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The Contribution of Social Media Value to Company's Financial Performance: Empirical Evidence from Indonesia

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Abstract

This article aims to explore the contribution of social media value to a company's financial performance in a digital environment economy since the awareness of companies and investors in the use of social media opens up new mechanisms for disseminating information. Quantitative method is used in this study with Multivariate Analysis of Variance as the analysis tool. The data used is secondary data gathered from Indonesia Stock Exchange (IDX) using 308 companies as samples. In the multivariate test, four kinds of multivariate significance tests were carried out, namely Pillai Trace, Wilk Lambda, Hotelling's Trace, and Roy's Largest Root. It was found that social media value has a small contribution in the difference of the level of profitability and the value of the company in Indonesia, but it doesn't have a contribution to the difference of the level of liquidity. The contribution was an implication of online Word of Mouth (WOM) motives which are interrelated with signal theory and as additional information for investors in relation to single-person decision theory. This study provides an insight into the importance of social media management considering that the world of digital economy will continue to develop, so companies in Indonesia need to take advantage of these opportunities.

Keywords: Social Media, Networking, Value, Financial Performance, Digital Economy

JEL Classification Code: D83, M15, G11

1. Introduction

The rapid development of technology began to occur in the late 1990s and early 2000s, the rapid development of this technology was accompanied by a shift in the process of human activities that became heavily dependent on technology, from simple daily activity processes to the process of a company's business activities. The peak of technological development occurred with the presence of the internet as a means of communication tools which was capable of penetrating communication boundaries and allowing each individual to be connected regardless of the distance that separates them that resulted in the emergence of the term globalization era.

According to Kellner (2002) for some people globalization is the finalization concept of global capitalism and imperialism, but for others, globalization is the continuation of modernization and a power to progress, increasing prosperity, freedom, democracy, and happiness. Many support the concept but some others don't. Apart from the endless debates about the good and bad sides of globalization, the facts show that the occurrence of globalization with the emergence of the internet which is able to penetrate the communication barrier, clearly brings many benefits from the side of information resources. The occurrence of globalization and the emergence of the internet has made it easier for people to access and obtain unlimited information. Places to obtain information via the internet are provided in various types, ranging from official websites, applications in communication tools that can be used as a mobile business, to trends that began to emerge around 2007, namely social media that allows individuals to exchange information in an interactive manner.

Kaplan and Haenlein (2010) stated that social media is characterized as a two-way interaction tool for collecting

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user content. Forester research in 2008 shows that 75% of internet users have used social media as of the third quarter of 2008 which is an increase of 56% from 2007 when the social media trend started. This growth is not only limited to teenagers, but expanded to the generation X as well, who were then aged between 35 - 44 years. This of course shows how social media is becoming a new revolutionary trend that needs to be paid attention to by companies whether they are mainly online, or in other fields. However, according to Kaplan and Haenlein, (2010) in the year 2010 the social media trend began and many companies still cannot accept the concept where customers can express their opinions freely with other social media users, and companies are no longer fully able to control what information is spread and available in the virtual world.

In January 2020 We Are Social & Hootsuite released data showing that out of Indonesia's total population of 272.1 million, 64% of the population which is 175.4 million in numbers, are active internet users and 59% of the population, which is 160 million people, are active media social users with an average daily usage of 3 hours 36 minutes. This makes Indonesia as the 5th country with most active social media users in the world.

In contrast to what happened 12 years ago, nowadays social media is an important tool for companies to communicate and convey two-way information with their consumers. Godes (2013) stated that social media has changed the organizational structure in terms of forming new market shares, a new world full of possibilities and challenges from various aspects ranging from marketing and operations, to finance and human resource management. Miller and Skinner (2015) in Cade (2018) stated that social media is different from traditional media such as press statements or company websites, social media supports two-way interactions in which company managers do not have full control over what is said about their company. According to Elliot and Cade, (2018) social media is an intermediary for capital market members who do not have direct access to the company management, to be able to express opinions and ask questions, and interact with the company managers.

In Alexander and Gentry, (2014) it was explained that the use of social media in American companies has grown over time, in 2013 it was recorded that 77% of companies listed in the Fortune 500 had Twitter accounts, 70% of companies had Facebook accounts, and 69% of companies managed YouTube accounts. In 2013, the Securities Exchange Commission's press release also stated that companies are allowed to use social media platforms such as Facebook and Twitter to make announcements regarding key company information in compliance with Fair Disclosure regulations as long as investors have been informed about which social media will be used to disseminate the information. The SEC investigative report (2013) confirms that Fair Disclosure regulations apply to social media and other new types of communication used by public companies in line with those applicable to corporate websites. The current SEC report clarifies that corporate communications via social media channels can promote selective disclosure.

The existence of company awareness in the use of social media for two-way interactions, opens up a new mechanism for information dissemination, half of the companies that use social media have at least once announced company earnings and developments in the company's financial condition. Blankespoor (2018) stated that the results of many recent studies show that the use of social media accounts by companies to announce company information can increase market liquidity. The use of social media by companies also needs to be balanced with a special strategy, where through social media companies can take offensive actions, namely by sharing good news from companies and companies can also take defensive actions, namely by doing damage control when the bad news spreads about the company. Therefore, investing in the use of social media will require a budget to add personnel, IT support, training, and legality costs (Hoos et al., 2015).

Meanwhile, in Rishika et al. (2013) it is explained that more and more companies are increasing their investment in social media management, but doubts about the effectiveness of social media businesses in increasing company investment returns have not been built. Recent research results show that researchers focus a lot on how social media helps product sales. Phang et al. (2013) supports content fusion, and promotes acceptance of recommendations, while from the company side, of course, wants to know how its investment in social media can produce results, one of them is by increasing returns or through increasing the intensity of the relationship between companies and consumers in creating sustainable corporate value. Yu et al. (2013) stated that through social media, investors can obtain information about timely evaluation of company performance which then allows investors to predict the future value of the company.

Social media is a form of corporate communication network that is currently widely used and is a means for investors to obtain information and make decisions. In previous studies, many analysts have explained that the social media has a role in the movement of the company's stock value. This means that the communication networks have value. In Joia (2000) it is explained that although knowledge and information are not visible or intangible, it does not mean that they cannot be measured. Today's world economy runs in counter to Marshall's law of diminishing returns and argues that the more resources that are deployed the higher the value that these resources form in the final product. Given that previous research focuses more on the effect of information distribution through the use of social media on stock movements, meanwhile this study will be focusing on researching and filling the existing research gap on Contribution of Social Media Value to Corporate Financial Performance in Indonesia's Digital Economy.

2. Literature Review

2.1. Single-Person Decision Theory

Single-person decision theory is a theory based on the perspective of a person (investor) who has to make decisions under uncertain conditions (Scott, 2015). Basically, if there is no uncertainty, the role of information is no longer necessary. The need for the use of information in markets and organizations must recognize that decision makers always face uncertainty and the consequences from the actions taken.

Scott (2015) stated that in single-person decision theory, state probabilities are no longer objective under ideal conditions, giving rise to formal procedures that allow individuals to be able to make the best decisions by choosing one set of alternative actions. In this theory, individuals (investors) who are in the process of making decisions are considered to have information about the company, but because of the possibility that it is no longer objective under ideal conditions, investors can use other information to make decisions. Other information used is not always in the form of accounting information from financial reports, but also information on conditions within the company, such as information on political conditions, natural disasters, and others. In single-person decision theory it is given a way of defining information, where information is evidence that has the potential to influence individual decisions. From this definition, it can be concluded that information is an ex ante definition, namely the main requirement for evidence to describe information in which at least some evidence needs to be obtained, the belief in that information will sufficiently influence decision changes. Every individual has different reactions in responding to the same information, therefore this study uses a single-person decision theory to analyze the effect of other information, namely company information obtained through social media on investor decision making. In addition, the contribution of knowledge in virtual communities can strengthen or weaken the influence of this other information on the investor decision making.

2.2. Signalling Theory

In general, to make a decision, investors always depend on the availability of information. The availability of information will affect the decision-making process by investors (Connelly et al., 2011). Signal theory in this case explains how the type of information available can affect the decision-making process by investors, where companies tend to announce information that shows that the company is in good condition, such as an increase in sales which is financial information that can usually be found in financial reports, this provides a good signal for investors to decide to do investment. Meanwhile the company will withhold information which will tend to be a bad signal for the investors. This shows that every company has the opportunity to signal or not to signal the quality of its company to outsiders (Connelly et al., 2011).

Many explanations of the signal theory model describe that quality is one of the distinguishing characteristics in forming company signals to investors, in this case quality is interpreted as a kind of relevant way. In this study, the quality that underlies the company's signal is the level of recognition of social media managed by a company, companies with social media accounts that have a large number of followers and have a blue tick (verified account) generally indicate that the company has a good reputation. The number of followers a company has also shows that the company has a large market potential. The more followers the company has, the easier it is for the company to market its products, so that the possibility of obtaining maximum sales and profits is also higher, this can be a good signal for investors in processing decision making.

2.3. The Company Communication Network

The ease with which investors can obtain information as well as the fast flow of company information that is spread in the form of news through news sites, especially the internet, indirectly also affects investors in making decisions, namely investors tend to be influenced by public opinion or feelings (Li et al., 2014). Investor decisions that can be influenced by additional information can be explained by the single person decision theory (Scott, 2015) in which investors will try to obtain additional information about the company before making a decision. Additional information obtained does not always come from financial reports but through other sources such as news about companies that are spread through sites on the internet.

The very common and essential type of communication network a company has is social media accounts. Currently, social media can also be used as a portal for sharing the results of individual analyzes regarding information on the financial performance of a company (Chen et al., 2013). Generally, the information shared will then be one of the additional information for investors to make decisions.

This is one of the reason why management needs to be aware of social media, becuase basically the awareness of social media is the first step for management to further know and understand how to fully make use of social media (Efendi, Sugandi, & Sutanto, 2020).

2.4. The Company Financial Performance

In general, a company is said to be successful if it is able to provide satisfactory feedback to the stakeholders in the company, especially investors. Satisfactory reciprocity is usually characterized by high returns, which indicate that the company's financial performance is categorized as good performance. In accounting itself, the financial performance of a company can be measured using four financial ratios, namely profitability, liquidity, solvency, and activity. In this article, researchers will use two of the four available financial ratio measurements, namely profitability and liquidity. In addition, the company's performance is also reflected in the company's stock price in the capital market, because generally the better the company's financial performance, the more investors will seek to invest in it.

2.5. Word of Mouth (WOM) Communication Motive

Word of mouth (WOM) is one of the most effective strategies and is widely used by companies. It is said to be effective because it is widely believed that the success of a product depends on the number of people talking about the product. According to Godes and Mayzlin, (2004) WOM can be said to be a driver of consumer behavior, so that the measurement of WOM can be a precursor to the emergence of an effective "buzz management". This buzz management usually happens because Word of Mouth is formed from the social media, and is called The eWord-of-Mouth communication. It has an important role in giving sense of virality to the communication (Kakirala & Singh, 2020).

Godes and Mayzlin (2004) explained that WOM influences the actions of consumers a lot, where in making decisions to buy an item, using a product or service, consumers are mostly influenced by the opinions of others, it is even stated that consumers are very likely to ignore personal information that they have themselves for the sake of information deduced from the actions of others. Basically, WOM itself has a framework consisting of four categories of motivation (Phang et al., 2013), including: 1. Product involvement, 2. Message involvement, 3. Self-involvement, 4. Other involvement. Product involvement is how WOM encourages consumers to express their views about a product or service that a company has after the consumer uses it.

Message involvement is a part of online WOM which is a discussion of a company's products or services carried out by consumers in social media portals. Meanwhile, self-involvement is how WOM makes consumers feel motivated to engage in a conversation about a product or service from a company with the intention of providing support for the product or service on the basis that the consumer feels as a pioneer in using the product or service. Finally, other involvement is when more than one consumer provides a review of their experience using a product or service in order to encourage other people to use the product or service.

Based on the four categories of WOM motivation, ownership and use of social media for companies can help increase sales through reviews and invitations to use company goods or services by consumers, which is generally done through the comments column (Chen & Xie, 2004). The greater the number of followers of the company, the greater the chance that consumers will be interested in using the company's goods or services.

2.2. Hypotheses

Social media is a virtual interaction portal that is becoming very popular and is widely used by the general public and companies in particular. The types of social media that are widely used by the community change over time. In the early days, the internet was widely used, at that time the type of social media liked by the public was in the form of message exchange portals and micro-blogs such as Yahoo Messenger and Myspace. Recently, the most widely used social media are YouTube, Twitter, and Instagram, which are places used to share a lot of information, from things as simple as messages, pictures, music, as well as videos. Currently, social media can also be used as a portal to share individual experiences about a company's products or services (Phang et al., 2013). Generally, the information shared will then become one of the considerations for other potential consumers who are followers of the company's social media accounts (Miller & Skinner, 2015), so that through information shared by consumers through the comments column in the company's social media accounts, it can encourage the intention of followers of the social media accounts. other social media followers can also then use the company's products or services, this has the potential to increase the number of company sales which will indirectly increase company's profit. So, the hypotheses that can be developed is:

***H1**: There is a contribution of social media value to the level of company profitability*

Back before social media was a hit, companies traditionally had a website as one way communication channel to their consumers. However, these type of communication is becoming more and more ineffective nowadays. This type of communication tends to looks lilke a self-serving propaganda since the company web is focusing more on postings to promote their products (Becker & Lee, 2019). Because of this, customers prefer new ways of communication and that is the two-way interaction facilities provided by the social media portals. Two-way interactions that occur on social media portals in general can be in the form of consumer responses regarding information obtained about the company in the form of posting messages through Twitter which can get responses from audiences in the form of "reply", and which can be widely shared by the public with facilities like "retweet" which helps spread the message, and "retweet with comment", namely repetition of the spread of the message with additional comments from other individuals (Elliott et al., 2018). Consumer responses via Facebook can consist of posting messages equipped with images or videos and audio, so that the impact of information distribution is more felt by the public, information dissemination via Facebook can be in the form of many comments left by audiences and can also be through the share or "share" feature similar to the "retweet with comment" feature on twitter, where the audience can repeat the spread of the message with additional comments. Meanwhile Instagram is a social media portal that fundamentally revolutionizes the way organizations connect with markets and social communities, shaping new world possibilities and challenges in various aspects of business, because Instagram offers image and video sharing features, customer responses via Instagram can be in the form of comments left on uploads. picture of the account owner (Aral et al., 2013). Responses left by the consumers on company social media accounts can be a driving force for followers of social media accounts owned by other companies to use the company's products or services which then drive an increase in the company's sales. The increase in company sales will lead to an increase in the company's current assets in the form of cash and receivables that the company can use to cover its short-term liabilities. This then becomes the basis for drawing the following hypothesis:

***H2**: There is a contribution of social media value to the level of company liquidity*

The results of Cade (2018) prove that investors' assessment of corporate communication through social media has a significant positive effect on stock movements, the relevance of information provided in social media activities also has a positive effect on securities prices, returns, and information asymmetry. This is supported by the results of research by Liu et al. (2015); Jiang et al. (2014); Mumi et al. (2018); Chen et al. (2013); Sul and Dennis (2014); and Dijkmans et al. (2015), which proved that information obtained by investors through social media has an effect on stock movements and value. Liu et al. (2015) also proved that the information and reputation depicted through the company's social media can be considered as a company's intangible valuable assets and become the company's competitive advantage. Therefore, the existence of a company on social media to provide feedback, response, and confirmation of information left by many parties on social media accounts will influence the decisions made by the investors, as well as a positive or negative signal which will then encourage change in prices. company shares that describe the value of the company. From the explanation above, the hypothesis that can be formulated is:

***H3**: There is a contribution of social media value to company value*

3. Research Methods and Materials

This article aims to explore the relationship between the contribution of social media value as an independent variable or fixed factor with the level of profitability (dependent variable 1), level of liquidity (dependent variable 2), and firm value (dependent variable 3).

3.1. Variable Measurement

3.1.1. Social Media Value

The value of social media, which is an independent variable or fixed factor, is proxied by Familiarity, which is the measure of the company's recognition by the general public. Measurements are made by scoring and ranking the number of followers of the company's social media accounts. The scoring ranges and ratings used are described on Table 1. as follows:

3.1.2. The Level of Profitability

The level of profitability is proxied by the Gross Profit Margin which is used to show the company's financial performance in terms of its ability to generate gross profit that can be achieved from each sale (Horrigan, 1968). Gross profit margin is a comparison of gross profit and sales in the same period (Chen & Shimerda, 1981). The bigger the calculation results, the better the company's financial condition. The way to calculate it is:

***GPM:** (company gross profit / company revenue) x 100%*

3.1.3. The Level of Liquidity

The level of company liquidity is proxied by the Debt Ratio, which is the ratio between total assets and total liabilities of the company, this ratio is used to measure whether all assets owned by the company can be used to fulfill all liabilities owned by the company, both short and long term (Chen & Shimerda, 1981). The higher the value of this ratio, the more liquid the company will be. The formula used is:

***DAR:** Total Liabilities / Total Assets*

3.1.4. The Company Value

For the proxy company value used is the comparison of Price to Book Value (PBV) (Jensen et al., 1997) with the following formula:

***PBV:** Share Price / Book Value*

Table 1: Familiarity of Corporate Social Media Rating Category

Predicate	Followers Count	Score
A = Widely Known	>1.000.000	5
B = Known	100.001 – 1.000.000	4
C = Quite Known	1.001 – 100.000	3
D = Rather Unknown	101 – 1.000	2
E = Unknown	0 – 100	1

3.2. Research Method

The analysis method used in this research is quantitative with MANOVA analysis to compare groups formed by independent variables based on the dependent variables (Hair et al., 2010). The data used has been taken from the Indonesia Stock Exchange (IDX), which indexes 693 listed companies. The sample used is a number of 308 companies after deducting the number of companies that do not have social media. Data on the company's financial performance is obtained through ICMD IDX, while information on the number of company social media followers is obtained through three major social media platforms namely twitter.com, instagram.com and youtube.com, summary statistics and company social media rankings can also be obtained through www.socialblade.com.

4. Results and Discussion

Of the 308 companies that were used as the research sample, 26% of the companies were from the Trade, Service and Investment sector, followed by 17% companies from the Finance sector, 11% companies from the real estate sector, 10% of the companies belonged respectively to the Basic industry, Chemical, Infrastructure, utilities, and the transportation sector, while rest of the companies which were below 10% comprised of the Customer goods industry, Mining, Miscellaneous industry, and Agriculture sector. Agriculture sector was in the last position with only 3% of companies from number of samples. Details of the composition of companies that have social media by business sector can be seen in Figure 1. below:

Of the total 691 companies listed on the Indonesia Stock Exchange, the figure 308 shows that almost half of the companies registered in Indonesia already have social media accounts. The largest percentage, namely 26% of all registered companies held by the trade, service, and investment sector, shows that companies in the service sector are trying to provide services following the trends, namely by trying to maintain a two-way door of communication with consumers using a platform that is widely known and used by the customers, which is social media. In this study, we then made a ranking of the 308 companies that have social media accounts with the results obtained illustrated on Figure 2 as follows:

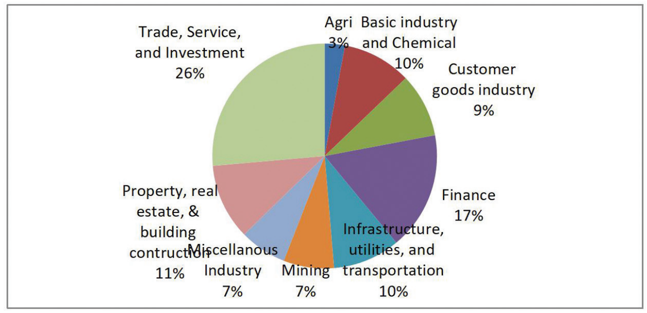

Figure 1: The Composition of Social Media User Companies based on Business Sector

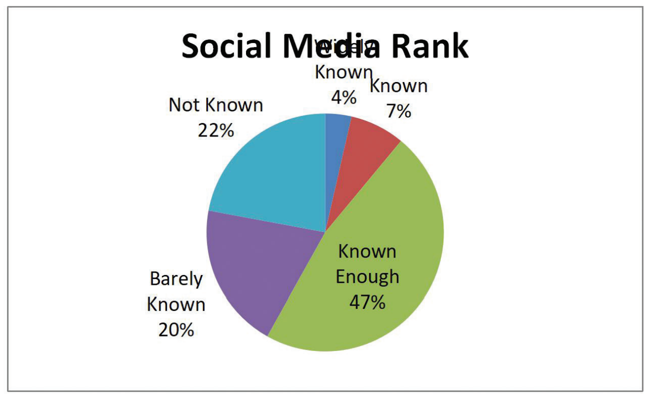

Figure 2: Company Social Media Account Rank based on Followers Count

The ranking results showed that of the 308 companies that own and manage social media accounts, only 4% of the company's social media accounts are widely known by the public, or can be called accounts that are very well known to the public. The ranking is carried out by the number of followers of the company's social media accounts, the company that has the most followers is Air Asia Indonesia Tbk. which has 4.1 million followers on the social media portal twitter, 1.5 million followers on Instagram, and 166 thousand subscribers on Youtube. The number of followers consists of various types of groups ranging from potential customers and corporate customers, shareholders such as company staff to corporate investors. Having a large number of followers indicate that many parties are interested in obtaining company information through the company's social media accounts. Companies can also easily provide information to their consumers through their social media accounts, such as providing promos or sharing information about the company's new products. Meanwhile, the information that can be obtained by investors by looking at the condition of this company is how the company has a large market share, so that it can indirectly increase the company's sales and affect the profits that investors will then get.

The Multivariate Analysis of Variance (MANOVA) method was used in this study to determine whether there were differences in the influence between the five categories of company groups and social media on the company's financial performance. The initial results obtained from data processing using the MANOVA method are the box test used to test the MANOVA assumption which requires that the variance or covariance matrix of the dependent variable is the same (not different). In this analysis, it can be seen that the Box's M test value is 532,351 and the F test value is 21,036 with a significance level of 0.000, which is far below 0.05, so that the null hypothesis which states the same variance matrix is rejected. Which means, the variance matrix of the dependent variable in this study is different as shown in Table 2.

Furthermore, a multivariate test is carried out to see whether the social media ranking value factors affect the Gross Profit Margin (GPM), Debt to Asset Ratio, and Price to Book Value which are the dependent variable group. In the multivariate test, four kinds of multivariate significance tests were carried out, namely Pillai Trace, Wilk Lambda, Hotelling's Trace, and Roy's Largest Root. In this study, the results of the multivariate test showed that the F test value for Hotelling's Trace was 2.874 and significant at 0.001. These results indicate that there is a relationship between the value of social media rankings with the three dependent variables, namely GPM, DAR, and PBV. It is shown in Table 3 below:

After that, through the results of Levene's Test, it will be known whether each dependent variable has the same variance for all groups based on the MANOVA assumption. The test results show that the Debt to Asset Ratio (DAR) variable is significant at 0.05, which means that it has different variances, this violates the assumption of MANOVA. While the Gross Profit Margin (GPM) and Price to Book Value (PBV) variables are not significant at 0.05, which means that these two dependent variables have the same variance and are in accordance with MANOVA assumptions as shown on Table 4.

4.1. Contribution of Social Media Value to Company Profitability Level

Theoretically the value of social media ranking has an indirect effect on the level of company profitability, considering that the higher the value of the social media ranking indicates that the company name is increasingly known because it has a large number of followers. The large number of followers is the company's market for selling its products, meaning that the more followers a company has in its social media accounts, the more it will increase the company's sales level and lead to an increase in company profits. The results of the test of the subject effects that test the effect of the social media ranking value as a fixed factor on GPM as a proxy for the level of company profitability, which is the dependent variable, shows that the F test value for the relationship between the value of social media rank and Gross Profit Margin (GPM) is 3.979. and significant at 0.05 (0.004), which means that there is a difference in GPM between the Social Media Rating Values. Meanwhile, the value of the adjusted R squared for GPM is only 3.7%, which indicates that even though the value of social media rankings has a significant effect on GPM, the contribution of the influence is very low.

Table 2: Box's Test of Equality of Covariance Matrices

Box's M	532.351
F	21.036
df1	24
df2	9111.456
Sig.	.000

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.
a. Design: Intercept + X

Table 4: Levene's Test of Equality of Error Variances

	F	df1	df2	Sig.
GPM	1.381	4	303	.240
DAR	3.376	4	303	.010
PBV	1.489	4	303	.205

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a. Design: Intercept + X

Table 3: Multivariate Tests

	Effect	Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.545	120.266	3.000	301.000	.000
	Wilk's Lambda	.455	120.266	3.000	301.000	.000
	Hotelling's Trace	1.199	120.266	3.000	301.000	.000
	Roy's Largest Root	1.199	120.266	3.000	301.000	.000
X	Pillai's Trace	.109	2.851	12.000	909.000	.001
	Wilk's Lambda	.894	2.868	12.000	796.663	.001
	Hotelling's Trace	.115	2.874	12.000	899.000	.001
	Roy's Largest Root	.071	5.365	4.000	303.000	.000

a. Design: Intercept + X
b. Exact statistic
c. The statistic is an upper bound on F that yields a lower bound on the significance level

4.2. Contribution of Social Media Value to The Company's Liquidity Level

Another financial ratio that can be used to measure a company's performance from a financial aspect is to use the level of liquidity. The level of company liquidity is proxied by the Debt to Asset Ratio, which is a comparison between the company's total current assets and the company's short-term liabilities. This ratio is used to measure whether the company is able to meet its short-term liabilities with the number of current assets owned by the company. The higher the value of this ratio, the more liquid the company is. The two most common forms of company current assets are cash and receivables. In theory, if the higher the value of the company's social media rating, it will lead to an increase in the number of current assets of the company which will then lead to a higher level of company liquidity. However, based on the results of the test of the subject effects which tested the effect of social media value on DAR, which is a proxy for the level of company liquidity as the dependent variable, the F test value for the relationship between the two was 1.825 and insignificant at 0.05 (0.124). it means that there is no difference in DAR between the Social Media Rating Value and the amount of the adjusted R squared value for DAR is only 1.1%.

4.3. Contribution of Social Media Value to Company Value

In addition to the commonly used financial ratios, the company's performance is also reflected in the company's stock price on the capital market, because generally the better the company's financial performance, the more investors will seek to buy it. Therefore, in this study, the company value is proxied by the ratio of the stock price to the company's book value. Based on the test results of the test of between subject effects which test the effect of social media value on PBV, which is a proxy for firm value as the dependent variable, it shows that the F test value for the relationship between the two is 3.237 and significant at 0.05 (0.013) which indicates that there is a difference. company value among social media ranking values. The results of this study support the results of research by Cade (2018); Liu et al. (2015); Jiang et al. (2014); Mumi et al. (2018); Sul and Dennis (2014); and Djikmans et al. (2014), stated that information obtained by investors through social media has an effect on the value of company shares. Meanwhile, the value of the adjusted R squared for PBV is only 2.8%, which indicates that although the value of social media rankings has a significant effect on PBV, the same as the effect on GPM, the contribution of the effect on PBV is very low as shown on Table 5.

Table 5: Tests of Between Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	GPM	2.907	4	.727	3.979	.004
	DAR	1.518	4	.379	1.825	.124
	PBV	3.142	4	.786	3.237	.013
Intercept	GPM	18.016	1	18.016	98.641	.000
	DAR	19.865	1	19.865	95.537	.000
	PBV	41.852	1	41.852	172.456	.000
X	GPM	2.907	4	.727	3.979	.004
	DAR	1.518	4	.379	1.825	.124
	PBV	3.142	4	.786	3.237	.013
Error	GPM	55.340	303	.183		
	DAR	63.002	303	.208		
	PBV	73.533	303	.243		
Total	GPM	78.000	308			
	DAR	92.000	308			
	PBV	164.000	308			
Corrected Total	GPM	58.247	307			
	DAR	64.519	307			
	PBV	76.675	307			

a. R Squared = .050 (Adjusted R Squared = .037)
b. R Squared = .024 (Adjusted R Squared = .011)
c. R Squared = .041 (Adjusted R Squared = .028)

4.4. Theoretical Implications

This study adds to the literature contribution regarding social media and its benefits for the company. How the number of followers of the company's social media accounts can strengthen the promotion of the company's products or services through comments left by followers who are also consumers, this comment can be an invitation to other followers to try the company's products or services, it can also be a review of consumer experiences in using products or services of the company. The more the number of followers of the company's social media accounts, more it will help in the sales growth prospects of the company, this can be a positive signal for investors in shaping their decisions, and they will see a higher value of the company and this will lead to an increased investments. This research is a development of research conducted by Phang et al. (2013); Cade (2018); Liu et al. (2015); Jiang et al. (2014); Mumi et al. (2018); Sul and Dennis (2014); and Dijkmans et al. (2015). Meanwhile, in terms of implications, this study provides an adequate understanding of the online Word of Mouth (WOM) motives which are interrelated with the signal theory and as additional information for investors in relation to single-person decision theory.

4.5. Practical Implications

The importance of ownership, participation and management of social media accounts is an important note for stakeholders in the company, from investors, managers, staff, to consumers. This study provides an insight into how the two-way interaction offered by social media platforms can be a means for companies to maintain their relationship with their consumers. The quality of social media management is very important considering that the world of digital economy will continue to develop, the trend of social media as a means to share information is not going to stop in the near future, so companies need to take advantage of these opportunities. Finally, company managers need to consider a special team to manage the company's social media accounts, so that accounts owned by the company are able to keep abreast of the times so that they can attract many followers who can become the company's market potential.

5. Conclusions

The results obtained from this study are: first, that GPM has a difference in each social media ranking value, and that the value of social media has a significant effect on the Gross Profit Margin (GPM) but with a very low contribution of 3.7%. Second, the Debt to Asset ratio does not have a difference in the rankings of the social media and social media has no significant effect on the Debt to Asset ratio (DAR). Third, the price to book value (PBV) has a difference in each ranking value of social media and social media has a significant effect on Price to book value (PBV), this result supports the results of Sprenger and Welpe (2011); Culnan et al. (2010); Elliott et al. (2018); Bollen et al. (2011); Lee et al. (2015); and Asur and Huberman (2010), stated that information obtained by investors through social media has an effect on the value of the company shares.

Given the type of research that is still not widely carried out in Indonesia, this research is still far from perfect, the limitations of this research include, firstly, the research was carried out within a period of one year, which is on 2018, considering that the world of digital development is very fast, the results of the research can be different if done in different years with different time periods. Secondly, the social media ranking value used is an adaptation of the model of one of the social media account ranking information providers, meaning that the data used is the secondary data, it will be more accurate if the next researcher can carry out research based on the primary data, by using social media analytics data directly sourced from the one who is directly managing that particular social media account. Thirdly, the research is carried out in general on various sectors of companies listed on the Indonesia Stock Exchange, the results of the research will be different and it is possible that it will be more accurate if in the future research is carried out on a micro level, or specifically for one sector of the company listed on the IDX.

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