

AFRICAN JOURNAL OF ACCOUNTING AND SOCIAL SCIENCE STUDIES (AJASSS)

Volume 4

Issue No. 2

2022



Tanzania Institute of Accountancy (TIA)
P. O. Box 9522, Dar es Salaam, Tanzania
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Volume 4 Issue No. 2 ISSN 2591-6815

Published by the Tanzania Institute of Accountancy

P.O. Box 9522, Dar Es Salaam,

TANZANIA

**TANZANIA INSTITUTE OF ACCOUNTANCY
(TIA)**



**AFRICAN JOURNAL OF ACCOUNTING AND SOCIAL
SCIENCE STUDIES (AJASSS)**

Volume 4 Issue No. 2

December 2022

ISSN 2591-6815

eISSN2591-6823 ONLINE

**Published by the Tanzania Institute of Accountancy
P.O. Box 9522, Dar Es Salaam, TANZANIA**

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**AFRICAN JOURNAL OF ACCOUNTING
AND SOCIAL
SCIENCE STUDIES (AJASSS)**

ISSUED TWICE A YEAR

EVERY JUNE AND DECEMBER

**AFRICAN JOURNAL OF ACCOUNTING
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Quality Assurance Practices in the Time of COVID 19: What Works in Tertiary Institutions in Tanzania

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Abstract

Despite natural disasters like COVID-19, tertiary institutions around the world should be more responsive and use a proactive approach to quality assurance. The COVID-19 eruption halted the operation of normal classrooms. Teaching was done from home, although many teachers were not aware of online facilitation. The current study examined the practice of quality assurance in Tanzanian tertiary institutions following COVID-19 eruption from 2020 to 2021. To achieve this, the study adopted a mixed-methods approach with the help of a sequential explanatory research design. The study involved 113 respondents, obtained randomly from four tertiary institutions. The study adopted an automated questionnaire and semi-structured interviews for collecting data from the respondents. The two methods of data collection enabled the gathering of voluminous information with little bias. The data were analysed descriptively and by using content analysis for qualitative data. Results from this study revealed that both external and internal mechanisms were adapted to varying degrees in the practice of quality assurance amid COVID-19. They also reveal that some tertiary institutions have adopted a blended online mode of teaching and learning. However, it was not successfully implemented because most tertiary institutions lacked the necessary resources and personnel to use digitalisation in teaching and learning. According to the study, digitalisation quality assurance systems should be improved further to overcome the current situation and the future effects of unpredictable disasters. Furthermore, higher education institutions must improve open and remote e-communication between tutors and students.

Key words: quality assurance, internal mechanism, external mechanism, COVID-19 mayhem, and tertiary institutions.

Received: 25-09-2022

Accepted: 30-11-2022

Published: 31-12-2022

<https://dx.doi.org/10.4314/ajasss.v4i2.10>

Use of Social Media to Improve Marketing Performance of Selected Manufacturing Firms in Tanzania: Evidence from Coastal Region

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ABSTRACT

The purpose of this study was to examine the effect of social media marketing on marketing performance of the manufacturing companies in Tanzania. Specifically, the study aimed to examine the effect of social media strategy, active presence and customer engagement initiatives on the marketing performance of selected manufacturing companies in Coastal Region. The study used social penetration theory. Quantitative research approach and cross sectional research design was used. A sample of 138 respondents was selected from 29 manufacturing companies in Coastal Region using simple random sampling technique. A structured questionnaire was used for collecting primary data. Data were analysed by using the Statistical Package for Social Science (SPSS) to compute descriptive statistics and undertake multiple linear regression. The results show that social media strategy had positive and significant relationship with marketing performance ($B = 0.539, p = 0.000$). Moreover, the results show that there was positive and significant relationship between active presence in social media and the marketing performance of the manufacturing companies ($B = 0.620, p = 0.001$). Furthermore, the findings show that there was positive and significant relationship between customer engagement initiatives in social media and marketing performance of the manufacturing companies ($B = 0.919, p = 0.000$). The study concludes that social media strategy, active presence and customer engagement initiatives in social media have positive effect on the marketing performance of the manufacturing companies. The study recommends that manufacturing companies should make sure social media strategy, active presence and customer engagement initiatives become part of the marketing strategies in order to increase marketing performance.

Keywords: Social Media Strategy, Marketing Performance, Manufacturing Companies.

Received: 25-09-2022

Accepted: 30-11-2022

Published: 31-12-2022

<https://dx.doi.org/10.4314/ajasss.v4i2.11>

1.0 Introduction

In recent years the marketing function has been under increased pressure to achieve marketing performance (Adeola et al., 2020; Suharto et al., 2022). Top management in the manufacturing companies is more concerned with the marketing performance because it helps to ensure survival of the business as it increases competitive advantage (Koski et al., 2019). Marketing performance captures customer-based market outcomes that result from customers' purchase and post-purchase behaviours that are facilitated by social media and includes such outcomes as new customer acquisition, customer satisfaction, customer services, sales and customer loyalty (Salimi et al., 2019). In order to increase marketing performance, firms are engaged in the use of social media marketing to foster marketing performance (Kazungu et al., 2017).

Globally, billions of people used social media as one of the essential tools for communication (Appel et al., 2020; Ibrahim, 2022). Various marketing opportunities have emerged due to increasing use of social media as an essential marketing tool (Gunawan and Sulaeman, 2020; Suharto et al., 2022). The use of social media is considered to be an important tool for the company to interact with customers, understand customer behaviour and respond to customers' request (Adeola et al., 2020; Tafesse and Wien, 2018). Most of the companies have invested in social media for the purpose of improving strategic marketing goals for example to obtain new customers, understand customers' needs and ensure maximum customer satisfaction (Oztamur and Karakadilar, 2014). The use of social media requires interactivity and engagement activities between company and its customers; the company should engage with customers for the purpose of obtaining strategic marketing goals (Tafesse and Wien, 2018; Liu et al., 2019). Social media improve customer interactions; for example social media play significant contribution to increase customers subscribing to the social media pages of the company (Mhilu and Lyimo, 2019; Liu et al., 2019), and engaging with the company content is an important requirement for the company to achieve customer-based market results (Rizvan et al., 2022). The success in marketing performance for most of the businesses is a result of social media (Kim and Chae, 2018; and Gunawan and Sulaeman, 2020). Social media are important for increasing in marketing performance of the company because they help to provide familiarity and closeness with virtual interaction (Adeola et al., 2020; Galati et al., 2017; Suharto et al., 2022).

In the context of the manufacturing sector, most of the companies do not use social media as strategic marketing tools to foster performance (Koski et al., 2019). For example, in Tanzania, most of the manufacturing companies use social media

because of their free availability and easy adaptation into the businesses environment (Wangwe et al., 2014; and Gunawan and Sulaeman, 2020; and Galati et al., 2017). There is a serious challenge in integrating social media and marketing performance in the manufacturing sector (Kazungu et al., 2017).

Despite social media playing a significant contribution to increasing marketing performance of the companies from the various sectors (Tafesse and Wien, 2018), in the context of manufacturing sector, little is known about relationship between social media and marketing performance of the manufacturing companies; this is not well documented (Wangwe et al., 2014). It is important to understand the effect of social media on marketing performance of the manufacturing companies because the sector has significant contribution to the economy. The manufacturing sector can employ large numbers of low-to-medium skilled workers (Koski et al., 2019). Moreover, the sector contributes to technological change and productivity growth, thus exhibiting positive learning and process development opportunities (Alam, 2022).

Moreover, the existing studies on social media and marketing performance are mainly from developed countries like the USA, United Arab Emirates (UAE) and Turkey (Kim and Chae, 2018). Besides, studies in the manufacturing sector are scarce (Koski et al., 2019). On the other hand, there is no consensus among scholars regarding the effect of social media strategy on marketing performance. For example, Tafesse and Wien (2018) and Oztamur and Karakadilar (2014) found a direct effect of social media strategy on marketing performance, but Krisnanto (2020) and Chanthinok et al. (2015) found an indirect effect. Also, there are mixed findings on the effects of active presence in the social media on marketing performance. For example, Tsimonis and Dimitriadis (2014) and Gunawan and Sulaeman (2020) found that active presence has positive and significant effect on marketing performance, but Bauman (2020) and Ahmad et al. (2019) found that active presence has insignificant effect on marketing performance. Moreover, previous studies on the effect of social media customer engagement initiatives on marketing performance show contradicting findings. For example, Li et al. (2019) and Kim and Chae (2018) found positive and significant relationship between social media customer engagement initiatives and marketing performance, but Chirumalla et al. (2018) found an indirect effect. Therefore, this study aimed to examine the impact of social media on marketing performance of the manufacturing companies in Coastal Region.

2.0 Theoretical Framework

This study used the social penetration theory. This theory was developed by Altman and Taylor during 1973 (Salimi et al., 2019). Previous studies such as ones by Gunawan and Sulaeman (2020), Kim and Chae (2018), Koski et al. (2019), and Mhilu and Lyimo (2019) used the theory to explain the influence of social media on the marketing performance. The theory proposes that companies which invest in social media for the purpose of improving strategic marketing goals for example obtain new customers, understand customers' needs and ensure maximum customer satisfaction (Oztamur and Karakadılar, 2014; Savitri et al., 2022). Various marketing opportunities have emerged due to increasing use of social media as an essential marketing tool (Tsimonis and Dimitriadis, 2014; Rizvan et al., 2022). The use of social media is considered to be important for the company to interact with customers, understand customer behaviour and responded to customers' requests (Adeola et al., 2020). Social penetration theory allows the manufacturing companies to know customer behaviour (Ahmad et al., 2019). Manufacturing companies do not use social media as strategic marketing tools to foster performance (Koski et al., 2019); they use social media because of their free availability and easy adaptation to the businesses environment (Galati et al., 2017).

Marketing performance is affected by social media strategy, active presence in social media and social media customer engagement (Oztamur and Karakadılar, 2014). Krisnanto (2020) described social media strategy as a company's plans intended to develop social media content, track customers' requests, and satisfy and respond to customer request through the use of social media. On the other hand, Li et al. (2019) explain social media strategy as the plan for increasing customer engagement and interactions. According to Narayanaswamy and Heiens (2022), the dimensions of social media strategy are key performance goals, social media, identity of target audience, and marketing strategy alignment. Adeola et al. (2020) believe that the social media strategy facilities increase marketing performance because they help to establish performance expectations and marketing objectives which strengthen the commitment of the company and better decision making in the organization. Therefore, this study defines social media strategy as a detailed blueprint intended to increase customer engagement, interactions in the social media and increase marketing performance. The following hypothesis statement was formulated.

H₁: Social media strategy has positive effect on marketing performance of manufacturing companies.

On the other hand, active presence in social media contributes to marketing performance (Kim and Chae, 2018). Gunawan and Sulaeman (2020) describe active

presence in social media as a process of frequent generating internet content, interacts with on a regular basis with the customers, and raising various marketing campaign ideas. Also, Sulaeman (2020) considers active presence in social media as the act of frequent creating brand stories in the social media, for the purpose of generating and improving the company's relationship with the customers through effective communication. According to Chirumalla et al. (2018) and Cheng and Shiu (2020), active presence in social media requires effective social media post and responding to customer requests. The dimensions of active presence in social media involve regular posting schedule, frequent posts and sufficient content (Ibrahim, 2022; Ahmad et al., 2019). Active presence in social media plays an essential role to increase marketing performance through exposing the products to a large number of the customers (Bauman, 2020; Chanthinok et al., 2015). Moreover, active presence in social media may increase marketing performance of the company because it helps to increase product awareness which plays significant contribution to increase marketing performance (Sulaeman, 2020; Narayanaswamy and Heiens, 2022). Therefore, this study considers active presence in social media as the act of developing content and engaging with customers in the social media on a regular basis for the purpose of increasing marketing performance. The following hypothesis statement was formulated.

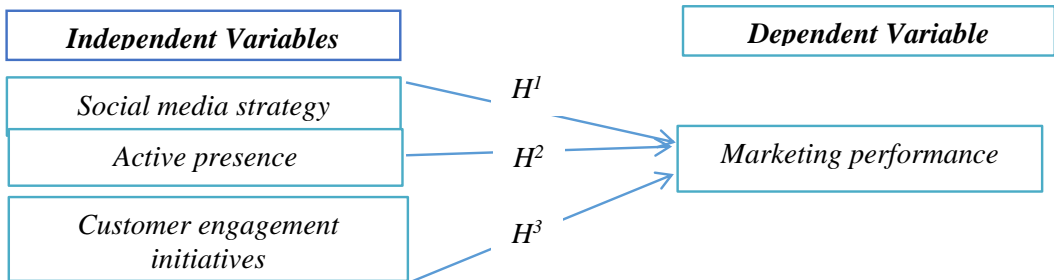
H₂: Active presence in the social media has positive effect on marketing performance of manufacturing companies.

Moreover, marketing performance is affected by social media customer engagement (Bauman, 2020). Chirumalla et al. (2018) believe that customer engagement is the process in which the company interacts with the customers by responding to customer requirements for the purpose of understanding customers' need and satisfy them. Similarly, Gunawan and Sulaeman (2020) define customer engagement as the process which involves customer involvement in products of the company. Moreover, Pourkhani et al. (2020) describe customer engagement initiatives as efforts made by the company in intermingling with customers within the social media and being active to respond to customers' comments in order to increase marketing performance. Chirumalla et al. (2018) identified the dimensions of customer engagement initiatives as customers' interactions, acknowledgement of customers, and active response and interesting contents. Therefore, this study defines customer engagement initiatives as an effort made by the company in providing content on the social media platforms. The following hypothesis statement was formulated.

H₃: Customer engagement initiatives in the social media have positive effect on marketing performance of manufacturing companies.

Based on the previous studies such as ones by Oztamur and Karakadılar (2014), Krisnanto (2020), and Pourkhani et al. (2020); social media strategy, active presence and customer engagement initiatives contribute to increasing marketing performance. Similarly, this study assumes that the independent variables are social media strategy, active presence and customer engagement initiatives. Figure 1 shows the conceptual framework of the study.

Figure 1: Conceptual Framework



Source: Oztamur and Karakadılar (2014); Krisnanto (2020).

3.0 Research Methodology

This study used cross-sectional research design. Under this research design the researcher measures the outcome and the exposures in the study participants at the same time (Tharenou et al., 2007). On the other hand, Greener and Martelli (2015) affirm that the major aim of cross-sectional research allows the causal and effect relationship between variables. Therefore, this study used cross sectional research design because it intended to establish the relationship between marketing performance and three variables, namely social media strategy, active presence and customer engagement initiatives in manufacturing companies. The study adopted quantitative approach in order to establish the relationship between variables.

The study was conducted in manufacturing companies in Coastal Region. Because the official list of manufacturing firms in Tanzania that sell products through social media was not available, this study used convenience sampling to obtain the sample from Coastal Region. To ensure that the sample was valid, they were pre-screened by being asked whether they sold products through social media channels or used social media as a marketing tool. Only firms which indicated they performed these activities in social media were selected. A total of 29 manufacturing firms qualified.

The population of the study involved employees from the 29 manufacturing firms. The unit of analysis involved employees from marketing departments who were responsible for day to day marketing activities of the companies. Thus, this study

used Stevens (1996) formula in equation (i) to estimate sample size because the study intended to use multiple regression to establish the relationship between variables as proposed by Pourkhani et al., (2020). According to Stevens (1996), the sample size used for multiple regression was obtained as follows:

$$n = 50 + 8m \dots\dots\dots (i)$$

Whereby:

n = Sample size for multiple regression, and m = Sum of indicators for all independent variables. The sum of indicators for all independent variables in this study was 11 variables. Therefore, the sample size for this study was calculated as follows:

$$n = 50 + 8(11) \dots\dots\dots (ii)$$

$$n = 138$$

The study used simple random sampling to select employees from manufacturing companies who were involved in the day to day marketing activities. Respondents were picked from lists of employees using a table of random numbers. Then the researcher administered a close-ended questionnaire to gather information from selected respondents. A self-administered questionnaire survey method was used for data collection. A total of 138 questionnaire copies were distributed to the respondents. However, a total of 129 usable questionnaires were returned at the end, yielding a 93.5% response rate.

The dimensions used in this study involved social media strategy, active presence, customer engagement initiatives and marketing performance, which are shown in Table 2.

Table 2: Measurement of the Variables

Variables	Dimensions	Sources
Social media strategy	<ul style="list-style-type: none"> • Key performance goals • Social media programme • Identify target audience • Marketing strategy alignment 	Adapted from Tafesse and Wien (2018); Li et al. (2019); Adeola et al. (2020); Pourkhani et al. (2020); Chirumalla et al., (2018).
Active presence	<ul style="list-style-type: none"> • Regular posting schedule • Frequent posts • Sufficient content 	Adapted from Gunawan and Sulaeman (2020); Tafesse and Wien (2018); Suharto et al. (2022)
Customer engagement initiatives	<ul style="list-style-type: none"> • Customers interaction • Acknowledge customers • Active respond • Interesting contents 	Adapted from Mhilu and Lyimo (2019); Tafesse and (2018); Pourkhani et al. (2020); Chirumalla et al. (2018) and Gunawan and Sulaeman (2020).

Marketing performance	<ul style="list-style-type: none"> • Customer satisfaction • New customers • Customer services • Increased sales • Customer loyalty 	Adapted from Salimi et al. (2019); Tafesse and Wien (2018); Koski et al. (2019); Ahmad et al. (2019)
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The process of data analysis was aided by the Statistical Package for the Social Sciences (SPSS 21). The study used descriptive and multiple regression techniques as used applied by Mazengo and Mwaifyusi (2021), Salimi et al. (2019), and Gunawan and Sulaeman (2020). The multiple regression analysis model that was used was appropriate because all explanatory variables involved a number of predictors. Therefore, the following equations were used:

$$MP = f(Sms, Ap, Cei) \dots \dots \dots (iii)$$

Whereby; MP = Marketing performance, Sms = Social media strategy; Ap = Active presence and Cei = Customer engagement initiatives.

This relationship is also shown in the following structural equation:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \dots + \beta_nX_n + \epsilon_i \dots \dots \dots (iv)$$

Whereby Y= Dependent Variable; X₁, X₂, X₃ = Independent variables; β₁, β₂, β₃= Constant regression term; β₀ = Regression coefficient; ε_i= Error term

This relationship can also be represented by the following empirical equation:

$$MP = \beta_0 + \beta_1Sms + \beta_2Ap + \beta_3Cei + \epsilon_i \dots \dots \dots (v)$$

Since Sms, Ap and Cei are composites, further analysis is given in the following equation

$$MP = \beta_0 + \beta_1Keg + \beta_2Smp + \beta_3Ita + \beta_4Msa + \beta_5Rps + \beta_6Fp + \beta_7Sc + \beta_8Ci + \beta_9Ac + \beta_{10}Ar + \beta_{11}Ic + \epsilon_i \dots \dots (vi)$$

Whereby independent variables are represented as:

Keg = Key performance goals, Smp = Social media programme, Ita = Identify target audience, Msa = Marketing strategy alignment, Rps = Regular posting schedule, Fp = Frequent posts, Sc = Sufficient content, Ci = Customers interaction, Ac = Acknowledge customers, Ar = Active respond and Ic = Interesting contents.

3.1 Preliminary Tests

The study established effects of social media strategy, active presence and customer engagement initiatives in the social media on the marketing performance of manufacturing companies by using multiple regression as suggested by Gunawan and Sulaeman (2020), Li et al. (2019), and Adeola et al. (2020). Therefore, the study tested multiple regression assumptions before adopting the techniques. These assumptions are autocorrelation, multivariate normality, multicollinearity and linear relationships as Adeola et al. (2020) advise. Also, the study tested for multivariate outliers check, reliability and validity test as suggested by prominent scholars, such as Tafesse and Wien (2018) and Li et al. (2019).

3.1.1 Autocorrelation Test

Testing for autocorrelation assumption was conducted by using Durbin-Watson Statistic as proposed by Lin and Tu (2020); Kabaila et al. (2021); and Turner (2020). The results from the model summary for Durbin-Watson in Table 3 show that the Durbin-Watson (DW) value was 2.202. Turner (2020) suggests that a DW value that is approximated or equal to 2 denotes that there is no statistically significant autocorrelation. Thus, this study did not violate autocorrelation assumption because the DW value was 2.202.

Table 3: Model Summary for Durbin-Watson

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.931 ^a	.866	.863	22.47831	2.202

a. Predictors: (Constant), Customer Engagement, Active Presence, Social Media Strategy

b. Dependent Variable: Marketing Performance

Source: Estimates from SPSS

3.1.2 Multivariate Normality Test

The study used kurtosis and skewness statistics to test for normality assumption as it is suggested by previous studies such as ones by Tafesse and Wien (2018), Koski et al. (2019), and Ahmad et al. (2019). According to Enomoto et al. (2020), the absolute values for both skewness and kurtosis of ± 2 indicate that the normality assumption was not violated. However, the general rule of thumb is that the absolute values for both skewness and kurtosis of ± 7 are accepted (Kim, 2020; Orcan, 2020; and Gorecki et al., 2020). The findings in Table 4 reveal that the values of both skewness and kurtosis fell within the recommended range of ± 7 . The findings show that skewness was within absolute values ranging from 1.836 to 2.360. Moreover, the findings indicate that kurtosis was within absolute values ranging from 0.865 to

2.582. The findings imply that normality assumptions in this study were not violated.

Table 4: Skewness and Kurtosis Statistics

		Social Media Strategy	Active Presence	Customer Engagement	Marketing Performance
N	Valid	129	129	129	129
	Missing	0	0	0	0
Skewness		1.864	1.836	1.952	2.360
Std. Error of Skewness		.213	.213	.213	.213
Kurtosis		1.158	0.865	2.582	2.089
Std. Error of Kurtosis		.423	.423	.423	.423

Source: Estimates from SPSS

3.1.3 Multicollinearity Assumption

This study used Variance Inflation Factors (VIFs) and Tolerances to test for multicollinearity assumption as proposed by Homocianu et al. (2020). The study was free from multicollinearity in case of tolerance values as they were higher than 0.2 and VIF values did not exceed 4.0 (Shrestha, 2020; Tirink et al., 2020). The results in Table 5 reveal that all tolerance values for social media strategy active presence and customer engagement were greater than 0.2 and VIF values did not exceed the threshold value. Therefore, multicollinearity was not violated in this study because all value of for tolerances and VIF fell below the threshold values.

Table 5: Tests of Multicollinearity

Model	Collinearity Statistics	
	Tolerance	VIF
Social Media Strategy	.789	1.267
Active Presence	.756	1.322
Customer Engagement	.810	1.235

a. Dependent Variable: Marketing Performance

Source: Estimates from SPSS

3.1.4 Test for Linearity Assumption

Pearson Correlation was employed for linearity test emulating Gunawan and Sulaeman (2020) and Tafesse and Wien (2018). The findings in Table 6 reveal that the correlations between market performance of the manufacturing companies and social media strategy, active presence in social media, and customer engagement initiatives were ($r = 0.892, p < 0.000$), ($r = 0.888, p < 0.000$), and ($r = 0.852, p < 0.000$).

<0.000) respectively. The findings suggest that the linearity assumption was not violated in this study.

Table 6: Correlations Coefficients

		Social Media Strategy	Active Presence	Customer Engagement	Marketing Performance
Social Media Strategy	Pearson Correlation	1	.996**	.765**	.892**
	Sig. (2-tailed)		.000	.000	.000
	N	129	129	129	129
Active Presence	Pearson Correlation	.996**	1	.756**	.888**
	Sig. (2-tailed)	.000		.000	.000
	N	129	129	129	129
Customer Engagement	Pearson Correlation	.765**	.756**	1	.852**
	Sig. (2-tailed)	.000	.000		.000
	N	129	129	129	129
Marketing Performance	Pearson Correlation	.892**	.888**	.852**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	129	129	129	129

** . Correlation is significant at the 0.01 level (2-tailed)

Source: Estimates from SPSS

3.2 Validity and Reliability Test

Content Validity: The study conducted comprehensive literature review to ensure content validity as proposed by Daud (2021) and Houts et al., (2020). Therefore, in this study, comprehensive literature review was conducted regarding social media strategy, active presence in the social media, customer engagement initiatives in the social media and marketing performance of the manufacturing companies.

Face Validity: This is a situation in which the research instrument measures accurately what it is required to measured (Hesamian and Akbari, 2020). In this study, face validity was tested by looking at the research instrument as proposed by Tharenou et al., (2007).

Construct Validity: According to Daud (2021), construct validity is divided into two groups, namely convergent and discriminant validity. Therefore, convergent as well as discriminant validity was conducted in this study.

Convergent Validity: According to Young and Keith (2020), Exploratory factor analysis (EFA) and correlation analysis are the best methods for examining convergent validity. Therefore, this study employed EFA and correlation analysis to measure convergent validity. EFA is used to measure convergent validity through

assessment of the factor loadings (Venter et al., 2018; Young and Keith, 2020). According to Young and Keith (2020), factor loadings should be greater than 0.5, in order to comply with convergent validity. The results in Table 4.20 show EFA with factor loadings for social media strategy, active presence, customer engagement and marketing performance. The loadings were greater than 0.5; the findings suggest that convergent validity was met.

Moreover, the results from correlation analysis in Table 6 show that the correlation between marketing performance and social media strategy was $r = 0.892$, and the correlation with active presence in social media was $r = 0.888$, the correlation with customer engagement was $r = 0.852$). Strong correlation in all variables implies that convergent validity was not violated (Bornmann and Tekles 2021; Young and Keith, 2020).

Discriminant Validity: According to Thuynsma and De Beer (2017), discriminant validity can be measured by using Average Variance Extracted (AVE). Therefore, in this study the AVE values for all constructs were compared with the square of the correlations between the constructs as recommended by Grobler and Joubert (2018). The results in Table 8 show that the AVE values for social media strategy, active presence in social media, customer engagement initiatives and marketing performance of the manufacturing companies were greater than the squared correlation coefficient. The results suggest that discriminant validity was not violated.

Findings from Exploratory factor analysis (EFA): Shrestha (2021) suggests that it is necessary to conduct Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of sphericity before factor analysis. This is important to identify the fitness of the data for factor analysis. Therefore, KMO and Bartlett's Test of sphericity were conducted in this study. The results in Table 7 reveal that the KMO value was 0.768 which suggests that the data were fit for EFA. Moreover, Bartlett's Test was applied to find whether the correlation matrix was not an identical matrix as proposed by previous studies such as ones by Ze-Hui et al. (2020) and Williams et al. (2010). The results in Table 6 show that Bartlett's test for sphericity was highly significant ($p \leq 0.000$). The results suggest that all variables used in this study related to each other, thus the variables were suitable for EFA (Shrestha, 2021).

Table 6: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.768	
Bartlett's Test of Sphericity	Approx. Chi-Square	985.613
	Df	6
	Sig.	.000

Source: Estimates from SPSS

Table 8 shows EFA with factor loadings for all variables, namely social media strategy, active presence in social media, customer engagement initiatives and marketing performance were above the threshold value of 0.5. Also, Cronbach's alpha and AVE values were above the threshold values. This suggests that discriminant validity and convergent validity were not violated.

Table 8: Factor Analysis

Variable	Loading	Cronbach's α	AVE
Social Media Strategy		.890	.862
Key Performance Goal	.519		
Social Media Programme	.791		
Identify Target Audience	.752		
Marketing Strategy Alignment	.594		
Active Presence		.892	.878
Regular Posting Schedule	.767		
Frequent Posts	.727		
Sufficient Contents	.716		
Customer Engagement		.951	.828
Customers Interaction	.699		
Acknowledge Customers	.492		
Active Respond	.718		
Interesting Contents	.705		
Marketing Performance		.933	.817
Customer Satisfaction	.754		
New Customers	.703		
Customer Services	.524		
Increased Sales	.602		
Customer Loyalty	.659		

Extraction Method: Principal Component Analysis.

Source: Estimates from SPSS.

Reliability Test: This study used Cronbach's Alpha coefficient to test internal consistency. The cut-off point of 0.7 and above was used as recommended by Hair et al. (2016). The findings in Table 4.20 show that Cronbach's alpha values for all constructs of social media strategy, active presence in the social media, customer engagement initiatives in the social media and marketing performance were above 0.7 as recommended by Hair et al., (2010). The findings suggest that reliability of the instruments was not violated in this study, since all the Cronbachs' alpha values fell within the acceptable threshold values.

4.0 Findings

4.1 Demographic Characteristics

The study identified age of the respondents in order to show their influence on use of social media. The descriptive findings indicate that 32.6% of the respondents were aged between 25 to 34 years. The findings in Table 9 show that 25.6% of the respondents were aged between 35 to 44 years. Moreover, the study found that 17.1% of the respondents were aged between 18 to 24 years and 14.7% of the respondents were aged between 45 to 54 years. Furthermore, the study found that a small number of the respondents (10.1%) had 55 years and above. The findings imply that young employees are more involved in social media activities of the manufacturing companies.

On the other hand, the study identified experience of the respondents in manufacturing companies in order to show their influence on social media use. The results show that the majority of the respondents (70.5%) had 5 years and above of experience of working in manufacturing companies. Descriptive findings in Table 9 indicate that 27.1% of the respondents had been working in manufacturing companies for 3 to 4 years. Moreover, the study found that a small number of the respondents (2.3%) had been working in manufacturing companies for 1 to 2 years. The results imply that employees involved in social media use had good experience of working in manufacturing companies.

Table 9: Demographic Characteristics of the Respondents

Age	Frequency	Per cent
18-24	22	17.1
25-34	42	32.6
35-44	33	25.6
45-54	19	14.7
55 and above	13	10.1
Total	129	100.0
Job Experience		
1-2 Years	3	2.3
3-4 Years	35	27.1
5 and above	91	70.5
Total	129	100.0

Source: Estimation Using SPSS.

4.2 Descriptive Statistics

Table 10 presents findings of descriptive analysis for social media strategy, active presence in the social media, customer engagement initiatives in the social media and marketing performance in terms of number of observations, minimum value, maximum, value, mean and standard deviation.

Table 10: Descriptive Statistics

Variables	n	Minimum	Maximum	Mean	Std. Deviation
Social media strategy	129	5.00	311.00	8.4219	33.13010
Active presence	129	4.00	318.00	6.5036	51.32749
customer engagement initiatives	129	4.00	328.00	11.6826	32.76591
Marketing performance	129	3.00	489.00	17.3781	56.79766
Valid N (listwise)	129				

Source: Estimation Using SPSS.

The results show that all the variables studied had a total of 129 observations. Also, the findings show that the minimum value for social media strategy was 5.0, while the maximum value was 311.00, with a mean of 8.4219 and a standard deviation is 33.13010. On the other hand, the findings indicate that active presence had a minimum value of 4, a maximum value of 318.00, a mean value of 6.5036 and a standard deviation 51.32749. Moreover, customer engagement initiatives had a minimum value of 4, a maximum value of 328.00, a mean value of 11.6826 and a standard deviation 32.76591. Furthermore, the maximum and minimum values for marketing performance were 3.0 and 489.00 respectively, the mean value was 17.3781 and the standard deviation was 56.79766.

4.3 Findings from Multiple Regression

The results in Table 11 show a coefficient of determination (R^2) of 0.866. The results suggest that 86.6% of marketing performance of the manufacturing companies was explained by the three independent variables, namely social media strategy, active presence in social media, and customer engagement initiatives.

Table 11: Coefficients of Determination

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.156	2.123		7.545	.001
	Social Media Strategy	.539	.582	.364	8.925	.000
	Active Presence	.620	.579	.214	7.552	.001
	Customer Engagement	.919	.114	.412	8.055	.000

a. Dependent Variable: Marketing Performance

$$R^2 = .866$$

Source: Estimates from SPSS.

4.4 Discussion

4.4.1 Social Media Strategy and Marketing Performance

The first objective of the study aimed to examine the effect of social media strategy on the marketing performance of the selected manufacturing companies. The findings show that social media strategy had positive and significant relationship with marketing performance of the manufacturing companies (beta value 0.539, $t = 8.925$, $p = 0.000$). The findings suggest that a unit increase in social media strategy would lead to 0.539 increases in the scores of marketing performance of the manufacturing companies. This is consistent with the social penetration theory due to positive relationship between social media strategy and marketing performance. This is related to findings of a study by Li et al. (2019) which affirmed that social media strategy has positive and significant relationship with marketing performance. Another study by Adeola et al. (2020) affirmed that the major aim of social media strategy is to increase marketing performance through aligning social media with the company's marketing objectives. Also, Chirumalla et al. (2018) agree that social media strategy facilitates increase marketing performance because they help establish performance expectations and marketing objectives which reinforce goal commitment and better decision making in the organization.

The findings are consistent with Hypothesis 1 which states that social media strategy has positive effect on marketing performance of manufacturing companies. This relates to findings of a study by Pourkhani et al. (2020) which asserts that social media strategy is important for strategic marketing goals of the company as it plays an essential role to increase marketing performance. According to Li et al. (2019), social media strategy is very important to coordinating company social media operations through identifying a coherent structure and line of communication.

4.4.2 Active Presence in the Social Media and Marketing Performance

The second objective of the study intended to analyse the effect of active presence in the social media on the marketing performance of the selected manufacturing companies in Coastal Region. The findings from Coefficients of Determination show that there was positive and significant relationship between active presence in social media and the marketing performance of the manufacturing companies (beta value = 0.6202, $t = 7.552$, $p = 0.001$). The results show that a unit increases in active presence in social media would lead to 0.6202 increases in the scores of marketing performance of the manufacturing companies. This is consistent with the

social penetration theory due to positive relationship between active presence in the social media and the marketing performance.

The results relate to findings of a study by Sulaeman (2020) who found active presence in social media to have positive and significant relationship with market performance. The act of frequent creating brand stories in the social media, for the purpose of generating and improving the companies' relationship with the customers through effective communication, contributes to increasing market performance (Cheng and Shiu, 2020).

The findings are consistent with Hypothesis 2 which states that active presence in the social media has positive effect on marketing performance of manufacturing companies. According to Salimi et al., (2019), active presence in social media may increase marketing of the company because it helps to improve brand connections and mutual trust by facilitating opportunities for regular interactions between the company and its customers. Tafesse and Wien (2018) believe that active presence in social media provides best chances for companies to prioritize and provide content to users, based primarily on engagement considerations.

4.4.3 Customer Engagement Initiatives and Marketing Performance

The third objective aimed to examine the effect of customer engagement initiatives in the social media on the marketing performance of the selected manufacturing companies in Coastal Region. The results from coefficients of determination show that there was positive and significant relationship between customer engagement initiatives in social media and marketing performance of the manufacturing companies (beta value = 0.919, $t = 8.055$, $p = 0.000$). The findings suggest that a unit increases in customer engagement initiatives in social media would lead to 0.919 increases in the scores of marketing performance of the manufacturing companies. This is consistent with the social penetration theory because social media customer engagement initiatives have positive effect on marketing performance.

This relates to findings of a study by Gunawan and Sulaeman (2020) which revealed that customer engagement initiatives in social media help increase marketing performance. Another study by Galati et al. (2017) revealed that there is positive and significant relationship between customer engagement initiatives and marketing performance.

The results also relate to Hypothesis 3, which states that customer engagement initiatives in the social media have positive effect on marketing performance of manufacturing companies. According to Mhilu and Lyimo (2019), the study asserts

that customer engagement has a positive and significant effect on marketing performance. Chirumalla et al. (2018) believe that customer engagement is the process in which the company interacts with the customers by respond to customer requirements for the purpose of understanding customers' needs and satisfying them. Similarly, Gunawan and Sulaeman (2020) define customer engagement as a process which involves customer involvement in products of the company.

5.0 Conclusion and Recommendations

The study concludes that social media strategy has positive and significant relationship with marketing performance of the manufacturing companies in the Coastal Region. Social media strategy in terms of key performance goal, social media programme, target audience and marketing strategy alignment facilitate to increase marketing performance.

Moreover, the study concludes that there is positive and significant relationship between active presence in social media and marketing performance of the manufacturing companies. Active presence in social media in terms of regular posting schedule, frequent posts and sufficient contents play an essential role to increase marketing performance.

Furthermore, the study concludes that there is positive and significant relationship between customer engagement initiatives in social media and marketing performance of the manufacturing companies. Through frequent content creation and interaction with customers, the company can potentially reach and appeal to various segments of their customer base. On the other hand, active presence in social media may increase marketing performance of the company because it helps to improve brand connections and mutual trust by facilitating opportunities for regular interactions between the company and its customers.

Finally, the study concludes that there is positive and significant relationship between customer engagement initiatives in social media and marketing performance of the manufacturing companies. Customer engagement initiatives in terms of social media interaction, acknowledging customers, active response and interesting contents help to increase marketing performance.

The study recommends that managements of the manufacturing companies should use social media strategy effectively because it contributes to increasing the marketing performance. Also, the study recommends that management of the manufacturing companies should make sure the company is actively present in the social media. This will help the company to increase the marketing performance.

Management of the manufacturing companies should develop content management systems and should facilitate real-time and intimate interactions with customers. Moreover, the government, through the Ministry of Trade and Industry, should develop good policy to encourage manufacturing companies to use social media platforms. The policy should consider the role of social media strategy on market performance.

Areas for Further Studies

This study used a cross-sectional research design. Therefore, future studies on social media strategy and marketing performance of the manufacturing companies should consider doing longitudinal research design. Moreover, other studies should use a large number of manufacturing companies and come up with a large sample size; this will increase the reliability of the findings.

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