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Social Media and Firm Performance: Empirical Study on Listed Indonesian Firms

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Abstract: This study aims to determine whether the use of Twitter and Instagram by companies has an impact on their operational and financial performance. Operational performance is evaluated using Return on Assets (ROA) and net income. For financial dissemination activities, social media usage is measured by the number of tweets and posts related to finance, while financial performance is measured using Tobin's Q and average daily market returns. Tobin's Q is a financial metric that is often used to assess a company's investment attractiveness and efficiency in utilizing its assets. This study uses a quantitative method using multiple regression analysis. The sample consists of 86 companies listed on the Kompas100 index from August 2023 to January 2024. The results of the study indicate that the use of Twitter and Instagram simultaneously has a significant effect on net income and Tobin's Q, but not on ROA and average daily market returns. In addition, none of the Twitter and Instagram usage variables are significantly related to the company's operational and financial performance. The findings of this study can benefit companies by encouraging the to reassess their social media strategies in order to better achieve their goals, both operational and financial goals.

Keywords: Firm Performance, Social Media, Net Revenue, Roa, Tobin's q.

INTRODUCTION

The advancement of technology has changed communication methods all around the world, with social media being one of its products. Social media made it possible for its users to communicate and create content without having to attend physically (Zhang et al., 2017). Indonesia, having the fourth biggest population in the world, has one of the biggest social media users in the world. Asosiasi Penyelenggara Internet Indonesia (APSI) estimated that the number of active social media users in Indonesia has reached 191,4 million users or 69,6% from the total of Indonesia's population. Users of social media variates from individuals to organization, such as firms. Every firm have a set of goals that they strive to achieve. To determine whether they succeeded in achieving those set of goals, performance measurements are needed. Good performance indicates good ability on using resources that they owned. Social media is one of the tools that firms could use to achieve their goals. (Kim et al., 2015) explains that internet innovation has played important part on firms' performance for the last two decades. This

research divides two main reasons why firms use social media, since those two reasons have different outcomes. The first purpose is marketing purpose, which has the end goal of increasing level of sales. The second purpose is financial information dissemination and its end goal of encouraging stakeholders to make decisions that benefits firm, such as buying firm's stocks which in turns increases firm's value. As such, the performance of marketing and financial information dissemination activity could not be measured with the same performance measurement.

Social media used for this research are Twitter and Instagram, mainly because both social media are among the most used social media in Indonesia. The number of Twitter and Instagram users have also steadily increased over the past 5 years. Previous studies have examined the impact of firms' social media usage on their performance. (Ravaonorohanta & Sayumwe, 2020) examined the impact of Twitter usage on firms' ROA and average daily market return in Canada. (Zu et al., 2019) conducted research in China and concluded that the launch and input intensity of social media account have a positive impact on financial performance. (Sprenger et al., 2014) did a study on S&P500 companies about what kind of information that could move market when disseminated on Twitter. So far, the research about this topic is still scarce in Indonesia. This is a missed opportunity since Indonesia has enormous number of social media user that could be beneficial for firms' performance if they understand how to best manage their social media to maximize their performance. Because the characteristics of social media user differs from each country, social media strategy that firms from Canada applies might not be applicable for firms based in Indonesia. Different demographic, social media platform preference, the way social media are used, and numerous other social media variables influence firms' social media strategy. Thus, this research hopes to fill the knowledge gap on how to best manage firms' social media account, in this case Twitter and Instagram, based on what are known about Indonesian social media landscape.

The objective of this research is to discover whether factors that contribute to Twitter and Instagram usage have a significant impact on firms' operational and financing performances. To measure social media impact on firms' marketing activity, factors used are ownership of official Twitter and Instagram account, number of Twitter and Instagram followers, and number of Twitter and Instagram posts (tweets for Twitter, photos, video, and "reels" for Instagram). Whereas to measure social media impact on firms' financial information disseminations, factors employed is number of posts on Twitter and/or Instagram that contains financial information. The result of this research could hopefully benefit Indonesian firms on what aspects of their social media strategy they need to improve in order to reach their operational and financing targets, and for investors to decide whether the company they want to invest their money on are worth the value (and its expected future benefit). Since this kind of research is still relatively new in Indonesia, hopefully it also paves way for other research about social media and its impact on Indonesian firms.

The Impact of Twitter and Instagram Use on Marketing Performance

Firms' main source of income is being generated by selling their products, whether it be goods or services. This makes marketing activity as one of firms' main activity, as they act as revenue center within the organization. To optimize marketing activity, firms' often use various marketing channel, one of them being Twitter. (Hoffman & Fodor, 2010) reveals that firms often use Twitter to increase brand loyalty, which in turns positively impact purchase intention.

Numerous previous researchers have concluded that visual media could shape customer's perception and purchase intention. Instagram, being one of the leading visual-based social media, is highly advantageous when it is used as one of firms' marketing channel. Shahbaznezhad (2021) explains that for firms, Instagram is better used for product-launching and encourage consumption (Shahbaznezhad et al., 2021).

Features that Twitter and Instagram embeds on their respective applications each have their own function that might help firms on conducting marketing activity. By owning a Twitter account, other Twitter users gets exposed to firms' products, achievements, or other things that firms might want to share on its social media. Number of Twitter followers and number of tweets posted could indicates brand awareness and brand engagement (Hoffman & Fodor, 2010).

Ownership of account, number of followers, and number of Instagram posts are key factors on pulling off marketing activity through Instagram. Instagram account ownership indicates that firms are willing to open themselves and being known more intimately by public. Number of Instagram followers suggests that how widespread the firms are known to public and how many users are being exposed to information that firms share on their Instagram. Then the number of posts could be used to measure how many information firms are willing, or eager, to share. Those three factors constitute indicators that could be used to measure brand awareness and brand engagement. Individuals that follow brand account on their Instagram account tends to have some sort of loyalty to the brand (Hollebeek & Chen, 2014), which increases the probability of the said individuals to repeat purchases to the brand.

Marketing activity directly affects net revenue, which makes up firms' revenue that comes from their main operation. One of the components that constitutes ROA is net revenue, which makes firms' ROA also get impacted by their marketing activity on Twitter and Instagram.

H1: Twitter and Instagram use on marketing activity positively impact firms' ROA

H2: Twitter and Instagram use on marketing activity positively impact firms' net revenue

The Impact of Twitter and Instagram Use on Financial Information Dissemination Performance

One of the ways to deduct whether marketing activity that firms conduct is successful is by taking a look at their net revenue. Net revenue is one of the financial information that is disclosed on financial statements. This means that marketing activity that firms continuously perform results in financial information that is communicated through financial statements. Financial statements, in turn, is distributed by firms throughout numbers of channels, which includes Twitter. Firms might not upload the entirety of their financial statements on Twitter, but they would upload bits of significant financial information that is taken from their financial statements, such as net income for the period, dividends paid to shareholders, or increase in their operational revenue. Financial information not only compromises on numerical data, but it could be anything such as signing of agreements between third parties that could bring significant change to financial condition of firms over time. Twitter as a short-text based social media is deemed capable on disseminating firms' short news, in this case short financial news, effectively to stakeholders, mainly shareholders.

Al-Kandari et al. (2019) explains that information and idea dissemination through visual media could improve identification as well as understanding of the information (Al-Kandari et al., 2016). This makes Instagram an ideal channel to disseminate firms' messages and information, including financial information. Visually attractive pictures and texts make Instagram users keener to read, understand, and react on financial information that firms share. The more Twitter and/or Instagram users are exposed to any kind of information, the more likely they are to get enticed and react on the information. This makes the number of tweets and Instagram posts which contains financial information a good indicator on measuring firms' financial information dissemination. The more Twitter and/or Instagram users perceives firms' financial information, the more likely they are to react on the information. One of the reactions being buying firms' stocks, which in turns creates movements in daily market return. Other than affecting daily market return, stock transactions also influence firms' value, which could be measured using Tobin's Q.

H3: Twitter and Instagram use on financial information dissemination activity positively impact firms' Tobin's Q
H4: Twitter and Instagram use on financial information dissemination activity positively impact firms' average daily market return

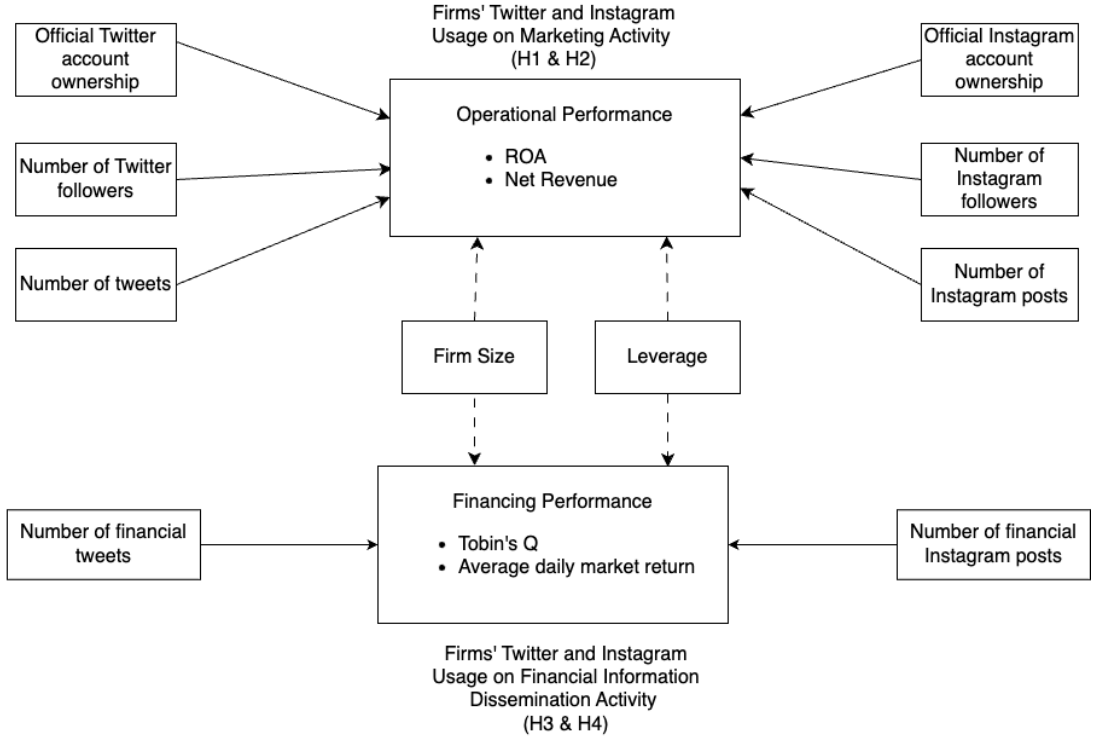


Figure 1. Hypotheses development

METHOD

This research employs quantitative method using secondary data taken from Indonesian Stock Exchange website, official firms' websites, and firms' official Twitter and/or Instagram accounts. The population used are firms listed on Indonesian Stock Exchanges in 2022. Samples are chosen using purposive sampling method with criteria below:

1) Firms that were included on Kompas100 index for August 2023 – January 2024, and;
2) Firms with official Twitter and/or Twitter account that could be analyzed (all information regarding Twitter/and or Instagram use are available).

Return on Assets

Return on Assets (ROA) shows how much return that firms made with assets that they owned. By calculation firms' ROA, information about how much return made by each monetary unit invested could be generated (Palepu & Healy, 2013), thus ROA could be used as one of the indicators to measure firms' operational performance, as previously used on Ravaonorohanta & Sayumwe (2020) research about the impact of Twitter usage on Canadian firms. ROA could be calculated using formula below:

$$ROA = \frac{Net\ Income}{Total\ Assets} \quad (1)$$

Net revenue

Net revenue is revenue that firms obtain from their main operation during a period, net of costs such as cost of goods sold. Net revenue growth is one of firms' main operational goal, making it a good indicator of firms' financial performance.

Tobin's Q

Tobin's Q is one of the measurements that could be used to determine firms' value. Tobin (1969) developed the measurement after discovering that most of the times, there are discrepancies between the price of existing and newly produced capital goods. Hence the higher Tobin's Q ratio of a firm, the higher discrepancies between its market and actual value, thus making the firm overvalued in the stock market. Tobin's Q is calculated using formula below:

$$Tobin's\ Q = \frac{Market\ Capitalization + Total\ Liability}{Total\ Assets} \quad (2)$$

Explanation:
Tobin's Q : Firm value
Market capitalization : Equity market value, calculated from stock's closing price on the end of financial reporting period multiplied by number of outstanding shares in the end of period.

Average daily market return

Average daily market return is calculated using stock market daily return during financial reporting period, which serves as an indicator on whether financial information uploaded during the year have significant effect on firms' stock prices. Ravaonorohanta & Sayumwe (2020) calculates average daily market return as:

$$Average\ Daily\ Market\ Return = \frac{The\ sum\ of\ daily\ market\ return\ in\ a\ year}{365} \quad (3)$$

Official Twitter and Instagram Account Ownership

Dummy variables are used to represent whether a firm owns an official Twitter or Instagram account. For Twitter account ownership, a value of 0 indicates that a firm does not own an official Twitter account, while a value of 1 indicates that it does. Similarly, for Instagram account ownership, a value of 0 indicates no ownership of an official Instagram account, and a value of 1 indicates ownership.

Number of Twitter and Instagram followers

The number of Twitter followers is measured as of December 31, 2022, coinciding with the end of the firms' financial reporting period. This allows for the observation of the impact of Twitter audience size during 2022 on the firms' performance for the year ending December 31, 2022. The number of Instagram followers is also measured as of December 31, 2022, based on the follower count of the firms' official Instagram accounts.

Number of Tweets and Instagram Posts

The number of tweets considered in this research refers to those posted by firms throughout 2022. This focus is intended to assess the impact of tweets made in 2022 on the firms' performance for the year ending December 31, 2022. The number of Instagram posts includes all content uploaded to a firm's Instagram feed during 2022, such as photos, videos, and reels. Posts made in Instagram Stories, which disappear after 24 hours, are excluded.

Number of Financial Tweets and Instagram Posts

A financial tweet is defined as any tweet posted by a firm that contains financial information, such as earnings reports, dividend declarations, or other financial data. Only financial tweets posted during 2022 are considered in this research. This focus aligns with the

performance measurements of Tobin's Q and the average daily market return, which are calculated using data from January 1, 2022, to December 31, 2022. Similarly, financial Instagram posts include any photos, videos, or reels containing financial information posted during 2022. The number of financial Instagram posts is used to evaluate the firms' financial information dissemination performance.

Firm Size

Firm size is calculated using logarithm of total assets owned by firms for the period that ended in December 31, 2022, as was previously employed in another research by Hartono (2008). The reason why firm size is used as control variable for this research is because Gajewski & Li (2015) opinionated that firms' communication strategy depends on the size of the company (Gajewski & Li, 2015). Bigger firms attained bigger attentions from the public, thus incentivized them more to disclose information through social media. The calculation of firm size is as follows:

$$Firm\ Size = Log(Total\ Assets) \quad (4)$$

Leverage

Debt to equity ratio (DER) is used for firm's leverage in this research. Leverage is used as one of the control variables since firms with higher rate of leverage have higher probability of default and underperformed. DER is calculated with this formula:

$$DER = \frac{Total\ Debt}{Total\ Equity} \quad (5)$$

Data Analytical Technique

This study employs multiple linear regression. There are several assumptions that needs to be fulfilled for the regression to be declared valid, namely:

1. Normality test
2. Multicollinearity test
3. Heteroscedasticity test

Every assumption mentioned above has been fulfilled, thus making this study fit for further analyzation.

RESULTS AND DISCUSSION

Statistical Descriptive Analysis

As presented in Table 1, this research draws up 86 firms as samples. From those 86 firms, 45.35% or 39 firms owned an official Twitter account, and 72.09% or 62 firms owned an official Instagram account. This indicates that Instagram is more commonly used among Indonesian firms than Twitter.

Table 1. Statistical Descriptive

Variables	N	Minimum	Maximum	Mean	Std. Dev.
ROA	86	-0.34	0.57	0.0954	0.12131
NETSALES	86	301,379,000,000,000	461,252,677,984	33,040,120,240,000	46,107,479,620,000
TOBINSQ	86	0.26	10.57	1.7470	1.71497
DAILYRETURN	86	-0.0087	0.0035	-0.001274	0.0023880
TWTDUMMY	86	0	1	0.4535	0.50075
TWTFOLL	86	0	1,254,020	48,217.558	162,171.2
TWEETCOUNT	86	0	67,490	3,165.4767	10,430.540
IGDUMMY	86	0	1	0.7209	0.45117
IGFOLL	86	0	3,248,708	211,517.48	533,256.624
IGPOST	86	0	4,075	286.1279	507.45422

FINANCETWT	86	0	19	2.4186	4.43108
FINANCEPOST	86	0	31	4.3023	6.43898
LOGTA	86	12.15	15.30	13.5644	0.61622
LEVERAGE	86	0.0003	5.06	0.7136	0.94541

The average number of followers among samples are 48,218 followers for Twitter and 211,517 for Instagram. Whereas the number of tweets and Instagram posts posted averages on 3,165 tweets and 286 Instagram post. This goes to show that although Instagram as social media platform utilizes by firms has more audiences, firms communicated more actively using Twitter. Twitter's platform format which heavily emphasized on short text creates an environment where users post more freely as they do not have to overly aware of visual aspects, which is what Instagram, as a photo-and-video-based platform, is all about. For some firms, Twitter also serves as customer service channel, which explain the huge number of tweets posted, as often seen on Twitter account of Indonesian banks.

The average number of financial tweets and Instagram posts posted during 2022 are 2 tweets and 4 Instagram posts, respectively. Instagram is more commonly used in Indonesia than Twitter, which explains the higher number of average and standard deviation of financial Instagram posts during 2022. Another reason for the result is because a number of firms that owns an official Instagram account and posts a bunch of financial posts did not own an official Twitter account.

The average of ROA and net revenue out of 86 firms tested is 0.1 and Rp33,040,120,240,000, indicating that firms tested have a relatively positive operational performance. The average of Tobin's Q calculation is 1.7, which shows that firms value in the market are quite fair. The last dependent variable, average daily market return, has an average number during 2022 of -0.13, which interpreted as firms experienced decrease in their stocks value most days in 2022.

F test

As shown on Table 2, Twitter and Instagram usage for marketing activity significantly affect one of the performance indicators, that is net revenue, but not ROA. This is interpreted as H1 is rejected and H2 is accepted. The result is in line with research done by Jeppson et al. (2020) about the impact of social media usage on net revenue but come on the opposite of research done by Ravaonorohanta & Sayumwe (2020) which stated that there is a significant impact between Twitter usage with ROA (Jeppson et al., 2019; Ravaonorohanta & Sayumwe, 2020). This might be caused by ROA having more components that made it up than net revenue, which made it harder to explain direct relationship of it with social media usage. Social media also serves as a tool to improve brand awareness and brand loyalty, both of which are reflected better through net revenue, as brand awareness and brand loyalty increases purchases intention (Arli, 2017) which in turns increases net revenue. This result shows that firms need to appeal to their customers in such way that could increase brand awareness and brand loyalty. For instance, firms could style their Instagram posts in a distinctive style to increase brand awareness, in a way that every time customers (or potential customers) sees the posts, they would instantly think about the brand. As for Twitter, firms need to have consistent writing style that, at the same time, could bridge the barrier between customers and firms. When firms succeeded in creating parasocial relationship between them and the customers, brand loyalty would be easier to achieve. Having a brand ambassador that appeal to certain demographic of main customer would also help a lot in creating brand awareness and brand loyalty, as some of the awareness and loyalty that the brand ambassador already has from their audiences would then get transferred into the firm.

Simultaneous use of Twitter and Instagram escalates audiences reached, since users of both platforms have different characteristics with different needs, which makes simultaneous

use of them could increase sales even further rather than only using one of them. Whereas ROA is composed by far more components than sales, most of those components not being affected at all by firms' use of social media. The kind of marketing contents Indonesian firms post on their social media are usually composed of one or several products in media chosen (photo, video, or reels) with prices and discounts (if applicable), especially for firms in retail industry. That type of posts has a main purpose to encourage consumers to spend more, which explains the research result, of which simultaneous use of Twitter & Instagram significantly impact net revenue. This result shows that firms need to have an active Twitter and Instagram account, not just an Instagram account (since most Indonesian firms that has an active Twitter account also has an active Instagram account). Especially since the demographic and social media behavior of Indonesian's Twitter and Instagram user differs quite significantly. By actively using Twitter and Instagram, firms could cover more bases on their potential customer. This is the case for firms that focused on B2C sales, but for firms who focused more heavily on B2B sales, using only Instagram might still be a good option. This is because Instagram is used for branding purposes, whereas Twitter is mostly used for more organic interactions between firms and customer, something that B2B firms would have much less need for.

Table 2. Twitter and Instagram Usage on Operational and Financing Performance

Performance Indicators	F-stat	P-value
Operational Performance		
ROA	1.376	0.221
Net revenue	6.253	0.000
Financing Performance		
Tobin's Q	3.008	0.023
Average Daily Market Return	1.662	0.167

Based on results displayed on Table 2, simultaneous use of Twitter and Instagram for financial information dissemination activity has a significant impact on Tobin's Q, but not on average daily market return, meaning that H3 and H4 on this research are accepted and rejected, respectively. This result is consistent with findings in (Kim et al., 2015; Wang & Kim, 2017; Zu et al., 2019) which stated that social media usage has a significant impact on Tobin's Q. But research done by (Bilinski, 2024; Ravaonorohanta & Sayumwe, 2020; Sprenger et al., 2014) produced a different result than this research, stating that social media usage significantly affect firms' shares value.

The result is potentially prompted by the fact that financial information shared on social media, whether it is Twitter or Instagram, are mostly not financial information for the time it was shared. Financial information shared also usually information of last period's performance, thus makes it less of a reflection of firms' performance on the period of which the information is shared. Also, financial information shared on Twitter & Instagram, for the large part, are the same information that firms put on their annual and/or financial report, which makes financial information shared on Twitter & Instagram are not the kind of information that could move the stock market.

Based on the data shared by Kustodian Sentral Efek Indonesia (KSEI), mutual funds investor in Indonesia for the year of 2022 reached the number of 9.6 million investors. Whereas the number for stock & bonds investors does not even reach the half of it, amassing around 4.4 million investors. This fact explains the reason why average daily market return is not significantly affected by financial information dissemination through Twitter and Instagram, because Indonesian investors tends to put their money on mutual funds, which causes daily return of stocks unaffected by financial information disseminated on social media. Indonesian's

investor demographic also plays a part, since data published by dataindonesia.id shows that on February 2023, number of social media users above the age of 55 only hovers around 2.8% out of all social media users. On the contrary, age group of above 60 years old owned around 58% of total assets in the market.

Components that formed Tobin's Q are total assets, total liabilities, and market capitalization. Data used for Tobin's Q calculation are data as of December 31, 2022, or in other words, end of financial reporting period. According to market efficiency theory, stock prices have reflected on all information available. It could be assumed that those market capitalizations are reflections of financial information that investors have received throughout the year, thus making the financial information disseminated by firms through Twitter and Instagram significantly impact Tobin's Q.

This result could be beneficial for both firms and investors, in a slightly different way. For firms, they would feel the need to disseminate their financial news to Instagram and Twitter more often, especially for information such as earnings per quarter, dividend announcement, and other information specific to their industry. The information does not exactly need to have numbers (as in currency number) but information that could be hugely impacted firms' financial condition. The examples are posting about the rise of global crude oil prices for oil & gas company or patenting certain drugs for pharmaceutical company. The information needs to be shared consistently, to ensure that the rise in firms' Tobin's Q is not a fluke and could stay that way regardless of the period of the year. As for investors, they might view this result differently, since higher Q ratio does not necessarily mean better firm to invest their money on. In fact, they might view firms that often shares financial information as overvalued. This means that firms need to find a middle ground to only shares financial information that is truly impacted the company, in order to not drive the investors away.

Partial t Test

Research result shown on Table 3 indicated that none of the variables tested has significant effect on ROA. Whereas for net revenue, Tobin's Q and average daily market return, only LogTA, which was the proxy of firm size, has a significant value of <0.05, meaning that firm size has a significant impact on net revenue, Tobin's Q and average daily market return. Which brings this research to a conclusion that variables that make up Twitter and Instagram usage, which are ownership of official Twitter and Instagram account, number of Twitter and Instagram followers, number of tweets and number Instagram posts and number of financial tweets and posts have no significant impact on both marketing nor financial information dissemination performance. This result shows that firms cannot improve only one aspect of Twitter and/or Instagram to improve their operational and financing performance, for example only inflating their number of followers yet not doing any work in consistently posting relevant and useful information. Firms need to focus on every aspect of Twitter and Instagram to make an impact on their operational and financing performance, as previously shown in Table 2.

Table 3. Twitter and Instagram Usage on Operational and Financing Performance

	Sig. Performance Indicators	
	Operating Performance	
Variables	ROA	Net revenue
(Constant)	0.207	0.000
TWTDUMMY	0.858	0.994
TWTFOLL	0.121	0.080
TWEETCOUNT	0.555	0.654
IGDUMMY	0.270	0.989
IGFOLL	0.762	0.470
IGPOST	0.501	0.626
LOGTA	0.357	0.000

LEV	0.547	0.237
Financing Performance		
Variables	Tobin's Q	Average daily market return
(Constant)	0.002	0.019
FINANCETWT	0.521	0.449
FINANCEPOST	0.226	0.563
LOGTA	0.009	0.027
LEV	0.831	0.445

The ROA of the Business is Unaffected by the Use of Instagram and Twitter in Marketing Campaigns

The return on assets (ROA) measures a company's operational profitability. Social media may not have a direct impact on ROA because it is comprised of multiple factors, including net income and total assets. Instead of directly affecting how well assets are used, social media use may be more closely linked to higher sales or brand awareness. This may help to explain why utilizing Instagram and Twitter has no appreciable effect on return on assets. Perhaps more significant is the correlation over an extended period of time between social media use and profitability. Long-term profitability can be impacted by social media-generated consumer loyalty, although short-term operational success may not immediately reflect this.

The present study's findings are in opposition to those of Abdillah (2022) and Ravaonorohanta (2020), who found that businesses that are active on social media, especially Twitter, can gain a competitive edge (Abdillah, 2022; Ravaonorohanta & Sayumwe, 2020). It does, however, correspond with Xu Zu's (2019) research, which shows a complex, non-linear link between the level of social media engagement on Weibo and business performance (Zu et al., 2019). Consequently, Weibo activity has no discernible positive or negative impact on business performance. A company's performance improves with increased Weibo activity. Yet, more Weibo activity starts to produce diminishing returns after hitting a certain point (the apex of the curve), and it may even have a negative effect on the performance of the business.

The Return on Assets (ROA) of marketing initiatives using social media can vary. Increased brand awareness, when social media activities broaden brand reach and improve sales and profits, can have a favorable impact on ROA. Social media also enables businesses to communicate directly with clients, strengthening client loyalty and boosting bottom line results. Since social media marketing is typically less expensive than traditional marketing, the company's revenues can rise and its return on assets (ROA) will improve. More accurate audience targeting enables more effective and efficient marketing, which raises sales and return on investment (ROA).

But occasionally, using social media could not have any effect at all or even hurt ROA. This may happen if the social media technique used is inappropriate or if the material offered is not as audience-relevant, leading to marketing initiatives that have little impact. Furthermore, excessive expenses for poorly thought out social media efforts might lower profit margins without significantly raising sales, which has a detrimental effect on ROA. Another obstacle is a lack of experience in social media management, which prevents businesses from taking full use of these channels. Furthermore, social media's erratic viral nature means that its beneficial effects on financial performance aren't always constant.

Social media's impact on return on assets (ROA) is influenced by a number of factors, including the industry; notably, more profitable industries than manufacturing or heavy industries include those in entertainment and retail. A further important factor is effective market segmentation; younger generations, for example, are more easily swayed by brands who cater to their active social media audience. The financial performance of the company is also influenced by the caliber and regularity of the information published, as well as by its capacity to handle social media problems. Consequently, while social media has a lot of

potential to increase ROA, how businesses handle their social media presence and a number of other internal and external factors will ultimately determine how well their efforts turn out.

The Net Income of The Business is Significantly Impacted by The Use of Instagram and Twitter in Marketing Initiatives.

Investors' interpretation of financial results is further influenced, according to Bilinski (2024), by the information that companies disclose on Twitter (Bilinski, 2024). In line with study conducted in 2015 by Seunghyun Kim, restaurants can derive benefits from investing in social media (Kim et al., 2015). In other words, the financial market sees restaurants that invest in social media as adding value. In addition, Trinkle said that investors' reactions to financial news are influenced by the comments left on the disclosures and that social media use can shape investors' impressions of the news. Commentary can change the valence (positive or negative) of the financial news that is provided, as seen by the symmetrical reactions of investors to both good and bad news.

Companies that have a big social media presence outperform those that don't, claims Jeppson (2019) (Jeppson et al., 2019). Companies that are more influential on social media have higher revenues and assets, along with higher earnings per share (EPS) and profit margins. Based on these results, a company's total assets, sales revenue, EPS, debt ratio, and profit margin may all be accurately predicted by using social media effectively. It appears that there is a connection between a company's traits and bottom line and its use of social media.

The Way That Financial Information is Shared on Twitter and Instagram has A Big Impact On Tobin's Q.

Majumdar (2019) found a favorable correlation between an increase in Tobin's Q and the sharing of product-related information on Twitter (Majumdar & Bose, 2019). This indicates that a company's value rises in direct proportion to the amount of product information it posts on Twitter. Albitar (2020) provides support for this conclusion, indicating that organizations who voluntarily implement integrated reporting (IR) typically outperform those that do not in terms of financial performance. By providing stakeholders with more comprehensive information, IR enables businesses to help investors make more informed investment choices (Albitar et al., 2020). This suggests that organizations that exhibit consistency and openness in their performance reporting are highly valued by the market.

The present study, along with prior research, indicates that the utilization of Twitter and Instagram by corporations for the purpose of sharing financial data quickens the information's direct dissemination to different stakeholders, such as analysts and investors. Increased accessibility to financial data improves transparency, which the market frequently values. As a result, investors may see the company more favorably, which could raise Tobin's Q. Market sentiment is indirectly influenced by the financial data that is published on Twitter and Instagram. Good feelings can increase demand for a company's shares when they proliferate through social media interactions. Proactive usage of social media is characteristic of high-performing businesses. Analyzing the relationship between social media and firm value presents an endogeneity problem since the rise in Tobin's Q may not be solely attributable to social media usage but rather to the company's overall great performance.

The Average Daily Market Return is Not Significantly Affected by The Sharing of Financial Information On Twitter And Instagram.

According to Miqdad's (2021) research, social media value affects gross profit margin (GPM), although it is not the primary element influencing a company's profitability (Miqdad & Oktaviani, 2021). This finding is consistent with that research. In contrast, companies that are engaged on Twitter do better in terms of return on assets and the stock market, according to study by (Ravaonorohanta & Sayumwe, 2020). Relative to All. An organization's operational

effectiveness and market value are positively impacted by its presence on Twitter, which is viewed as a symbol of openness, accessibility, and transparency. Despite the potential that some tweets are opportunistic, external stakeholders view messages on Twitter as credible. In order to improve performance, businesses must use social media as part of their voluntary disclosure plan.

The lack of this effect suggests that social media-shared information may not be deep or detailed enough to have a significant impact on investment decisions in terms of quality and relevance. Brief content on social media is rarely as attentive to investors as formal financial reports and news from more reputable sources. Additionally, the material on social media may be seen as promotional or unsubstantial spin, which lessens its trustworthiness and lessens its influence on investment decisions. Furthermore, the overabundance of information on social media can produce "noise", in which the volume of information posted reduces the prominence and impact of each post. Consequently, investors experience a sense of overload and diminish the distinct influence of every message.

CONCLUSION

This research examines the impact of social media usage, specifically Twitter and Instagram, on firms' marketing and financial information dissemination activities. Marketing activity is a crucial component of operational performance, while financial information dissemination provides insights into firms' financing activities. The simultaneous use of Twitter and Instagram has a significant impact on marketing performance, as measured by net revenue. It also significantly influences financial information dissemination performance, as measured by Tobin's Q. However, no significant impact is observed for the simultaneous use of Twitter and Instagram on marketing and financial information dissemination performance when measured by Return on Assets (ROA) and average daily market return, respectively. Furthermore, there is no significant impact of individual variables representing Twitter and Instagram usage on firms' performance in either marketing or financial information dissemination. The study covers the Twitter and Instagram usage of firms across various industries. However, limitations exist in collecting Twitter and Instagram data, particularly in relation to the number of followers. The sites used to collect data were unable to generate historical follower data for some companies due to low follower counts, resulting in the exclusion of these firms from the analysis, which may have influenced the findings.

Focusing on specific industries to provide results that can be more effectively applied by firms. Additionally, exploring other financial aspects potentially affected by social media usage could provide more accurate performance indicators. Finally, future research should employ improved methods for collecting historical Twitter and Instagram data, enabling the inclusion of all firms that meet the study criteria.

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