African Journal of Rural Development, Vol. 8 (2): April-June, 2023: pp. 141-157 ISSN 2415-2838

Benefits and barriers to social media use in promoting business brands of final-year agribusiness students

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ABSTRACT

This study examined how University of Cape Coast, Ghana final-year agribusiness students used social media to promote their brands during their supervised agribusiness project, a required practical training course. The results show that using social media to promote agribusinesses helped the students to strengthen their brands and raise awareness of their products. Poor internet network access and expensive internet data costs were challenges that hindered Agribusiness promotion on social media, hurting entrepreneurs and their capital bases. The study highlighted that sex, monthly income, household size, and revenue source affect agriculture social media training and security. The study found that student agribusiness social media use was crucial to product marketing. The study recommends that the University of Cape Coast should increase internet access to allow agribusiness students and others to build and market their company concepts into competitive brands. The university should also provide social media training for their students and wider University Community.

Keywords: Agribusiness students, business branding, Ghana, internet access, product marketing, Social media use

RÉSUMÉ

Cette étude a examiné comment les étudiants en agribusiness de dernière année de l'Université du Cap-Vert, Ghana, ont utilisé les réseaux sociaux pour promouvoir leurs marques au cours de leur projet agribusiness supervisé, un cours pratique obligatoire. Les résultats montrent que l'utilisation des réseaux sociaux pour promouvoir les entreprises agricoles a aidé les étudiants à renforcer leurs marques et à sensibiliser le public à leurs produits. Un accès internet et un réseau médiocres ainsi que les coûts élevés des données internet étaient des défis qui entravaient la promotion de l'agribusiness sur les réseaux sociaux, affectant négativement les entrepreneurs et leur capital. L'étude a mis en évidence que le sexe, le revenu mensuel, la taille du ménage et la source de revenus influencent la formation en agriculture sur les réseaux sociaux et la sécurité. L'étude a trouvé que l'utilisation des réseaux sociaux par les étudiants en agribusiness était cruciale pour le marketing des produits. L'étude recommande que les universités augmentent l'accès à Internet pour permettre aux étudiants en agribusiness et aux autres de développer et de commercialiser leurs concepts d'entreprise en marques compétitives. Les universités devraient également fournir une formation aux réseaux sociaux à leurs étudiants et

Cite as: Ametepey, E.T.K., Omega, S., Asante, I.K., Fanyinkah, K.D., Nuer, A.T.K. and Ocran, J.K. 2023. Benefits and barriers to social media use in promoting business brands of final-year agribusiness students *African Journal of Rural Development* 8 (2):141-157.

à la communauté universitaire au sens large.

Mots-clés : Étudiants en agribusiness, branding commercial, Ghana, accès internet, marketing de produits, utilisation des réseaux sociaux

Introduction

Agribusiness can be defined as the business of agricultural production, trade, and distribution, and is a significant sector in many economies worldwide (Chavas, 2008). In recent years, the use of social media to promote agribusiness ventures has become more popular. Facebook, Instagram, X (formerly called Twitter), and LinkedIn which are social media sites provide agribusiness owners with an opportunity to showcase their products, engage with potential customers, and build their brands (Zhao *et al*., 2011). The use of social media is particularly relevant for final-year agribusiness students who are transitioning from academia to the business world. These students may lack the financial resources to advertise their business brands and can, therefore, leverage on social media tools to promote their businesses at a lower cost.

According to Zhao *et al*. (2021), social media has emerged as a crucial platform for businesses in establishing and maintaining relationships with customers. The investigation further notes that businesses interact and communicate with customers and potential customers, respond to inquiries, and obtain feedback on their products and services. In the agricultural industry, social media has been used to establish relationships between farmers and consumers. Farmers also have the opportunity to share information related to farm produce and communicate directly with potential customers (Cui, 2014).

Booth and Matic (2011) evaluated how the use of social networking sites has become increasingly prevalent in this era, with individuals and businesses alike leveraging on these platforms for various purposes including marketing and branding. Other uses such as identifying and using social media influencers to help impact how people perceive business brands have been acknowledged as successful pathways for small businesses and startups. In the context of agribusiness, social media can serve as a valuable tool for promoting business brands and connecting with potential customers (Adegbola *et al.,* 2018). Social media platforms have altered how we seek and consume information and have become an important part of our daily activities, and its impact has been felt across different industries, including the agriculture sector. In recent years, there has been a significant increase in the use of social media as a marketing tool for promoting various business brands.

Farmers and agribusiness owners have begun using social media platforms to advertise their goods and services, continuing a trend that has been seen across industries (Birner *et al.,* 2021). According to Birner *et al.* (2021), the integration of social media into the ecosystem of agribusiness has the potential to transform the sector by expanding the market options available to farmers and agribusiness owners. According to the study, social media sites like Facebook, Twitter, Instagram, and LinkedIn have gained popularity as tools for promoting agribusiness brands. As a result, students are increasingly using these sites to build brand recognition, attract leads, and boost sales for their start-ups and business initiatives.

A number of investigations have looked at how social media is used to promote companies in various industries. For instance, a study by Bilgin (2018) found that social media marketing has a positive impact on customer loyalty, trust, and satisfaction. Similarly, Rauschnabel *et al.* (2016) showed that social media marketing could enhance brand awareness, generate leads, and increase sales. Adegbola *et al.* (2018) also provide valuable insights into the use of social media by agribusiness students to promote their business

brands. The study highlights the importance of social media in the promotion of agribusiness brands, and how agribusiness students can leverage social media to create a competitive advantage in the industry. The use of social media by Nigerian final-year agribusiness students was examined by Katz *et al*. in 2021. According to the study, most students promoted their enterprises on social media. The two platforms that students use the most frequently were Facebook and WhatsApp.

In addition, the students use a variety of techniques to market their brands, including developing interesting content, working with influencers, and collaborating with other companies. Some of the benefits the students derived from using social media to promote their brands included increased sales, brand awareness, and customer engagement. The study also identified some challenges, such as the difficulty of standing out in a crowded social media landscape and the need for digital marketing skills. These findings suggest that social media marketing can be an effective tool for agribusiness students to promote their business brands.

The Department of Agriculture Economics and Extension of the School of Agriculture at the University of Cape Coast, Ghana, trains agribusiness students to develop the knowledge, attitudes, and skills to conceptualize, develop and establish agribusinesses on campus (cf.https://daee.ucc.edu.gh/programmes/agribusiness, 2023). The students develop and establish their agribusiness enterprises through a program known as Supervised Agribusiness Projects (SAPs).

The SAPs provide the students with a six-month business mentorship program where the capacities of the students are built to conceptualize, develop a business plan, establish a business, and promote the business to drive sales of the products or services. This is one of the challenges faced by agribusiness students is promoting their new brands on campus in order to drive sales.

Research has revealed that using social media to promote their businesses can have significant advantages for students at other colleges. However, little is known about the ways in which agribusiness students in the Department of Agriculture Economics and Extension at University of Cape Coast,

Ghana are using the various social media platforms to advertise their agribusiness businesses. This study therefore explored the use of social media platforms by agribusiness students to promote and brand their businesses. The study contributes to the understanding of the use of social media by students to advance their businesses. It also adds to the field of agribusiness and social media studies, which investigates how synergies between academia, pedagogy, and industry might be affected by the emergence of social media. The findings of this study have implications for policymakers at the Department of Agriculture Economics and Extension of the School of Agriculture in the University of Cape Coast, to fashion out courses and programs on social media use for promoting business brands. The study also provides empirical data to help agribusiness educators with the social media strategies they can adopt to enhance the marketing and promotion of their business brands, whilst improving their teaching methods.

Theoretical Framework. Use and Gratification Theory. Social media-related studies have been informed by different theoretical frameworks according to literature. This study drew upon the use and gratification theory developed by Harold Lasswell in the 1940s and later expanded in 1970 by Jay G. Blumler and Elihu Katz as the theoretical framework. The use and gratification theory was developed in psychological and communications research. The theory is a mass communication theory that explains why people utilize media channels to meet personal needs (Katz and Blumler, 1974). The theory posits that media users are

not passively utilizing, however, actively use media to meet individual needs (Katz *et al*., 1973).

The use and gratifications theory takes an audience-centered approach to understand "what people do with the media?" as opposed to the conventional research that puts the emphasis on "what media do with the people?". Thus, the theory demonstrates what consumers of media do with media rather than what media does to them (Katz *et al.,* 1973). The theory operates on five assumptions which are: media consumers are active and goal-oriented; audience select media based on their expectations and the ability of media to meet their needs; the social context in which the said media is used, as well as personality influence their choice; audience attention is competed for by various media available; and audience are not influenced by media since they play an active role in what they consume (Katz *et a*l., 1973).

The use and gratifications theory has been used to inform several studies. Rubin (2009) utilized the theory to understand how audiences use mass media types which include television, radio, print media, news, and many more. Shao (2009) applied the use and gratification theory to study user-generated media (UGM). User-generated media allows individuals to create content that may not be directly linked to professional responsibilities and shared via social media platforms. Ray *et. al.* (2019) underpinned their study with the use and gratification theory to investigate the reasons why people use food delivery applications (FDA). Food delivery applications serve as a conduit through which consumers can purchase food and have it delivered to them with less stress. To investigate how women farmers in the United States perceive social media use, Daigle and Heiss (2021) adopted the use and gratification theory. They discovered that women farmers use social media platforms like Facebook, Twitter, Instagram, and others to connect with consumers of their agricultural products. Social media is used by farmers to connect with other farmers emotionally and to look for agricultural facts. This paper adopted the use and gratification theory to understand how agribusiness students developed user-generated content via social media to promote and market their business brands and products.

Purpose and objectives. The importance of social media in enhancing communication in the 21st century cannot be overemphasized. Several social media platforms are being utilized especially in the agricultural sector for marketing, sharing agricultural information, branding, and reaching out to farmers and consumers (Wagler and Cannon, 2015). With social media, information can reach the masses within the shortest possible time. The purpose of this study is to assess how final-year agribusiness students in the Department of Agriculture Economics and Extension at the University of Cape Coast used social media in promoting their agribusiness brands during their supervised agribusiness project. To address the purpose of the study, the following research objectives were used to guide the study:

1. Assess the student-related characteristics of agribusiness students at the Department of Agriculture Economics and Extension at the University of Cape Coast
2. Examine the benefits of using social media for promoting agribusiness products among final-year Agribusiness students at the University.
3. Investigate the barriers impinging on the use of social media for promoting agribusiness products among final-year Agribusiness students at the University.

Methods

This inquiry deployed a quantitative research technique via survey design to elicit the required data from respondents. The population included final-year

Agribusiness students in the Department of Agriculture Economics and Extension at the University of Cape Coast. As part of the curriculum, Agribusiness final-year students are tasked to design and implement a business idea through SAPs. Students are guided by faculty from the conceptualization of the business idea, through the development of a business plan, implementation, monitoring, and evaluation. The study population included final-year students in the 2022-year group who completed their SAPs within the year. The final-year agribusiness students were selected for the study because they used social media as a central tool in promoting marketing and brand projection. The study used a census technique to survey all 32 students of the 2022 cohort.

Data collection and instrumentation. Data were collected in the month of April 2023. The data collection process occurred when these students had completed their supervised agribusiness projects. Prior to data collection, ethical clearance was obtained from the University of Education, Winneba Ethical Review Board. In addition, respondents were asked to confirm their voluntary involvement in the research without any compulsion. A questionnaire was administered to students after attending major classes during the month. The researcher met with respondents, explained the purpose of the study to subjects, and sought their consent after which the instrument was distributed. The research instrument's design was divided into three sections. The first part elicited data on students and their business-related characteristics. These included their gender, mode of sales of products, employment status, sources of income, and social media use. The second part of the questionnaire consisted of the benefits of using social media for promoting agribusiness products among final-year Agribusiness students. Eleven items were developed to ascertain the benefits students derived from using social media to promote their products during the SAPs. These items were measured on a scale of 1 = Very low agree to 5 = Very high agree and 0 = not applicable. The final part of the instrument measured the barriers encountered with the use of social media for promoting their agribusiness products during the SAPs. The measurement was on a scale of 1 = Very low agree to 5 = Very high agree and 0 = not applicable. Two lecturers with backgrounds in agricultural extension and agribusiness development ensured both the face and content validity of the instrument. The instrument was vetted to ensure that the items listed on it measured the objectives of the study. The reliability of the validated instrument was then assessed prior to use with 20 third-year agribusiness students from the department. The Cronbach's Alpha coefficient was calculated for the Likert-type subscales using IBM Statistical Package for Social Science (SPSS). For the benefits and barriers, respectively, Cronbach's Alpha confidents of 0.79 and 0.82 were observed, indicating that the instrument was reliable and could be used for the main study (Pallant, 2016). The final year agribusiness students were then given the trustworthy and approved tool to collect data.

Data analysis. Using Microsoft Excel, the collected data were inputted, cleaned up, and processed before being exported into IBM's Statistical Package for Social Science (SPSS). STATA 13.0 was an additional piece of analysis software that was used. As part of the analysis for the various goals, the University of Cape Coast agribusiness students' characteristics as students were examined using descriptive statistics including frequency, percentage, mean, and standard deviation. The benefits and barriers of using social media to promote agribusiness products among final-year Agribusiness students at the University of Cape Coast were analysed using mean, standard deviation, and rank-based quotient. Further analysis of the barriers encountered when using social media to promote agribusiness products among final-year Agribusiness students was analysed using skewness and the standard error of skewness. Lastly, the factors influencing the barriers were analysed using robust regression.

Model Specification

Robust regression is a form of regression designed to overcome the challenge of outliners, and influential observation in a dataset to minimize the impact it could have on the regression coefficients (Khan *et al.,* 2021). The advantage of robust regression over other forms of estimation procedure is the reliability of estimates and inferences made for unknown parameters even in the presence of outliners. The robust technique uses other features that are less influenced by unobserved observation to replace the sum of square residuals of the ordinary least square (OLS). The robust regression and the OLS regression models used in this study was specified as;

The dependent variables of the study, thus, connectivity, security and training, and customer relation are linearly related to the independent variables in the matrix notation given as

$$Y_i = X_i\ \theta + \varepsilon_i \qquad 1$$

Where Y- Dependent variable with vector n*1

X- Independent variables in the form n*p

θ – Unknown regression parameters given as p*1 that needs to be estimated Hence, the estimated the θ is given by;

$$\widehat{Y_i} = \theta \widehat{X_i} \qquad 2$$

Therefore, the residual can also be estimated as;

$$\varepsilon_i = Y_i - \widehat{Y_i} \qquad 3$$

The θ is estimated to be close to the true value by minimizing the residuals of the OLS equation (sum of square residuals). This can be written mathematically as;

$$\widehat{\theta_{OLS}} = \arg\ min_\theta \sum_{i=1}^{n} r_i^2(\theta) \qquad 4$$

Due to the influence of outliners, the study used the use of minimizing the sum of absolute values of the residuals rather than the sum of squares. This protects the regression against vertical outlines;

$$min_\beta \sum_{i=1}^{n} |Y_i - (X_i \theta)| \qquad 5$$

Due to the M-estimators unbounded influence because of its failure to account for leverage, the study used the Generalised M-estimator (GM-estimator) as it accounts for both vertical outliners and leverage. The general GM class of estimators is defined by

$$\sum_{i-1}^{n} w_i(x_i)\psi\left\{\frac{\varepsilon_i}{v(x_i)\widehat{\sigma_\varepsilon}}\right\}x_i \qquad -0 \quad 6$$

Where ψ is the score function, and the weights w_i and v_i initially depend on the model matrix X from an initial OLS regression fitted to the data but are updated iteratively.

Rank Based Quotient (RBQ) is a scientific scoring technique that assigns arbitrary points based on the relative importance of certain limitations and rewards. This study like other studies by Nisha and Vimalrajkumar (2019),

Meena *et al.* (2022), and Malarkodi *et al*. (2020) calculates RBQ with the following steps;

1. Compiling a list of barriers to using social media by consulting subject-matter experts, responders, literature, and personal experience.

2. Respondents were made to rank the barriers/ benefits identified from the most serious barrier/ benefits to their social media use to the least serious barrier/benefits to their social media use.

3. Based on the assigned ranks provided by the respondents, the RBQ was calculated as;

$$RBQ = \frac{\sum_{i=1}^{n} f_i(n+1-i)}{N_n} * 100 \qquad 7$$

Where f_i-the frequency of students (respondents) for the i^{th} rank of the barrier/benefits

N – the total number of students respondents) (32) n- the number of ranks (20)

4. The barrier with the highest RBQ value was considered the most serious barrier/benefit to the respondents.

The variables of the study are captured in Table 1.

Table 1. Description of Variables

Variables	Measurement Unit	Expected Direction
Dependent		
Connectivity	Continuous variable (0-5)	
Security and Training	Continuous variable (0-5)	
Customer Relation	Continuous variable (0-5)	
Independent		
Age	Age as at last birthday	-
Sex	0-female 1-male	+/-
Joining Social Media (JSM)	Years	+/-
Monthly income (MI)	Ghana Cedis (GHs)	-
Income source (SI)	1-Parents 0-Others	-
Sales Point(SP)	1-Online 0- Others	-
Employment status (ES)	1-Employed 0-Others	-
Household size (HS)	Number of people under a roof	+
Social media use (SMU)	1-Yes 0-No	-

Source. Author Construct (2023)

Results and Discussion

Assessing the student-related characteristics of agribusiness students in the University. The results from Table 2 indicate that majority of agribusiness students were males (75%) and the remaining females (25%). This reflects the educational distribution in Ghana according to sex. The Ghana Statistical Service (2021) reports that the country has a population of males in school that is greater than that of females despite the gap being better than the previous census. According to Aziato (2016), the low numbers of females in tertiary institutions has to do with poverty and its ripple effects, and the demand of families that places them outside the classroom. Similarly, Akyina *et al.* (2015) in examining the cause of low female choice of agriculture science programs revealed that the lack of guidance and counselling, financial constraints, lack of female role models, fear of studying mathematics, and difficult nature of agriculture programs are major reasons why females do not prefer agriculture programs from the senior high school level to the university level.

The mode of sales of their supervised agribusiness project is also presented in Table 2. The results indicate that close to 6 in 10 agribusiness students (59.4%) used online platforms to sell their products. The remaining 4 in 10 sold their products either offline (25%) or using both offline and online platforms (15.6%). The nature of consumers and good interaction predict the point of sale.

For consumers those who are readily available and are less in tune with Internet base marketing are less likely to purchase online (Punj, 2011; Campbell, *et al*, 2014). However, Andrews *et al.* (2016) added that for populations that are dispersed, mobile-based marketing becomes very effective and convenient to both the consumer and seller. Similarly, due to the huge and dispersed nature of students, it becomes increasingly difficult to sell to them offline. Additionally, online sales introduce the product to a wider audience (close and far), implying high sales and income, according to Ghose and Yao (2011). Intuitively, online sales reduce the pressure on students' academics as they can easily combine academic work with promoting their agribusiness brands (Baines *et. al.,* 2017).

Additionally, 65.6 percent of students were unemployed while 28.1 percent were self-employed, and the remaining 6.3 percent were employed in the formal or informal sector. This result can be attributed to the fact that the agribusiness program at the undergraduate level is a full-time program with loaded schedules which makes working in the private or public sector difficult. For the few who are self-employed, they sell student-needed items, such as credit cards, data bundles etc, to supplement their income and pay their bills. According to Hodge and Lear (2011) and Sánchez (2011), students are unemployed because

they lack the competencies to engage in active employment.

Table 2 also presents the sources of income of students. It reveals that students obtain income from two main sources, from family (71.88%) or through their own business (21.88%). A few obtain income from both family and own businesses (6.24%). This supports the results of employment status which reveals that students are unemployed, hence their dependence on their families for sustenance. To diversify their incomes, students are likely to add a business to their academics to reduce their dependency on family and pay their bills.

According to Houle (2014), the disparity in education is due to student incomes, as poor students are less likely to enjoy school services. The author identified parents' income, parents' education, and student support services (Student loan) as determining the amount and source of students' income.

On the use of social media by agribusiness students (Table 2), it was revealed that 87.5 percent were social media users. The large number is due to the majority of students using smartphones and the need to connect with family and friends. Similar studies conducted by Lau (2017) and Lacka *et al.* (2021) on students' social media use showed that almost all students use social media tools either for their research, purchases, advertisement, and other personal activities such as reaching out to family and friends. However, there were differences between the two authors about how effectively students used social media. Lacka *et al.* (2021) did not find a statistically significant relationship between social media use and efficiency, contrary to Lau (2017) who claimed that students who use social media were less productive. However, for the purposes of this study, students used social media platforms to advertise their brands to customers rather than to maximize the effectiveness of their academic achievement.

The average age of agribusiness students was 24 years (SD-2.00). The minimum age was 20 years and the maximum was 29 years (Table 2).

This shows that the study respondents were relatively young within the Ghanaian school-going age for tertiary institutions.

According to Ghana Statistical Service (2021), the educational age for tertiary institutions is as low as 16 years for entry into public universities and averagely 30 years for young students entering public universities. Also presented in Table 2 is the experience of the students on social media. The results indicate that averagely, students had eight years (SD = 3.32) of social media use and experience. This shows that students started using social media before entering the university. The results indicate that on the whole respondents had relatively few years of social media use and experience. Social media years of experience result in satisfaction, according to Lee and Ma (2012). Thus, using social media for a longer period of time has more advantages. Table 2, also shown the monthly earnings of students. Monthly salaries for students ranged from as little as GHS 100 to as much as GHS 1000. GHs 485.94 (238.69) per month, which is the average student income, is consistent with this.

Table 2. Student-related characteristics of Agribusiness students

Student Related Characteristics	Freq.	%	Mean	SD	Min.	Max.
Sex						
Male	24	75.0				
Female	8	25.0				
Mode of sales						
Online	19	59.4				
Offline	8	25.0				
Both	5	15.6				
Employment Status						
Unemployed	21	65.6				
Self-employed	9	28.1				
Employed	2	6.3				
Income Source						
Family	23	71.88				
Own Business	7	21.88				
Both	2	6.24				
Social Media Use						
Yes	28	87.5				
No	4	12.5				
Total	32	100.00				
Age			23.87	2.00	20.00	29.00
Time of joining social media			8.32	3.32	3.00	16.00
Monthly Income			485.94	238.69	100.00	1000.00

Source: Author Construct (2022) n=32 1 GHs = $12

Benefits of using social media for promoting agribusiness products among final-year Agribusiness students at the University. The benefits of using social media to promote agribusiness products among final-year agribusiness students at UCC is presented in Table 3. The results indicate that the major benefit derived by the students from using the online platforms for promoting agribusiness products are its helpfulness for brand promotion (Mean-3.844, SD-1.417), making people aware of the agribusiness brand (Mean-3.813, SD-1.176), and offering support to the band (Mean-3.719, SD-1.486). Other benefits highlighted by the students with moderate influence include the introduction of the brand to new business partners (Mean-3.375, SD-1.476) and increased sales' (Mean-3.469, SD-1.545).

According to Rodriguez *et al*. (2012) and Paniagua and Sapena (2014), using social media by firms boosts business performance, which in turn boosts revenue and profits. McCann and Barlow (2015) further stated that effective social media use boosts sales, lowers marketing expenses, increases customer service, raises brand awareness, and strengthens business ties. Our study's findings concur with those of Ahmed *et al*. (2019), who reported that social media was essential to business promotion and enhanced sales and profits.

The barriers of social media use to promoting agribusiness among final-year Agribusiness students at the University. Despite the benefits from social media use, it has associated barriers that hinder its use for promoting agriculture businesses. Table 4 presents the barriers to the use of social media for promoting agribusiness products. The results indicate that the major barrier to the use of social media for promoting agribusiness products among students are 'poor network connectivity' (Mean = 3.906, SD = 1.174) 'high cost of internet data' (Mean = 3.438, SD = 1.413) and 'inability to address compliance concerns' (Mean = 3.281, SD = 1.326).

On the other hand, the students perceived the following barriers, lack of control on social media handles (Mean = 2.469, SD = 1.545), restricted communication with customers (Mean = 2.469, SD = 1.344) and 'social media as an unfriendly (Mean = 2.156, SD = 1.322) as having low effect on social media use for promoting agribusiness. According to Rahardjo *et al*. (2016) limited internet facilities affect knowledge and willingness of social media usage among students. On the other hand Elghannam *et al*. (2017) indicated that the major barrier to social media use in promoting business is the need for businesses to connect and create a brand image for their product. Our findings do not differ from the finding of these studies but also indicate that connecting to consumers within the social media space can be achieved.

Table 3. Benefits of social media use for promoting Agribusiness

Benefits of Social media use	Mean	SD	RBQ	Rank
Social media services are helpful to my brand	3.844	1.417	96.875	1
Social media has made people aware of my brand	3.813	1.176	90.909	2
Social media has offered support to my brand	3.719	1.486	81.818	3
Social media has helped to acquire new customers	3.688	1.378	72.727	4
Social media has improved relationships with customers	3.688	1.491	72.727	4
Social media reduces marketing cost	3.656	1.232	54.545	6
Social media has improved my customer and audience engagement	3.594	1.456	45.455	7
Social media has given my brand a competitive intelligence	3.563	1.480	36.364	8
Social media has improved my product reputation	3.531	1.414	27.273	9
Social media has increased my sales	3.469	1.545	18.182	10
Social media introduced my brand to business partners	3.375	1.476	9.091	11

Source: Author Construct (2023) n-32 Min. - 0 Max-5

when network connectivity is favourable to both the producer and consumers. This is easily achieved when there is proper network infrastructure and data packages are cheaper. This shows that for students to optimize the full potential of social media, the barriers to its usage need to be removed.

Social Media Barriers Components. Table 5 outlines the different groups into which the social media barriers might be divided. It reveals that the barriers to the use of social media as identified by respondents in Table 4 can be grouped into three (3). The categories were connectivity, security and training, and customer relation which had four (4), fourteen (14), and two (2) variables respectively. Additionally, it was revealed that the mean score values show that connectivity (Mean = 3.305, SD = 0.983) was the major barrier to social media use. Connectivity was followed by security and training (Mean = 2.842, SD = .1.028) and customer relations (Mean = 2.313, SD = 1.148).

However, all the components were negatively skewed (connectivity -0.544, security and training - 1.228, and customer relation-.376) showing that the barriers were mildly severe to restricting students from using social media to promote their agribusiness products. Additionally, the standard error of skewness was uniform across all components as 0 .414.

Factors influencing the barriers to social media use in promoting agribusiness among final year Agribusiness students at the [University].

Table 6 shows the factors influencing the barriers to the use of social media for promoting agribusinesses. The results were placed under three (3) categories connectivity, security and training, and customer relations. The model summary for the analysis revealed that the number of respondents were the same across both the OLS and robust regression analysis.

Table 4. Barriers to social media use in promoting Agribusiness

Barriers to Social media use	Mean	SD	RBQ	Rank
Poor network connectivity	3.906	1.174	100	1
High cost of internet data	3.438	1.413	95	2
Inability to address compliance concerns	3.281	1.326	90	3
Risks associated with social media	3.188	1.378	85	4
Violation of privacy	3.219	1.408	80	5
Lack of knowledge of some social media features	2.938	1.390	75	6
Technical support difficulties	2.938	1.458	70	7
Lack of training on social media usage	2.875	1.264	65	8
Lack of internal resources to support social media	2.906	1.279	60	9
Poor reliability on social media	2.875	1.238	55	10
Cultural sensitivity to social media	2.913	1.378	50	11
Issues of mistrust towards social media marketing	3.031	1.282	45	12
Difficulty in constantly updating products on social media	2.688	1.330	40	13
Untimely provision of information	2.844	1.394	35	14
Difficulty in understanding the language used on social media	2.656	1.494	30	15
Poor organisation of social media pages	2.406	1.434	25	16
Difficulty in understanding concepts on social media	2.531	1.436	20	17
Lack of control on social media handles	2.469	1.545	15	18
Restricted communication with customers	2.469	1.344	10	19
Social media environment is unfriendly	2.156	1.322	5	20

Source: Author Construct (2023) n-32 Min. - 0 Max-5

Table 5. Social Media Barriers Components

Components	Items	Mean	SD	Skewness	Std. Err of skewness
Connectivity	4	3.305	.983	-0.544	0.414
Security and training	14	2.842	1.028	-1.228	0.414
Customer Relation	2	2.313	1.148	-0.376	0.414

Source: Author Construct (2023) n-32 Min. - 0 Max-5

The results of the robust regression across the three (3) categories revealed that they were significant at $p<0.05$, while only connectivity showed significance at $p<0.05$ for OLS. The results show that the robust regression output was better than that of the OLS.

On security and training (Table 6), it was revealed that only sex of students, monthly income, household size, and social media use were significant at $p<0.05$. The results further show that females were more likely to have issues with social media security and training compared to males Similar studies conducted by Antonio and Tuffley (2014) revealed that females were more likely to experience security and training barriers to social media use due to exclusion from technology education and design, limited free time, social norms, and financial and institutional constraints. It is challenging for females to receive training on social media security issues because of these limitations. As a result, online bullies and scammers violate the safety and privacy of women. Similar to the study of Mohamed and Ahmed (2012), females, despite being more likely to be concerned about privacy information, are less likely to adopt privacy protection due to the uniqueness that social media exerts on females and the low training received on social media use. This view is shared by other researchers in the field (Laric *et al.,* 2009; Hoy and Milne, 2010).

Again, Table 6 shows that agribusiness students with low monthly income were more likely to experience security and training challenges by 0.08 percent. This indicates that when students' incomes are low, they will be less likely to pay for training programs or security features, which will protect them in promoting their brands on social media compared to students who have high monthly incomes. Additionally, students who belong to smaller households are more likely to experience barriers of security and training by 96.8 percent compared to students with large household sizes. This indicates that students from large households are more likely to be trained in social media use and value security more. This is because students who belong to large households are likely to have low incomes from their parents or guardians (all other things being equal), and therefore their access to services such as social media serve as extra cost to be incurred for their businesses. The cost element of these students will be high compared to students from low household size. Hence, they will take the leisure of securing and training in social media. Lastly, on training and security, students who use social media are 134.40 percent more likely to experience security and training challenges than students who do not use social media for their SAPs. This is so because students who do not use social media will not have issues with social media security and will not require training on social media.

On connectivity (Table 6), our results show that age and sex are the only significant variables that predict connectivity as a barrier to social media use in promoting agribusiness products. As students age, the probability of them experiencing the barrier of connectivity in promoting their products increases by 22.54 percent. This shows that aging students are more likely to have difficulties with connectivity on social media. This is embedded in the fact that younger students are more likely to be abreast with social media issues than their older counterparts are. The findings of Karimi and Neustaedter (2012) agree with the findings of our study which revealed that older students are less receptive to new technology and social media pages due to the difficulty and changing nature of these sites. Hence, they prefer to be more isolated and have offline communication with people. Similarly, Anderson and Jiang (2018) reported that younger people use social media as a form of communication and building of relationships, which creates the opportunity for them to show new creations to a wider audience. Additionally, older people stay away from social media platforms to avoid social media theft and value social media isolation to its use.

Secondly, the results in Table 6 show that female students are more likely to have difficulty with social media use in promoting their agribusinesses compared to

Table 6. Factors influencing the barriers to social media use in promoting agribusiness

Factors	TSrobust		TSols		Conrobust		Conols		CRobust		CRols	
	dy/dx	Std.Err.	dy/dx	Std.Err.	dy/dx	Std.Err.	dy/dx	Std.Err.	dy/dx	Std.Err.	dy/dx	Std.Err.
Age	-0.0480	0.0308	-0.0140	0.1443	0.2254*	0.0901	0.1544	0.0985	0.1964*	0.0432	0.0521	0.2017
Sex	-0.6835*	0.1370	-1.2582	0.6295	-0.8943*	0.4008	-0.9537	0.4896	-0.8975*	0.1924	-0.4497	0.6881
JSM	-0.0085	0.0176	0.0448	0.0552	0.0319	0.0516	0.0435	0.0522	-0.0437	0.0247	0.0222	0.0715
MI	-0.0008*	0.0003	0.0003	0.0007	0.0007	0.0007	0.0002	0.0007	-0.0031*	0.0004	-0.0014	0.0011
SI	0.1370	0.1342	0.6967	0.3517	0.2025	0.3928	0.6211	0.4123	-1.2756*	0.1885	-0.2323	0.5772
SP	0.0246	0.0825	-0.0460	0.3314	0.2829	0.2414	0.1715	0.2234	-1.1861*	0.1159	-0.0353	0.5018
ES	-0.1615	0.1411	-0.3619	0.3853	-0.2508	0.4127	0.2486	0.5319	0.4855*	0.1981	-0.2248	0.6237
HS	-0.0968*	0.0215	-0.0862	0.0513	-0.0596	0.0629	-0.0559	0.0532	-0.1105*	0.0302	-0.0641	0.0744
SMU	1.3740*	0.1714	0.9966	0.6351	0.6782	0.5015	0.8469*	0.3173	0.7560*	0.2407	0.6733	0.9572
Model Summary												
n	32		32		32		32		32		32	
F(9, 20)	11.14		2.24		2.52		8.06		29.95		.62	
Prob> F	.0000*		.0641		.0412*		.0001*		.0000*		.7632	

Source: Author Construct (2023) n- 32 * significant at 5%

males. This can be attributed to the limited accessibility to internet sources and low training they receive regarding social media connectivity platforms. As males can move to areas with strong internet connectivity to access social media platforms, females with higher workloads and social restriction are less likely to have access to some of these areas, hence low social media connectivity (Lal, *et al.* 2021; Xiao *et al*. 2021).

Furthermore, the barriers to customer relations in promoting agribusiness through social media are presented in Table 6. The results revealed that age, sex, monthly income, source of income, point of sales, household size, employment status, and social media use were the factors that significantly influence the customer relation barrier. On age, it was revealed that as student age, they are more likely to experience customer relation barriers to social media use in promoting agribusiness by 19.64 percent. Due to fear of social media theft and other factors, elderly individuals are less inclined to interact with and make purchases from businesses online. Therefore, information flow is restrictive. Studies by Chakraborty *et al*. (2013) and Boll and Brune (2016) have also shown that older people are less likely to communicate with clients through online platforms compared to offline mode due to issues of trust.

On sex of students, the results indicate that females are 89.75 percent more likely to experience customer relation barriers compared to males. This is because males, unlike females, are more likely to receive favorable customer relations treatment on social media than females due to high chance of females being treated as the product rather than the agribusiness product sole. Additionally, males have a strong personality in demanding proper customer treatment (Tsai and Men, 2013; Nadeem *et al*., 2015), while females are more likely to offer better customer services to their customers (Hanna *et al.,* 2011;

Kietzmann *et al*., 2011). Additionally, as the monthly income of students increase their chances of experiencing customer relation barriers increase. This is because as student entrepreneurs earn more, they become more reluctant to ensure customer relations through their social media handles. This causes most of them to lose clients.

Kietzmann *et al*. (2011) noted that as entrepreneurs improve their customer relationships even with an online customer base, they improve their brand and sales volume. In addition, agribusiness students who obtain income from other sources other than their parents are more likely to experience customer relation barriers in social media in promoting agribusiness products by 127.56 percent. This is because students who do not receive income from their parents have irregular income inflows, which makes it difficult to address customer relations issues such as refunds, hence becoming a barrier to effectively using social media to promote their businesses (Khamis *et al*., 2017). Lastly, agribusiness students who do not promote their products through social media are 118.61 percent more likely to experience customer relation barriers. According to Rokka *et al*. (2014) and Dwivedi *et al*. (2021), social media sometimes reduces the contact the business owner has with a client which provides the business owner time to do research and address client concerns compared to business owners who have direct contact with clients.

In order to understand how people use media channels to meet their personal requirements, our study relied on the use and pleasure theory (Katz and Blumler, 1974), a utility mass communication theory. The findings offer empirical support for the usefulness of the use and pleasure theory for evaluating the advantages and disadvantages of social media use among final-year Agribusiness students in building their brand identities. Our study revealed that the Agribusiness students relied on the benefits of various social media platforms to address the need to make people aware of their brands, acquire new customers and clients and reduce marketing, promotion and advertising cost. Our results also show that Agribusiness students depended on the assumption of the use and gratification theory that, media users are active and goal-oriented, select media based on their expectations and the ability of media to meet their needs, the social context in which the said media is used, as well as personality, which influences their choices. The Audience attention is competed for by various media available and audience are influenced by media since they play an active role in what they consume (Katz *et al*., 1973).

Conclusion and Recommendation

Exploring how university students are leveraging the potential of social media to promote entrepreneurship is critical in this internet-driven era. This is because the internet has made it easy for business owners to connect with customers and clientele virtually for transactions to transpire. The insurgence of social media serves as a catalyst for connecting to new and existing customers using varied mediums such as short videos, audio, use of flyers, and many more.

The study sought to assess the use of social media among final-year agribusiness students at the Univerity of Cape Goast, Ghana in promoting their business brands. Most of the students involved in the study were males as compared to females. Students utilize several mediums to promote their agribusiness enterprises which include online and offline mediums with the majority being unemployed. Additionally, students mainly obtain their income from two identified sources namely family income sources and income from sales of products from personal businesses.

A sizeable portion of the students in the study use social media primarily on smartphones. The promotion of corporate brands, raising awareness of corporate brands, and supporting students' corporate brands are three major advantages of social media use among students. The main obstacles to using social media that were found in the study were poor network access, hazards related to using social media, high internet costs, and the inability to address compliance issues. Furthermore, connectivity, security and training, and customer relations were the factors that influenced social media use among final-year agribusiness students involved in the study.

It is recommended that interventions that promote females' involvement in agriculture be established to encourage more female students to participate in agribusiness education. As such, universities should prioritize providing systems (agribusiness hubs) with proper internet connectivity and needed logistics to enable agribusiness students to have the flexibility to develop and promote their business ideas into brands. Again, efforts should be made by the university and the department to address the barriers associated with social media use among students by connecting with service providers to provide students with high-quality internet services at reasonable prices to encourage students to use social media to promote their agribusiness competitive brands.

The University of Cape Coast through the Department of Agriculture, Economics, and Extension should organise social media training for students to improve their social media skills. The scope of this research is limited to final year agribusiness students at the UCC, thus further students can consider investigating all college students engaging in entrepreneurial activities while in school. Again, a further study can assess students' social media use in all universities across the country to ascertain any variations among schools, students, and location of institutions. Educators, policymakers, and industry players within the field of agribusiness and social media ecosystem will need to factor in the results of this study, to advance the development of course content in the field of agribusiness practicum and trainings. Policy decision making and pedagogy experts will need to further support similar studies across universities to validate and further understand the phenomena unravelled as shown in the results culminated from this study.

Statement of No-Conflict of Interest:

The authors declare no conflicting interest.

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