of technology, specifically in the area of agriculture among the youth. As such, PU and PEOU are important factors for rural youths to find digital marketing tools that are valuable and relevant to their agribusiness ventures.

Perceived usefulness (PU) is the level of conviction that rural youth hold in the effectiveness of the available digital marketing tools for improving business performance, be it increasing the coverage of markets, increasing sales, or profitability (Husein et al., 2024). On the other hand, perceived ease of use (PEOU) aims to assess the ease of using these tools because most consumers may lack the necessary physical and technological resources and or knowledge when it comes to adopting technologies (Guo & Peng, 2024). These perceptions have a huge impact on the chances of embracing and implementing such instruments in rural settings where technology is comparatively more limited.

Kaur et al. (2022) posit that the use of digital innovation by youths in rural areas is important to enhance the sustainability of agribusiness since its usefulness and ease of use enhance its adoption in business. However, some of the factors that can prevent the adoption include low levels of technology literacy, inadequate resources, and the rural environment. Such barriers prove that there is a need for support and assistance so that rural youth could apply such tools without much difficulty, which might be caused by their lack of experience with digital technologies. Hence, TAM’s constructs of PU and PEOU are central to understanding youth's use of technology in rural agribusiness. Solutions to these perceived barriers can still be achieved once digital tools are well-designed to fit the capabilities of rural youth agropreneurs. This would also increase the sustainability of the youths' businesses, hence boosting their participation in agriculture.

Innovation Diffusion Theory (IDT)

IDT, introduced by Rogers in 1962, provides a framework for understanding how, why, and at what pace new knowledge and technologies are adopted across cultures. In the context of rural youth entrepreneurs, IDT offers valuable insights into the adoption of digital marketing tools. A key component of this theory is the role of social influence, which significantly impacts the adoption of new technologies. Social influence refers to the effect that peers, community leaders, and social networks have on an individual's decision to adopt new tools or practices (Rui et al., 2024). This is particularly relevant in rural areas, where community ties are strong, and the opinions of key figures such as fellow entrepreneurs or local leaders can shape attitudes toward innovation (Navarro et al., 2022). Youth agropreneurs, in particular, are often influenced by respected members of their communities. These influential individuals can either facilitate or obstruct the adoption of digital marketing tools, depending on their attitudes toward technology. If these opinion leaders embrace new technologies, they can motivate others to follow suit, promoting broader adoption. On the other hand, if these key figures are resistant to adopting new tools, they may discourage others, limiting the uptake of innovations. Therefore, social influence plays a crucial role in determining how effectively digital marketing tools are integrated into rural agribusinesses, ensuring the

sustainability and long-term success of these innovations (Tripalupi et al., 2023).

Comparative Analysis of The Framework

Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT) offer unique perspectives on technology adoption. The integration of these two theories provides a richer understanding, especially in explaining the uptake, or lack thereof, of sustainable agribusiness practices among rural youth. TAM is particularly based on user characteristics, where perceived usefulness (PU) is a major driver of an individual's perceived ease of use (PEOU) of technology. This model was found useful in different contexts such as e-learning and cashless payment systems, where views on usefulness and ease of use predict behaviours (Syafaastuti et al., 2024; Almulla, 2021). However, due to its concentration on different individuals' attitudes and behaviours, TAM is not effective in examining such social and systematic influences, which might be significantly important in rural areas.

On the other hand, IDT provides a wider view as it analyses the diffusion of innovations through the social structures containing such aspects as compatibility, observability or the impact of the social network. The influence of peers, relatives and opinions from the society is core to IDT collective behaviour, and the societal relationship plays a key role in the adoption process (Cioc et al., 2023). Research has shown that social cues may positively impact perceptions of technology. For instance, internet banking's perceived security and privacy risks are determined by social conversation or public opinion (Giovanis et al., 2012). However, as will be discussed later, IDT does not address the perception of technology at the individual level, something that TAM handles, so one can have a broader view of the application of technology.

The integration of TAM and IDT provides a more comprehensive view of the factors that constrain the adoption of technologies when both are applied to rural agribusiness. The challenges experienced by rural youth include weak social capital, resource constraints, and low level of technology adoption in the use of digital tools in agribusiness. TAM, however, relates to these individual impediments by embracing the perceptions of the technology, how easy it is to use, and how useful it can influence adoption intentions. In contrast, IDT overcomes many of those obstacles, such as the absence of community-centred development and local culture that matters significantly in rural areas, including the opinion of recognised leaders.

By integrating the theoretical framework postulated by the technology acceptance model and the innovation diffusion theory, a holistic method for the sustainable development of agribusiness is revealed, providing integrated solutions for enhancing subjective preparedness as well as external factors. Research by Kaur et al. (2022), Abu et al. (2023), and Geethalakshmi et al. (2024) states that these frameworks need to be implemented. Considering both of these viewpoints can significantly enhance the strategies for developing efficient, sustainable technology adoption in rural agribusiness. This approach results in more efficient interventions to develop congruency between personal beliefs and collective community endeavours aimed at realising sustainable agribusiness among the youths in rural areas.

The Moderating Role of Socioeconomic

Socio-economic status (SES) is a multiplicity of elements like income, education, occupation, and resource access that play a central role in determining the extent to which an individual can use new technologies. Students from privileged backgrounds enjoy better education facilities and a compact network of friends and families and are economically more endowed. These give them adequate skills and opportunities to address digital marketing tools, and they are better placed to succeed in their endeavours of using technology for personal or professional development (Laplume, 2024; Lin, 2023). Conversely, youth from low SES experience numerous challenges that hinder the adoption of technology. Low exposure to information and communication technologies, poor levels of IT literacy, and fewer social contacts limit their capacity to engage with and capitalise on digitisation (Amitha et al., 2023). For instance, due to lack of access to the internet or modern devices, those youth living in lower SES households may be locked out of working in the new economy, which encompasses electronic commerce and electronic marketing (Wulandari, 2017). Besides, possessing less technological capital, including few friends, family members, or role models who can introduce these youths to new technologies, can hinder their access to and use of technologies and delay their time joining any technology platforms.

The study by Mat Taib et al. (2022) suggests that SES interventions must be introduced to fill the identified gaps. This paper aims to examine the technological adoption of digital marketing among rural youth agribusiness and socio-technological initiatives that may be employed to diminish the technological gap with SES groups. Therefore, SES has a significant moderating function in technology adoption, particularly where inequity in resource accrual and opportunity attainment is expected.

Framework Development

The Effect of Perceived Usefulness (PU) on the Sustainability of Agribusiness among Rural Youth.

Rural youths' attitude towards the usefulness of digital marketing tools determines if they will embrace the tools to increase the sustainability of agribusiness (Kaur et al., 2022). Perceived usefulness covers the extent to which youth think that the use of digital marketing tools will enhance business sales, market presence, and profitability, according to Ortiz et al. (2024). The positive attitudes towards the usefulness of the tools imply that these technologies create high value and enhance business performance and survivability. Abu et al. (2023) also revealed that perceived usefulness is an important factor that makes organisations continue to incorporate digital tools in their strategic plan in order to gain a competitive advantage in emerging markets. The et al. (2023) also pointed out that customising digital technologies to fit the needs of agribusiness can increase efficiency and improve the stability of operations in rural settings. These innovations are partly responsible for the promotion of economic or cost sustainability. However, they are also integral to the goals of social and sustainable ecological efficiency through the efficient use of available resources in the growth of social connections. These findings shed light on how perceived usefulness influences digital transformation in rural agribusiness.

H1: There is a positive relationship between perceived usefulness (PU) and the sustainability of agribusiness among rural youth.

Examining the Relationship Between Perceived Ease of Use (PEOU) and the Sustainability of Agribusinesses Among Rural Youth

A study confirmed that the youth engaged in agribusiness who have gained skills on how to use digital marketing tools are more likely to adopt these technologies to enhance the sustainability of agribusiness ventures (Elfi & Elinur, 2024). This is well illustrated by perceived ease of use, which is deemed to be crucial for internet purposes intended use in rural areas where the level of computer literacy is believed to be lower than in urban areas. This is a positive change in pace because when digital tools are considered easy to use, adoption follows, thus leading to improved operation efficiency, increased market coverage and business viability (Yu et al., 2024). According to Ali et al. (2023), the problem with digital tools is that they are complicated, which makes the use of simple tools recommended for rural areas. Teo et al. (2023) also pointed out that if the perceived ease of using the digital tools is high, the likelihood of the tools being adopted and incorporated into the rural agribusiness operations was significantly high and, therefore, would help build a sustainable future.

Furthermore, Williams and Tan (2023) pointed out that ease of use matters in reducing the gap between technologically enabled and less enabled areas such as rural areas, especially where technical support and training are limited. Easy to use tools that assist in enhancing market access and thus make rural agribusiness products reach out to more customers may also be useful in enhancing business productivity (Husein et al., 2024). Hence, the integration of such marketing tools should be done in a way that they are easily accessible and usable in the rural systems that support agribusiness.

H2: The level of perceived ease of use is positively related to the sustainability of agribusiness among young people in rural areas.

Social influence positively affects the adoption of digital marketing tools and the sustainability of agribusinesses among rural youth.

Social factors are immensely influential when it comes to the selection of these digital marketing tools that have direct impacts on the sustainability of agribusiness among the youthful community in rural areas. In the rural

context, people are more inclined by their peers, relatives and even officials from the community in which they live. First adopters or opinion leaders formed social networks that may influence the other members of the community significantly (Geethalakshmi et al., 2024). Since people tend to emulate the actions of their peers or other personalities within their community, there is usually a domino effect which sees companies within such a community follow the same examples set by a few others in adopting digital marketing tools (Ruslan & Khalid, 2023). This social phenomenon increases the probability of rural youth adopting the use of digital tools, which may lead to higher sustainable use of resources in their agribusiness since it brings efficiency, market access and profitability into consideration (Liu & Yan, 2024).

When youth see that peers in similar sectors are effectively using digital marketing tools, then they may see the tools as not only beneficial but also as the norm. This fosters society's feeling of acceptance and, thus, fuels the adoption process (Ruslan & Khalid, 2023). The fact that social influence has a positive effect on the use of digital marketing tools results in better business practices that benefit the longevity of agribusinesses located in rural areas (Tripalupi et al., 2023). These tools provide extended market coverage, improved customer interactions, and optimised business processes, which define the survival and development in rural environments.

Thus, social influence becomes an influential determinant of the diffusion of digital marketing tools in fostering a virtuous cycle for the sustainable development of rural agribusiness. Besides, more success is possible when more youth in agribusiness use these tools, which, in addition to improving their businesses' profitability, contributes to the general development of the rural economy (Geethalakshmi et al., 2024; Liu & Yan, 2024). Therefore, the integration of both the TAM and IDT models when assessing the sustainability of youth in rural agribusiness contexts is important for identifying how to improve perceptions and social influence of, and ultimately, the adoption of technology to increase the sustainability of agribusiness practices (Ortiz et al., 2024; Teh et al., 2023).

H3: Social influence positively affects the adoption of digital marketing tools, leading to greater sustainability of agribusinesses among rural youth.

The Effect of Socioeconomic Status (SES) moderates the relationship between Perceived Usefulness, Perceived Ease of Use, Social Influence and the Youth Sustainability of Agribusinesses.

The study of Perceived Usefulness (PU), perceived ease of use (PEOU), and Social Influence in the adoption of new technologies in rural agriculture contribute significantly to knowledge on factors that affect the sustainability of youth-led agribusiness firms in rural regions (Husein et al., 2024) Nevertheless, it is important to understand that the socioeconomic status (SES) of rural youth in agribusiness plays a moderating role in this process. Previous Studies have employed SES as a moderating effect in the relationship between intention and health behaviours (Corner, 2014), intention and health behaviours (Corner et al., 2013), social cognitions and physical activity (Schuz et al., 2017) and metacognitive skills and reading performance (Koyuncu et al., 2022). Even though SES remains one of the most studied moderator variables in various behavioural models. However, it cannot be overemphasised that other factors, including culture and personality factors, have equally constitutive roles to play in these relations.

Young people with higher SES status are likely to have better access to resources like education, technologies, and social capital. This gives them a beneficial and easy perception of the technology, such as digital marketing platforms. This access enhances their capacity to adopt and apply innovations in their agribusiness, hence increasing the productivity, profitability and sustainability of their business ventures. Laplume (2024), while Lin (2023) acknowledges the fact that youths within the higher SES bracket are inclined to adopt technological innovations because they have the resources and knowledge that enable them to optimize the opportunities provided by the tools in question.

On the other hand, the youth from a low SES environment experience many challenges in embracing digital tools. These barriers entail a lack of means of ICT, low IT skills, and fewer opportunities to interact with other people to seek mentorship. Amitha et al. (2023) also note that the members with lower SES are characterised by poor social capital, which means that other members of the community, leaders or peers cannot influence lower-SES persons to adopt various technologies. Thus, such people may have a negative attitude towards the use of

the tools in their business, and therefore, the lack of use hampers the sustainability of their agribusiness ventures. This indicates SES acts as a moderator in relation with PU, PEOU & social influence.

Therefore, to capture and address the context of use issues and the potential for encouraging tool use in rural agricultural businesses, moderation of SES is critical. This is well supported by Mat Taib et al. (2022), where technological and resource barriers create a double-edged sword for lower SES youth, who rarely use digital marketing tools. This means that it is not enough to encourage the perception that the tools are useful and easy to use. Hence, SES interventions need to be targeted at developing and enhancing digital literacy, providing more accessible technologies, and building supportive social networks for community-oriented lower SES consumers.

H4: Socio-economic Status (SES) moderates the relationship between Perceived Usefulness, Perceived Ease of Use, Social Influence, and the Sustainability of Agribusinesses.

Table 1.0 Key Factors Influencing Digital Marketing Adoption in Rural Agribusiness

VARIABLE	KEY FINDINGS	SUPPORTING STUDIES
Perceived Usefulness (Pu)	Rural youth's attitude towards digital marketing tools influences their adoption of agribusiness sustainability. Tools enhance sales, market presence, and profitability.	Kaur et al. (2022), Ortiz et al. (2024), Abu et al. (2023), The et al. (2023)
Perceived Ease of Use (Peou)	Digital literacy affects adoption; simple tools are recommended for rural areas. Higher PEOU leads to improved efficiency, market coverage, and viability.	Elfi & Elinur (2024), Yu et al. (2024), Ali et al. (2023), Teo et al. (2023), Williams & Tan (2023), Husein et al. (2024)
Social Influence (Si)	Peer influence, opinion leaders, and social networks drive digital marketing adoption, improving market access, efficiency, and business longevity.	Geethalakshmi et al. (2024), Ruslan & Khalid (2023), Liu & Yan (2024), Tripalupi et al. (2023)
Socioeconomic Status (Ses) (Moderator)	Higher SES youth have better access to technology and resources, increasing adoption. Lower SES youth face barriers (ICT access, digital literacy, social capital).	Husein et al. (2024), Laplume (2024), Lin (2023), Amitha et al. (2023), Mat Taib et al. (2022)

Conceptual Framework

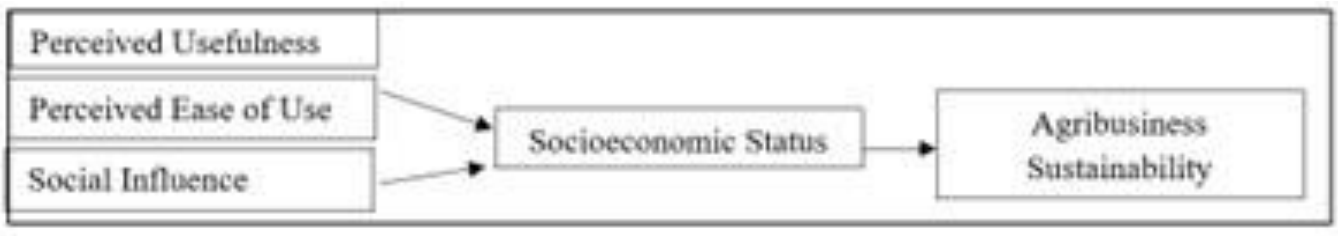

Figure 1.0: Proposed conceptual framework

RESULTS

This conceptual paper aims to use both the TAM and IDT to explain the sustainability of agribusiness by young people in rural areas. TAM and IDT are both significant in establishing issues that influence the use of technology, especially when it comes to digital marketing tools for youths within rural areas in agribusiness. Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) from the Technology Acceptance Model (TAM) and social influence from Innovation Diffusion Theory (IDT) offer a strong foundation for assessing factors for

the use of technology in a rural area. However, the effect of SES cannot be ruled out on these relationships. SES moderates the impact of PU, PEOU, and social influence on the use of digital tools. Youth from a higher SES care for education, resources and social connections would find it easy and meaningful to use digital tools. These increase the access and exposure of such tools, making their adoption easier and resulting in the eventual improvement of business results and overall sustainability in the long run. Laplume (2024) and Lin (2023) agree that youths with higher SES are more likely to engage in digital marketing tools because they can afford the requisite tools, knowledge and time to apply the tools.

In line with the results of this conceptual paper, SES was identified to be affecting the moderating between PU, PEOU, social influence, and the sustainability of agribusinesses among rural youths. The combination of TAM and IDT offers an extensive model that will help identify the individual and social factors affecting technology adoption in rural agribusinesses. PU and PEOU are significant factors that influence whether or not the youth will find the digital tools useful and easy to use, and social influence is a motivating factor toward adoption, especially in peer support.

DISCUSSION

Nevertheless, SES is a significant moderating variable that operates in this process. They also suggest that youths from a higher SES are likely to use digital marketing tools because of their resource status, education, and social capital. On the other hand, youth from low SES have many challenges that prevent them from adopting technology. These include limited access to technology and low technological skills, which prevent them from adopting technology into their businesses. This implies that special efforts are required to target SES to work on reducing such inequalities and encourage the use of technologies and innovations for the sustainable development of rural agricultural SMEs (Smidt & Jokonya,2021). These interventions could range from enhancing people's awareness about the use of technology and enhancing their access to technology to establishing community support systems. Through eradicating barriers that hinder lower SES youths from accessing technology, the policymakers, as well as the practitioners involved, will have little challenge in extending the digital divide to all youths within the rural areas so that they may be apposition to use technology to enhance the growth and sustainability of their agribusinesses. Future research lies in the empirical literature that applies the proposed integrated framework while investigating the feasibility of using digital marketing tools to improve the sustainability of agribusiness in other rural contexts. These contexts will offer insightful information about the actual advantages and limitations of applying digital marketing tools to address different problems related to agribusiness sustainability in other cultural and geographical environments.

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