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An Efficient Us Analysis Emoji and Effective Alternative of Accounting Information

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Abstract:

The general function of accounting includes providing useful information for its users in order to make a decision, so that financial statement communication can be carried out effectively and efficiently. However, at present, what is not being paid attention to is how other parties who are not accountants, who have an interest in financial reports, as untrained, educated, and have no experience in accounting certainly cannot better interpret the company's financial condition.

This study aims to explore empirically the use of emojis as a means of communicating accounting information that is more efficient and effective in making a decision compared to conventional presentation formats. This study used a qualitative research approach using the One Way Anova statistical test. The population in this study is a first semester student of the Department of Accounting and Management, Jendral Achmad Yani University. Determination of the sample in this study using a satisfied random sampling with a sample size of 182 people. The test results in this study are that the use of emojis requires a shorter time (efficient) to classify the company's financial condition and the use of emojis on the ratio of profitability, liquidity and solvency has fewer errors (effective) to classify the company's financial condition compared to other formats.

Keywords: *Emoji, effectiveness and efficiency*

1. Introduction

1.1. Research Background

Accounting information has a very important role for investors, especially in the context of making an investment decision, however inequality of information (asymmetry of information) in a large company will always occur, the company or other owners or users of financial statements will prioritize their own interests. Companies will be afraid to disclose information that is not expected by users of financial statements, so they tend to manipulate financial statements. Currently, accountants compile financial statements in the form of numeric tables, this is in accordance with the Accounting Standard Guidelines as a reference. Meanwhile, the thing that has not been paid attention so far is how other parties who are not accountants but have an interest in financial reports, as untrained, educated, and having no experience in accounting certainly cannot better interpret the company's financial condition. Meanwhile, one of the general functions of accounting is to provide useful information for its use in order to make a decision, so that financial statement communication can be carried out effectively and efficiently.

A phenomenon that has occurred in 2019 in Indonesia is that there is a doctor named Gamal Albinsaid, who lacks knowledge and experience in the field of accounting, mentioning that BUMN debt has swelled in the Jokowi Era which was uploaded on Twitter social media and denied by financial planners. 'Apparently, many netizens are trying to straighten out tweetsDr.Gamal Albinsaid. Among them are the Twitter account owner @MohammadMakruf. He explained about the meaning of BUMN debt. According to him, the money that the customer keeps isdebtfor the bank. So, he said, ifdebtBUMNrepaid, that means the bank is closed. According to him, it is the basic science of accounting lessons '(Febrianti, 2019). The above phenomenon shows that users of financial reports who are not educated in the field of accounting are less precise in interpreting the financial condition of a company so that the information provided can disturb the general public who do not understand accounting information. Therefore, the researcher intends to find a way of presentation that can simultaneously display several dimensions in an overall acceptable format. The format that can be fulfilled is the pictorial or image method.(Moriarity, 1979) states that respondents can easily detect changes in the faces presented, even more quickly and accurately than using accounting numbers or ratios derived from the financial statements. (Kartadjumena et al., 2012) Accounting information presented using Chernoff's schematic face will be more efficient and effective for users of accounting information.

1.2. Problem Formulation

This research aims to explore empirically the use of emojis as a more efficient and effective means of communicating accounting information in making a decision

2. Theoretical Study

Communication according to Hovland, Janis and Kelly in (Effendy, 2000) is 'The process by which an individual (the communicator) transmits stimuli (usually verbal) to modify the behavior of other individuals (the audience)' (Effendy, 2000) the primary communication process, namely the process of conveying one's thoughts and feelings to others by using symbols (symbols) as a medium. Symbols as primary media in the communication process are language, gestures, signs, images, colors, etc. which are directly able to translate the thoughts or feelings of the communicator to the communicant.

The general function of accounting is to provide useful information for investors, editors and other users in order to make decisions. According to (Davis, 2000) information is data that has been processed into something form that is important to the recipient and has tangible value that can be felt in decisions that are now or decisions that are to come. (Reeve et al., 2014) explained that: 'in general, accounting can be defined as an information system that produces reports to parties who have an interest in economic activities and the condition of the company'

(Gale, 1976) explained that:

'The face has long been a source of information in interpersonal communication. This is a very important tool in conveying meaning. In a few seconds facial expressions can move us to the top of the decision'

The author does not focus on conventional presentation formats that use graphics with many arguments that support current accounting theory because the authors see in terms of the efficiency and effectiveness of the presentation of accounting reports so that there is no gap between users of financial statements, financial reports can be read by someone without having to know the science of accounting regularly. deep and also can immediately make the right decision. Therefore, with the development of communication, the author uses symbols as a means of communication. The symbol used is emoji.

According to (Kartadjumena et al., 2012) By looking at the schematic face, someone can quickly react or respond to a problem and immediately make a decision about the condition of a company without having to have special expertise. Emojin is currently very familiar in society through social media that is used today. (Thompson & Foulger, 1996) in his research shows that using Emojis, emojis, and stickers can help each other understand a message.

Emoji made in Japan in 1997, consists of real pictures, such as a face, a grape, or a panda. Emojis require special software support; otherwise, they will appear as icons *placeholder* or empty space. (Thompson & Foulger, 1996). The author conducted experiments by trying to make *Emoji* which is more familiar and more colorful as in Figure 1 below. This image still has similarities with the pictures used in previous studies such as the face of Chernoff's schematic.

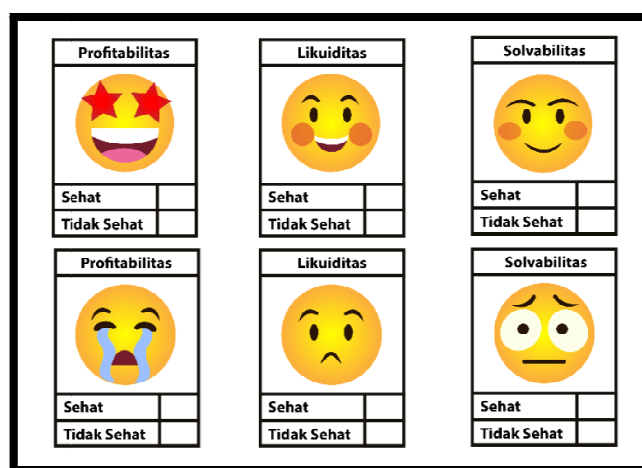


Figure 1: Emoji

Sehat: Healthy; Tidak Sehat: Unhealthy

- Profitability is described by the condition of eye expression. Healthy companies have the expression of stellar eyes, whereas unhealthy ones are expressed by crying eyes.
- Liquidity is described by the shape of the mouth. Healthy company is indicated by the shape of a smiling mouth, while the unhealthy is expressed by the shape of the mouth that is curved upwards.
- Solvency is described by the shape of the eyebrows. Healthy firm is indicated by the shape of the eyebrows that are curved upwards while unhealthy firm is expressed by the shape of the eyebrows that are curved downward.
- Efficiency is the amount of time it takes for the object to solve each of the given cases. Time counting is done by measuring the time difference between the hours when the work starts with the hours when the work is

completed in the healthy and unhealthy company classification in the form of financial reports, financial ratios, and cartoon images. Efficiency is calculated up to seconds.(Kartadjumena et al., 2012) and (Oktafiyani, 2013)

- Effectiveness is the accuracy of the answer that must be obtained by determining the correct number based on the standard answers that have been prepared. The effectiveness is seen by how big the mistake is in grouping the company according to the conditions 'healthy' and 'unhealthy'. Because there are two financial conditions on above, then there are two types of confusion regarding Liquidity, Profitability, Leverage: Type-I (classifies healthy companies as unhealthy companies) and Type-II (classifies unhealthy companies as healthy companies).(Kartadjumena et al., 2012) and (Oktafiyani, 2013)

2.1. Previous Research

(Chernoff, 1973) start designing a schematic face that varies in size and shape depending on the value imposed on a variable. The use of Chernoff's schematic face has been carried out by several researchers.(Moriarty, 1979) conducted research to describe the company's financial status using a face shape. The variables studied are using financial statement data, testing the use of multi-dimensional charts to describe the company's financial status. This study aims to test the speed and accuracy of the respondents in grouping companies into failed or not failed. The results of this study indicate that respondents can easily detect changes in the faces presented, even more quickly and accurately than using accounting numbers or ratios derived from these financial statements.(Febrianto & Rafdinal, 2006) using a graph to describe the company's financial status and dividing it into 4 treatment groups, based on four task complexity (accumulation, recognition, estimation, projection) and four forms of presentation (table, bar graph, line graph and circle graph). The results of these studies indicate a difference in the mean between the groups he observed or at least one different group.

(Febrianto & Rafdinal, 2006) aims to explore empirically the usefulness of schematic faces as a communication tool compared to conventional presentation formats, by focusing on the relative uses of schematic faces, financial ratios, and accounting reports as information formats for decision making. And race on previous studies. The research was conducted in an experimental setting. Samples were taken from three groups divided based on the division, namely students, academics, and practitioners. Samples taken consisted of 110 samples with the distribution of 33 for students, 33 for academics, and the rest is for practitioners.

(Sri Suryaningrum, Suchyo, 2005) The accounting information presented in schematic face shape, respondents can more quickly determine the conditions of a company, this proves that the delivery of accounting information will be more efficient if shown in the form of a schematic face. The accounting information presented with Using cartoon images (schematic faces) will be more efficient and effective for users accounting information.

(Kartadjumena et al., 2012) Accounting information presented using Chernoff's schematic face will be more efficient and effective for users of accounting information. (Oktafiyani, 2013) There are significant differences in the presentation of accounting information in the form of financial statements, financial ratios, and cartoon images. This is indicated by the use of cartoon images processed faster than other methods but not more effective in processing when compared to financial ratios.

3. Research Methodology

3.1. Research Design

This study uses a qualitative research approach using statistic test. The population in this study is a student of the Department of Accounting and Management, General Achmad Yani University, Class of 2019. Minimum respondents were selected who did not really understand financial statements. The sampling method in this study was determined by stratified random sampling (stratified random) by dividing the population into homogeneous groups called strata and then samples were taken randomly from each of these strata. The sample used in this study amounted to 182 students. The questionnaire in this study uses data from trading companies listed on the Indonesia Stock Exchange (IDX), compiled with a 6: 4 comparison of healthy and unhealthy company data.

3.2. Data Analysis

The data analysis methods used in this study include descriptive statistics to provide an overview of the demographics of the respondents and the respondents' knowledge of accounting information. Then perform validity and reliability tests to test whether the questionnaire is valid (Pearson product moment correlation coefficient) and reliable (Cronbach Alpha). Data analysis tool used for t test with One Way Anova analysis

Variable	Indicator	Variable Concept	Scale
1. Effectiveness			
a. Financial data - Profitability - Liquidity - Solvency	Financial ratio values compared to industry averages. (If the profitability & liquidity ratio is > than the industry average, the company is said to be healthy. If the solvency ratio value < the industry average, then the company is said to be healthy.	The respondent's mistake in classifying the companies according to their conditions	Ordinal
b. Ratio - Profitability - Liquidity Solvency	Financial ratio values compared to industry averages. (If the profitability & liquidity ratio is > than the industry average, the company is said to be healthy. If the solvency ratio value < the industry average, then the company is said to be healthy.	The respondent's mistake in classifying the companies according to their conditions	Ordinal
c. <i>Emoji</i> - Profitability - Liquidity Solvency	Emojin shape (The company is said to have good profitability as indicated by the shape of the star's eye, good liquidity is indicated by a smiling mouth, and good solvency is indicated by the eyebrows that are curved upwards.	The respondent's mistake in classifying the companies according to their conditions	Ordinal
2. Efficiency	Time to fill out the questionnaire	Difference in initial time minus end time	Ordinal

Table 1: Operationalization of Variables

3.3. Research Stages

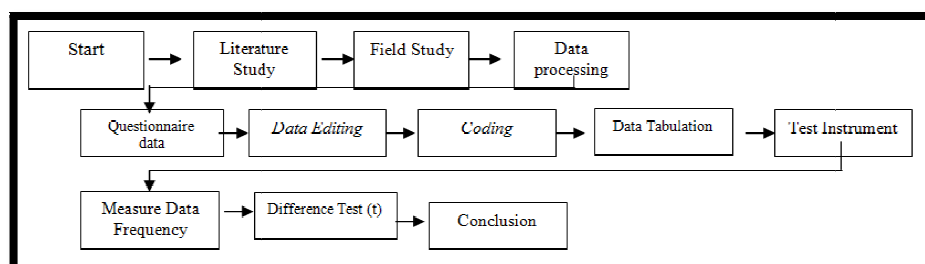


Figure 2: Research Stages

4. Data Analysis and Discussion

4.1. Descriptive Results of Respondents' Demographics

Demographic characteristics are analyzing of respondents which are carried out using various things related to the respondent's condition based on a central tendency analysis. Descriptive of demographic data can be seen in full in the table below:

Information	Frequency	Presentation
Gender		
Male	39	21.4%
Women	143	78.6%
Department of Education		
Accounting	108	59.3%
Management	74	40.7%
Read LK		
Often	50	27.5%
Rarely	128	70.3%
Never	4	2.2%

Table 2: Respondent Demographic Data

Source: Processing Data

Result Descriptive analysis of respondents' demographics based on gender in Table 2 above, shows that male respondents are 39 people (21.4%) and female respondents are 143 people (78.6%). The respondent's scientific department indicated that there were 108 students majoring in accounting (59.3%) and 74 students majoring in management (40.7%). When viewed from the frequency of respondents reading financial reports, 50 people (27.5%) admitted that they often read financial reports, 128 people (70.3%) admitted that they rarely read financial reports and 4 people (2.2%) claimed to have never read reports finance.

4.2. Relationship between Respondents' Scientific Field and Financial Statement Preparation

Based on the questionnaire questions in the first section, the authors obtained data regarding the relationship between the respondent's scientific field and the preparation of financial statements. The relationship between the respondent's scientific field and the preparation of financial statements as measured by one question based on the theory measured by the Likert scale. This measurement gives a score of 1 for a very close opinion, a score of 2 for a close opinion and a score of 3 for an ordinary opinion. Below are descriptive statistics for the question of the relationship between the respondent's scientific field and the preparation of financial statements.

Information	Frequency	Percentage
Very closely	136	74.7%
Tight	45	24.7%
The usual	1	0.5%
Amount	182	100%

Table 3: Relationship between Respondents' Scientific Field and Financial Statement Preparation

Source: Processing Data

Based on Table 3 above, it is obtained the data that the respondent data is 182 people. Respondents who gave very close opinions were 136 people (74.7%), respondents who gave a close opinion were 45 people (24.7%) and those who said they were normal were 1 person (0.5%).

4.3. Relationship between Respondents' Scientific Field and Financial Statement Analysis

Based on the questionnaire questions in the first section, the authors obtained data about the relationship between the respondent's scientific field and financial statement analysis. The relationship between the respondent's scientific field and financial statement analysis as measured by a single question based on the theory measured by the Likert scale. This measurement gives a score of 1 for a very close opinion, a score of 2 for a close opinion and a score of 3 for an ordinary opinion. Following are descriptive statistics for the question of the relationship between the respondent's scientific field and the preparation of financial reports.

Information	Frequency	Percentage
Very closely	124	68.1%
Tight	56	30.8%
The usual	2	1.1%
amount	182	100%

Table 4: Relationship between Respondents' Scientific Field and Financial Statement Analysis

Source: Processing data

Based on table 4 above, the data obtained shows that the respondent's data is 182 people. Respondents who gave very close opinions were 124 people (68.1%), respondents who gave a close opinion were 56 people (30.8%) and those who said they were normal were 1 person (1.1%).

4.4. Respondents' Knowledge of Formulas

Based on the questions in the second part of the questionnaire, the authors obtained data about the respondent's knowledge of the formula using the matchmaking method used to determine the respondent's ability to identify the correct formula for profitability, liquidity and solvency.

Information	Frequency	Percentage
That's right 1	35	19.2%
That's right 3	147	80.8%
amount	182	100%

Table 5: Relationship between Respondents' Scientific Field and Financial Statement Analysis
Source: Processing Data

Based on table 5 above, it can be seen that from the matchmaking method, the results showed that as many as 182 respondents as many as 35 people (19.2%) were only able to answer 1 correct formula given and as many as 147 people (80.8%) answered with correct the three formulas given.

4.5. Logic of Respondents to Financial Ratios

Based on the questions in the second part of the questionnaire, the authors obtained data about the respondents' logic to financial ratios. This question is given with the aim of knowing the ability of the respondent to use their logic, so in this analysis an experiment is carried out, namely a company is said to be better than the industry average if:

- The profitability ratio is higher or lower than the industry average.
- Liquidity ratios are higher or lower than the industry average.
- The solvency ratio is higher or lower than the industry average.

Information	Frequency	Percentage
That's right 1	41	22.5%
That's right 2	45	24.7%
That's right 3	96	52.7%
amount	182	100%

Table 6: Logic of Respondents on Profitability, Liquidity and Solvency
Source: Processing Data

Based on Table 6 above, it can be seen that the results obtained were 41 respondents (22.5%) were only able to answer 1 logic out of the three logics given, then 45 respondents (24.7%) were able to answer 2 of the three logics. given and as many as 96 respondents (52.7%) answered correctly all the logic given.

5. Discussion

5.1. Validity and Reliability Test

Validity and reliability tests are used to determine whether the questions that are spread through the questionnaire are valid and reliable. A question is said to be valid if the question on the questionnaire is able to reveal something to be measured. Meanwhile, it is reliable if the answers from respondents to questions are consistent or stable from time to time.

Reliability testing in this study using SPSS 25 using alpha model analysis. Testing is done by paying attention to the correlation value between the scores of each item and the total score of the items. The correlation value can be seen in the Corrected Item Total Correlation in the output which is compared with the product moment r table value. If the coefficient value is positive and greater than the product moment r table, then the item is declared valid. The sample in this study was 182 people so that at sig 0.05, the value of r table was at a value of 0.145. Below are the results of the validity test in this study

Item	Corrected Item Total Correlation	Value of r Product Moment	Information
Financial Profitability Data	0.627-0.917	0.145	Valid
Liquidity Financial Data	0.325-0.820	0.145	Valid
Solvency Financial Data	0.380-0.927	0.145	Valid
Profitability Ratio	0.472-0.890	0.145	Valid
Liquidity Ratio	0.385-0.893	0.145	Valid
Solvency Ratio	0.730-0.951	0.145	Valid
Emoji Profitability	0.340-0.870	0.145	Valid
Emoji Liquidity	0.461-0.703	0.145	Valid
Emoji Solvency	0.510-0.726	0.145	Valid

Table 7: Validity Test
Source: Processing Data

Based on Table 7 above, it can be seen that all items of the questionnaire questions can be declared valid. This is because the calculated r value obtained is greater than the product moment r , it can be concluded that all question items are valid.

Item	Cronbach Alpha	Value of r Product Moment	Information
Financial Profitability Data	0.965	0.145	Reliable
Liquidity Financial Data	0.926	0.145	Reliable
Solvency Financial Data	0.946	0.145	Reliable
Profitability Ratio	0.932	0.145	Reliable
Liquidity Ratio	0.936	0.145	Reliable
Solvency Ratio	0.977	0.145	Reliable
Emoji Profitability	0.918	0.145	Reliable
Emoji Liquidity	0.884	0.145	Reliable
Emoji Solvency	0.894	0.145	Reliable

Table 8: Reliability Test
Source: Processing Data

Based on table 8 above, it can be seen that all items of the questionnaire questions can be declared reliable. According to Sekaran (1992) in (Duwi Priyatno, 2018) reliability less than 0.6 is not good, while 0.7 is acceptable and above 0.8 is good. In this case, because the calculated r value obtained is greater than 0.8, it can be said that both are reliable).

5.2. Hypothesis Testing Results Time Difference Associated with Efficiency

In conducting the significance test the author uses the t test with the One Way Anova analysis method. According to (Duwi Priyatno, 2018) regarding the basis for the decision making of significance test using the method of analysis *One Way Anova* are as follows:

- If the probability > 0.05 , then H_0 is accepted, meaning that there is no difference in the mean data to be tested at the 95% significance level.
- If the probability < 0.05 , then H_0 is rejected, meaning that there is a difference in the average data to be tested at the 95% significance level.

Information	Processing Time	
	Ratio	Financial data
Emoji	5,76923 *(0.000)	15.90659 *(0.000)
Ratio		10.13736 *(0.000)

Table 9: T-Test (P-Value) for Processing Time Difference
Source: Processing Data

Table 9 above is the result of efficiency output in the Multiple Comparisons table, Tukey HSD Mean Difference column, sig column and descriptive table. This shows that when compared to financial ratios, the p-value is significant (0.000). When the emoji is compared with financial data, the p-value is obtained of significance (0.000). When financial data is compared with financial ratios, the obtained p-value is of significance (0.000). Based on the theory put forward (Duwi Priyatno, 2018) This means that overall H_0 is rejected and it can be concluded that 'There is a significant time difference in analyzing financial statements using emojis against the format of financial ratios and financial data'.

Information	Mean (minute)	Minimum	Maximum
Emojin	3.620879	1.00	24.00
Ratio	9.390110	1.00	54.00

Table 10: Mean Time of Classification
Source: Processing Data

Table 10 above shows that the mean classification time for the emojis format is (3.620879) minutes or is rounded for 4 minutes which is less than the mean classifying time ratio (9.390110) minutes or rounded to 9 minutes and is less than the mean time for classifying financial data (19.527473) minutes or rounded off for 20 minutes. So, it can be concluded that the use of emojis requires a shorter time (efficient) to classify the company's financial condition with other presentation formats.

5.3. Hypothesis Testing Results for Type 1 and Type 2 Errors Related to Effectiveness

In conducting the effectiveness significance test, using the t test with the one way Anova analysis method.

5.3.1. Profitability

Below is a table of the results of testing the significance of profitability:

Information		Financial Ratios		Financial Data	
		Type 1 (healthy even though not healthy)	Type 2 (not healthy but healthy)	Type 1 (healthy even though not healthy)	Type 2 (not healthy but healthy)
<i>Emoji</i>	Type 1	22,890 * .000		32,044 * .000	
	Type 2		16,071 * .000		34,753 * .000
Financial Ratios	Type 1			9,154 *0.002	
	Type 2				18,681 * .000

Table 11: T-Test (P-Value) for Misclassification of Profitability
Source: Processing Data

Table 11 above is obtained from the results of the effectiveness of profitability type 1 and type 2, namely the Multiple Comparisons table, Tukey HSD Mean Difference column, sig column and descriptive table. When Emojin type 1 and type 2 are compared to financial ratios, the p-value obtained is 0.00 < 0.05 for type 1 and type 2. When Emojin type 1 and type 2 are compared with financial data, the p-value obtained is 0.00 < 0.05 for type 1 and type 2. When financial data type 1 and type 2 are compared with financial ratios, the p-value obtained is 0.002 < 0.05 for type 1 and 0.00 < 0.05 for type 2. Overall H_0 is rejected and it can be concluded that:

'There is a significant difference between type 1 and type 2 profitability errors in the Emoji format against the financial ratio format and the financial data format.'

Mean Profitability Classification Error					
Type 1 (healthy but not healthy)			Type 2 (not healthy but healthy)		
<i>Emojin</i>	Ratio	Financial data	<i>Emojin</i>	Ratio	Financial data
4.96	27.85	37.00	3.30	19.37	38.05

Table 12: Mean Misclassification of Profitability
Source: Processing Data

Table 12 above shows the mean classification error for type 1 emojis format is 4.96 and type 2 is 3.30 which is much smaller than the mean classification error for type 1 ratio (27.85) and type 2 (19.37) and the error mean Classification of financial data type 1 (37.00) and type 2 (38.05). Based on this, it can be concluded that the use of emojin format on profitability ratios has fewer errors (effectively) in classifying the company's financial condition compared to other presentation formats.

5.3.2. Liquidity

Below is a table of the results of the liquidity significance test data processing:

Information		Financial Ratios		Financial Data	
		Type 1 (healthy even though not healthy)	Type 2 (not healthy but healthy)	Type 1 (healthy even though not healthy)	Type 2 (not healthy but healthy)
<i>Emoji</i>	Type 1	29,231 * .000		29,214 * .000	
	Type 2		21,703 * .000		22,527 * .000
Financial Ratios	Type 1			-.016 1.00	
	Type 2				.824 .958

Table 13: T-Test (P-Value) for Misclassification of Liquidity
Source: Processing Data

Table 13 above is obtained from the results of the effectiveness of liquidity type 1 and type 2, namely the Multiple Comparisons table, Tukey HSD Mean Difference column, sig column and descriptive table. When Emojin type 1 and type 2 are compared to financial ratios, the p-value obtained is 0.00 < 0.05 for type 1 and type 2. When Emojin type 1 and type 2

are compared with financial data, the p-value obtained is $0.00 < 0.05$ for type 1 and type 2. When financial data type 1 and type 2 are compared with financial ratios, the p-value obtained is $1.00 > 0.05$ for type 1 and $0.958 > 0.05$ for type 2. Based on theoretical theory Overall H_0 is rejected and it can be concluded that:

'There is a significant difference between type 1 and type 2 liquidity errors in the emoji format against the financial ratio format and the financial data format.'

Mean profitability classification error					
Type 1 (healthy but not healthy)			Type 2 (not healthy but healthy)		
Emoji	Ratio	Financial data	Emoji	Ratio	Financial data
8.27	37.50	37.48	7.42	29.12	29.95

Table 14: Mean Misclassification of Liquidity
Source: Processing Data

Table 14 above shows that the mean classification error for type 1 emojis format is 8.27 and type 2 is 7.42 which is much smaller than the mean classification error for type 1 (37.50) and type 2 (29.12) and type 1 financial data classification errors (37.48).) and type 2 (29.95). Based on this, it can be concluded that the use of the emojis format in the liquidity ratio has fewer errors (effectively) in classifying the company's financial condition compared to other presentation formats.

5.3.3. Solvency

Below is a table of the results of the data processing of the solvency significance test:

Information		Financial Ratios		Financial Data	
		Type 1 (healthy even though not healthy)	Type 2 (not healthy but healthy)	Type 1 (healthy even though not healthy)	Type 2 (not healthy but healthy)
Emoji	Type 1	26,456 * .000		34,269 * .000	
	Type 2		14,835 * .000		16,967 * .000
Financial Ratios	Type 1			7,813 * .046	
	Type 2				2,132 .813

Table 15: T-test (p-value) for Misclassification of Solvency
Source: Processing data

Table 15 above is obtained from the results of the solvency effectiveness of type 1 and type 2, namely the Multiple Comparisons table, Tukey HSD Mean Difference column, sig column and descriptive table. When Emoji type 1 and type 2 are compared to financial ratios, the p-value obtained is $0.00 < 0.05$ for type 1 and type 2. When Emoji type 1 and type 2 are compared with financial data, the p-value obtained is $0.00 < 0.05$ for type 1 and type 2. When financial data type 1 and type 2 are compared with financial ratios, the p-value obtained is $0.046 < 0.05$ for type 1 and $0.813 > 0.05$ for type 2. Based on theoretical theory Overall H_0 is rejected and it can be concluded that:

Mean Profitability Classification Error					
Type 1 (Healthy But Not Healthy)			Type 2 (Not Healthy But Healthy)		
Emoji	Ratio	Financial data	Emoji	Ratio	Financial data
11.64	38.10	45.91	14.70	29.53	31.66

Table 16: Mean Error in Classification of Solvency
Source: Processing Data

Table 16 above shows that the mean classification error of type 1 emojis format is 11.64 and type 2 is 14.70 which is much smaller than the mean classification error of type 1 (38.10) and type 2 (29.53) financial data and the mean of classification error of type 1 financial data (45.91).) and type 2 (31.66). Based on this, it can be concluded that the use of the emojis format on the solvency ratio has fewer errors (effective) in classifying the company's financial condition compared to other presentation formats.

6. Conclusion and Recommendation

6.1. Conclusion

Based on the discussion previously described, it can be concluded that:

- There is a significant time difference in analyzing financial statements using emojis. And the use of emojis requires a shorter (efficient) time to classify the company's financial condition compared to other formats.
- There is a significant difference between type 1 and type 2 profitability errors in the emoji format against the financial ratio format and the financial data format. And the use of emojis on profitability ratios has fewer errors (effective) to classify the company's financial condition compared to other formats.
- There is a significant difference between type 1 and type 2 liquidity errors in the emoji format against the financial ratio format and the financial data format. And the use of emojis on liquidity ratios has fewer errors (effectively) to classify the company's financial condition compared to other formats.
- There is a significant difference in error type 1 and type 2 solvency in the emoji format against the financial ratio format and the financial data format. And the use of emojis on the solvency ratio has less error (effective) for classifying the company's financial condition compared to other formats.

6.2. Recommendation

6.2.1. For Further Researchers

- Increase the number of research samples so that they will be more representative.
- Using a non-monotonous questionnaire
- Trying other industries in presenting examples of companies on the questionnaire such as banking, property and so on.

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