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ANALYSIS OF ROA, NPM, AND TATO BEFORE AND AFTER THE OPERATION OF ONLINE APPLICATION-BASED DIGITAL COMPANIES IN RETAIL, TRANSPORTATION, AND MEDIA SECTOR COMPANIES IN THE DISRUPTION ERA

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Abstract. Incumbent companies currently have to deal with digital disruption due to the operation of online application-based digital companies offering more efficient transactions and more affordable product prices, encouraging consumers to switch from in-store to online shopping. This research aims to empirically test whether there are significant financial performance differences of incumbent companies before and after the operation of online application-based digital companies, involving the variables of Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO), and the population of retail, transportation, and media companies in 2013-2015 and 2017-2019. Paired Sample T-test and Wilcoxon Signed Rank Test are utilized to test normally distributed data and non-normally distributed data, respectively. The research results exhibit that all three variables for retail and transportation companies result in no significant differences while those for media companies result in significant differences before and after the operation of online application-based digital companies.

Keywords: Digital companies, online applications, NPM, ROA, TATO.

I. INTRODUCTION

The rapid and inclusive development of technology has created a new reality, namely a world that feels increasingly narrow and changing so that differences in time and distance are no longer a concern. This phenomenon is closely related to the era of technological disruption, which is characterized by changes in the old system into a new system. The era of technological disruption is also known as the industrial revolution 4.0. Massive changes with unpredictable patterns that cause a lot of uncertainty occur as a result of technological disruption.

In the era of disruption, the development of technology has a significant impact in various aspects, including the business world. The development of technology causes various changes and innovations in the business world. Slowly but surely, a number of sectors such as retail, transportation, logistics, finance, media, and entertainment will be eroded. To survive in this era of technological disruption, businesses need to adapt and innovate. Business actors are required to do new things so that their business can survive and develop so that they can get profits. Efficient technology for transactions in this disruption era requires business actors to change or develop their business models (Tanjungsari, 2020). Business actors are required to

transform from conventional transactions to modern or online-based transactions. This is because consumers will look for products that have better, faster, and easier characteristics so that consumers prefer to make online transactions using internet media or e-commerce.

Broadly speaking, electronic sales (e-commerce) is a term used to describe the buying and selling of goods and services via the internet. With the increasingly widespread use of the internet, the more widespread trade using e-commerce operated by business people both by giant companies that are widely known to MSME players home online stores. In transactions using e-commerce, sellers and buyers do not meet face to face but use intermediary media. The media or business model used is familiar and used in the community, among others, starting from the simplest form of classifieds such as OLX to the form of market places such as Shopee, Tokopedia, and Bukalapak. Sellers and buyers can connect quickly and easily when making transactions because of e-commerce. Everything the buyer needs can be responded to by the seller quickly so that customer satisfaction occurs and profits are obtained by the seller.

According to a survey conducted by the Association of Indonesian Internet Service Providers (APJIII) reported on the kominfo.go.id website, the number of internet users was more than half of the population in Indonesia in 2016. In 2016, the number of internet users in Indonesia reached 132.7 million out of 256.7 million total population in 2016 or equivalent to 51.8%. This is one of the driving factors for the increasing number of businesses innovating in the field of digital transactions based on online applications. In that year, e-commerce was on the rise in Indonesia, starting from transportation applications such as Gojek and Grab, to shopping applications such as Shopee, Tokopedia, and Bukalapak. The products or services provided are more efficient, practical, and tend to be affordable.

With the convenience offered by these online applications, people tend to choose to use online applications using internet media or e-commerce. Electronic sales (e-commerce) is a term used to describe the sale and purchase of goods and services via the internet. With the increasingly widespread use of the internet, the more widespread trade using e-commerce operated by business people both by giant companies that are widely known to MSME players home online stores.

However, changes in the consumption patterns of Indonesians can also cause incumbent companies to start experiencing disruption. The operation of digital companies based on online applications can also disrupt or disturb the existence of companies that have been present first, especially in the retail, transportation, and media sectors.

Retail companies are an important sector in the economic life of a country, especially when the process of distributing goods and services from producers to consumers is carried out. The emergence of the phenomenon of online shopping in society and the intense competition that occurs in the market has made sales of incumbent retail companies experience a downward trend in recent years. E-commerce companies such as Shopee, Tokopedia, Bukalapak are present to disrupt incumbent retail companies such as PT Hero Supermarket, PT Matahari Department Store, and PT Matahari Putra Prima The company is closing outlets to be more efficient and able to follow people's consumption patterns.

Reporting from CNBC Indonesia, Hero Group has closed all Giant outlets at the end of July 2021. The closure was carried out as the final step taken by the company. Previously, from the end of December 2017 to March 31, 2021, the company had reduced its employees by 6,667 people. Based on the 2018 financial report, the number of PT Hero Supermarket employees

was 13,734 people, down from the previous period of 14,642 people. However, he focused on developing IKEA as a necessary response to adapt to changing market dynamics. This is done because IKEA is considered not only for selling furniture, but also for providing experiences to consumers.

In addition, in the case of PT Matahari Department Store, to keep up with the changes in people's consumption patterns, it released an online store using the website mataharimall.com. Despite releasing the website, PT Matahari still experienced a decline in performance. Reporting from liputan6.com, there are two department store outlets from Matahari that were closed at the end of September 2017, namely in Pasaraya Blok M and Manggarai. The closure was due to the fact that the performance of the two stores did not meet the sales target due to the shift of people's shopping habits to online stores.

Previous research conducted by Akbar et al. (2021) is in accordance with the above statement which concludes that there is a significant difference in Return on Assets and Total Asset Turnover before and after the implementation of e-commerce. In this study, the object tested was a retail sub-sector company in the Indonesian Sharia Stock Index (ISSI) on the Indonesia Stock Exchange. However, Kamaluddin (2021) states that Return on Asset in retail subsector companies between the period before and after the implementation of e-commerce shows an insignificant difference, which means that the application of e-commerce has not made a positive contribution.

In the transportation sector, online application-based companies that were present and operating around 2016, disrupted the existence of incumbent companies (Agun & Cahyaningsih, 2019). The previous research stated that there was a decline in the company's financial performance in 2016 and 2017. In 2016, there were widespread protests regarding the arrival of online transportation, both in city centers and in rural areas. Traditional transportation actors still show disapproval of the adoption of application-based transportation. Online transportation is more popular with the public because of the ease of booking, paying, and requesting transportation services. By using online transportation, consumers only need to order using a smartphone and provide the location where they are via GPS then the driver will pick up right at that location. The prices offered by these companies tend to be more affordable than conventional transportation prices. The practicality and accuracy of the system can certainly spoil consumers.

However, previous research conducted by Tirtosudiro et al. (2023) explains that one of the incumbent companies in the transportation sector, namely PT Blue Bird, has innovated by working with Gojek as an online transportation company. This is supported by research conducted by Cahyaningtias & Rosyadi (2023) which states that there is no significant difference in Return on Asset between before and after the existence of online transportation.

The development of the media sector is growing rapidly from year to year. The existence of the internet presents video sharing sites that can be easily accessed by the public. Through video platforms on smartphones, users can watch videos anywhere supported by streaming technology. One of the sites used to present various types of video content that is widely used is Youtube. In addition to videos, currently many people also use subscription applications to watch movies such as Netflix and VIU. Unlike television, users can get a wide selection of content or movies, without having to depend on a system that can be accessed anytime and anywhere. These services disrupt the existence of television. This is evidenced by research conducted by Haqqu & Ersyad (2020) which states that the frequency of adolescents watching

television programs is less than 3 times, namely 57.1%. Previous research conducted by Rahman & Jumhana (2020) also stated that Net Profit Margin, Return on Asset, and Total Asset Turnover decreased in 2014-2018 in one of the companies in the media sector.

Based on previous research conducted in these three sectors, the results of the study show inconsistencies. This is taken into consideration to determine the factors that cause these variations in the research variables. In addition, this study also added a research year range which was previously two years before and after the implementation of e-commerce, to three years before and after the implementation of e-commerce. This study also uses different variables in measuring financial performance. The financial performance ratios used in this study are Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO).

Return on Asset (ROA) can shed light on whether companies are able to generate profits from their assets amidst technological disruption. Changes in ROA before and after the presence of digital companies based on online applications can illustrate the effects of changes in business models or strategies of traditional companies in adjusting to market changes triggered by technology. As for the Net Profit Margin (NPM) variable, it can be used to help management in assessing the company's ability to convert sales into net profit, especially in the face of increasingly fierce competition and changes in consumer behavior triggered by technology. Changes in NPM can provide insight into how companies in the retail, transportation, and media sectors respond to the presence of digital companies based on online applications in managing costs and increasing profitability. The Total Asset Turnover (TATO) variable describes the company's ability to use its assets to generate revenue. In the context of digital companies, TATO will help evaluate how efficient the company is in optimizing the use of its assets to generate revenue, especially in the midst of increasingly fierce competition and changes in consumer behavior. Changes in TATO can provide insight into the extent to which a company has successfully adjusted its operational strategy to deal with technological disruption and improve the efficiency of its asset utilization.

In the industrial era 4.0, incumbent companies are required to adapt to technology. Innovation strategy is an important factor so that companies can maintain their existence in this disruption era. Several companies listed on the Indonesia Stock Exchange innovate with online-based sales to increase sales. This is done to maintain its existence in the digital era so that it can increase profits. Companies using e-commerce can develop new and more promising revenue streams not found in traditional trading systems, increase market share, reduce operating costs, increase global influence, increase customer loyalty, and manage suppliers (Anggrainie, 2020).

Innovations made by management have an impact on the company's financial performance. Innovation can improve financial performance by increasing attractiveness in the market, but innovation can also reduce company performance if it is not carefully projected, such as high development costs that can suppress profits. For this reason, financial performance analysis is needed to find out an overview of the company's financial condition. The results of the analysis can provide information to management regarding the strengths and weaknesses of the company and help them understand the steps that need to be taken. This information becomes the foundation for managers to make strategic decisions and innovations in the future.

This research uses the Industrial Organization Theory proposed by Michael Porter in 1980 through a book entitled "Competitive Strategy". According to Porter, there are five competitive

factors that affect the strength of the industry, namely the possibility of new competitors, the power of suppliers, the power of buyers, the potential for substitution, and competition within the industry. Therefore, the company's management understanding of these factors will determine the right strategy to be taken for the survival of the company.

Based on the explanation above, this research will discuss from the perspective of the financial performance of go-public companies listed on the Indonesia Stock Exchange. Researchers want to know the impact of the emergence of digital companies based on online applications such as Shopee, Tokopedia, Bukalapak, Gojek, Grab, and Youtube on the operations of go-public companies in the retail, transportation and media sectors in 2013-2015 and 2017-2019. Therefore, researchers conducted research on how the performance of public companies in the retail, transportation and media sectors before and after the operation of digital companies based on online applications by conducting empirical studies on companies listed on the Indonesia Stock Exchange with a different test method.

II. RESEARCH METHODOLOGY

A. Type of Research

This research is quantitative research. Quantitative research method is a method for finding knowledge by using data in the form of numbers as a means of analyzing information about what you want to know. The quantitative research method was chosen in this study with the aim of knowing the differences in Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO) in retail, transportation, and media sector companies before and after the existence of digital companies based on online applications.

Table 1 Operational Definition of Variables

Variables	Formula
ROA	$\frac{Laba\ bersih}{Total\ Aset}$
NPM	$\frac{Laba\ bersih}{Penjualan}$
TATO	$\frac{Penjualan\ bersih}{Total\ Aset}$

B. Data Type and Source

The data used is secondary data. In this study, the secondary data used are the company's annual financial statements. The financial report data is obtained from the IDX website (http://www.idx.co.id/) and the related company website. The period used is three years before the operation of digital companies based on online applications (2013 - 2015) and three years after the operation of digital companies based on online applications (2017 - 2019).

C. Population and Sample

The population in this study are public companies in the retail, transportation and media sectors listed on the Indonesia Stock Exchange (IDX). The sampling technique used is purposive sampling. In this study, there were 38 samples of companies taken based on the following criteria:

a. Retail, transportation, and media sector companies listed on the Indonesia Stock Exchange that have financial statement data in 2013-2015 which indicates the era before the

operation of digital companies based on online applications and 2017-2019 which indicates after the operation of digital companies.

b. Have complete annual financial report data during the research period.

D. Data Collection Methods

This research uses the documentation method, namely by recording and exploring the data and documents needed in this research. The required information and documents include the company's financial statements, which can be accessed through the website www.idx.co.id or the official website of the company concerned.

E. Data Analysis Method

In this study, the data analysis method used was a different test using the Paired Sample T-test and Wilcoxon Signed Rank Test with the application of the Statistical Product and Services Solutions (SPSS) version 24 application:

1. Descriptive Statistics

Descriptive statistics are used in this study to describe the characteristics of existing variables. The main variables that are the focus of this study are the financial data available in the company's financial statements. The data was analyzed for three time periods, namely three years before the online application company was present and three years after. To analyze these variables, the analytical tools used include the calculation of average, maximum value, minimum value, and standard deviation.

2. Data Normality Test

In this study, to assess whether the data is in accordance with the normal distribution, Saphiro Wilk statistical analysis was used.

3. Hypothesis Test

- Paired Sample T-test

Paired Sample T-test is a test method used to evaluate the difference between two samples that have a paired relationship and normal distribution. The sample is a paired sample referring to a situation where the same subject experiences two different treatments, namely before the process and after. According to Widiyanto (2013), the test method used to evaluate the effectiveness of the treatment is the Paired Sample T-test, which identifies the difference between the means before and after the treatment.

- Wilcoxon Signed Rank Test

Wilcoxon Signed Rank Test is used to measure the significance of differences between two paired samples that are not normally distributed. In this study, subjects will be measured in the same way but there are two kinds of treatment, namely before and after.

III. Research Results

A. Descriptive Statistics Test

Descriptive analysis is used to present an overview and description of the data used in the study. The descriptive test results in the table contain the minimum value, maximum value, average, and standard deviation of each research variable.

Table 2 Descriptive Statistical Analysis of the Retail Sector

Variables	N	Minimum	Maximum	Mean	Std. Deviation
ROA Before	24	-3,598	0,422	-0,228	0,955
ROA After	24	-1,872	0,284	-0,085	0,426
NPM Before	24	-0,665	1,040	0,016	0,280
NPM After	24	-0,085	0,531	0,037	0,121
TATO Before	24	0,042	8,406	2,088	1,632
TATO After	24	0,043	17,672	2,781	3,555
Valid N (listwise)	24				

Table 2 shows that of the 24 sample companies studied, the results of the average descriptive statistical analysis for retail sector companies on the Return on Asset (ROA) variable before the operation of online application-based digital companies was -0.228 with a standard deviation of 0.955. Meanwhile, the average result after the operation of online application-based digital companies has an average of -0.085 with a standard deviation of 0.426. This shows that the profit level of incumbent companies in the retail sector as measured by assets has increased after the operation of digital companies based on online applications.

On the Net Profit Margin (NPM) variable, the results of the average descriptive analysis before the operation of the online application-based digital company were 0.016 with a standard deviation of 0.280. While the results of the average after the operation of the online application-based digital company increased by 0.037 with a standard deviation of 0.121. This shows that the level of profit obtained by incumbent sector companies as measured by sales has increased after the operation of digital companies based on online applications.

The average descriptive analysis before the operation of an online application-based digital company for the Total Asset Turnover (TATO) variable is 2.088 with a standard deviation of 1.632. While the results of the average after the operation of online application-based digital companies increased by 2.781 with a standard deviation of 3.555. This indicates that the capital performance of incumbent companies in the retail sector has increased in generating revenue after online application-based digital companies began operating.

Table 3 Descriptive Statistical Analysis of Transportation Sector

Variables	N	Minimum	Maximum	Mean	Std. Deviation
ROA Before	6	-0,033	0,310	0,007	0,125
ROA After	6	-0,493	0,065	-0,083	0,211
NPM Before	6	-0,072	0,202	0,079	0,102
NPM After	6	-2,378	0,139	-0,404	0,977
TATO Before	6	0,318	1,444	0,658	0,408
TATO After	6	0,207	0,803	0,495	0,200
Valid N (listwise)	6				

Table 3 shows the descriptive statistical results of 6 samples of incumbent companies in the transportation sector. The Return on Asset (ROA) variable before the operation of digital companies has an average of 0.077 with a standard deviation of 0.125. Meanwhile, after the operation of digital companies based on online applications has an average result of -0.083 with a standard deviation of 0.211. This indicates that there was a decrease in the profit level of incumbent companies in the transportation sector as measured by assets after digital companies based on online applications began operating. The average Net Profit Margin

(NPM) variable before the digital company started operating was 0.079 with a standard deviation of 0.102. After the operation of digital companies based on online applications, there was a decrease in the average to -0.404 and a standard deviation of 0.977. This shows that the level of profit in transportation sector incumbent companies as measured by sales has decreased after the operation of digital companies based on online applications.

In the Total Asset Turnover (TATO) variable, the average before the operation of digital companies based on online applications was 0.658 with a standard deviation of 0.408. Meanwhile, after digital companies began operating, the average was 0.495 with a standard deviation of 0.200. This shows that there is a decrease in the ability of the capital of incumbent companies in the transportation sector to generate revenue after the operation of digital companies based on online applications.

Based on Table 4, the results of descriptive statistical analysis of incumbent companies in the media sector as measured by the variables Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO) show a sample of 8 companies. The average ROA before the operation of digital companies was 0.069 with a standard deviation of 0.125. Meanwhile, after the operation of online application-based digital companies, the average ROA is 0.005 with a standard deviation of 0.110. This shows that the profit level of incumbent companies in the media sector as measured by assets has decreased after the operation of digital companies based on online applications.

Table 4 Descriptive Statistical Analysis of Media Sector

Variables	N	Minimum	Maximum	Mean	Std. Deviation
ROA Before	8	-0,076	0,320	0,069	0,125
ROA After	8	-0,125	0,208	0,005	0,110
NPM Before	8	-0,149	0,355	0,084	0,171
NPM After	8	-0,214	0,255	0,007	0,174
TATO Before	8	0,340	1,538	0,771	0,369
TATO After	8	0,302	1,304	0,627	0,325
Valid N (listwise)	8				

The average Net Profit Margin (NPM) variable before the digital company began operating was 0.084 with a standard deviation of 0.171. After the operation of digital companies based on online applications, there was a decrease in the average to 0.007 with a standard deviation of 0.174. This shows that the level of profit in incumbent companies in the media sector as measured by sales has decreased after the operation of digital companies based on online applications.

The average descriptive analysis before the operation of online application-based digital companies for the Total Asset Turnover (TATO) variable was 0.771 with a standard deviation of 0.369. While the results of the average after the operation of online application-based digital companies decreased by 0.627 with a standard deviation of 0.325 This indicates that the capital performance of incumbent companies in the media sector has decreased in generating revenue after online application-based digital companies began operating.

B. Normality Test

Before conducting hypothesis testing, a parametric statistical test is required using the normality test. Below is the output of the normality test in this study.

Table 5 *Saphiro-Wilk* Normality Test for Retail Sector

	Saphiro Wilk		
	Statistic	Sig.	Conclusion
ROA Before	0,409	0,000	
ROA After	0,541	0,000	Not normally distributed
NPM Before	0,660	0,000	Not normally distributed
NPM After	0,675	0,000	Not normally distributed
TATO Before	0,765	0,000	Not normally distributed
TATO After	0,567	0,000	Not normally distributed

Table 5 shows that the normality test carried out on Return on Asset, Net Profit Margin, and Total Asset Turnover data in retail sector companies before and after technological disruption results in a significance level of 0.000. The data does not meet the normality test because it is less than 0.05, indicating that the data is not normally distributed. Therefore, the hypothesis test related to profitability in the retail sector will be carried out a non-parametric test, namely the Wilcoxon Signed Rank Test.

Table 6 *Saphiro-Wilk* Normality Test for Transportation Sector

	Saphiro Wilk		
	Statistic	Sig.	Conclusion
ROA Before	0,409	0,107	Not normally distributed
ROA After	0,541	0,020	Not normally distributed
NPM Before	0,660	0,901	Not normally distributed
NPM After	0,675	0,001	Not normally distributed
TATO Before	0,765	0,034	Not normally distributed
TATO After	0,567	0,965	Not normally distributed

Table 6 shows that Return on Asset, *Net Profit Margin*, and *Total Asset Turnover* in transportation sector companies are not normally distributed. This is because the data has a significance level of less than 0.05 so it does not meet the normality test. Therefore, in the hypothesis testing related to profitability in the transportation sector, a non-parametric test will be carried out, namely the Wilcoxon Signed Rank Test for data that is not normally distributed.

Table 7 *Saphiro-Wilk* Normality Test Media Sector

	Saphiro Wilk		
	Statistic	Sig.	Conclusion
ROA Before	0,891	0,239	Normally distributed
ROA After	0,941	0,623	Normally distributed
NPM Before	0,933	0,540	Normally distributed
NPM After	0,924	0,464	Normally distributed
TATO Before	0,896	0,267	Normally distributed
TATO After	0,880	0,187	Normally distributed

Table 7 shows that the data used is normally distributed data. Return on Asset, *Net Profit Margin*, and *Total Asset Turnover* data in the media sector before and after technological disruption meet the normality test results indicated by the significance level of the data greater than 0.05. Therefore, for the third hypothesis test related to profitability in media companies, a Paired Sample t-test will be conducted.

C. Hypothesis Test

Hypothesis testing is used to determine the difference in variables within a predetermined time span. Hypothesis testing in this study uses a significance level of 0.05.

Table 8 *Wilcoxon Signed Rank Test* Retail Sector

Test Statistics			
	ROA After - ROA Before	NPM after - NPM before	TATO after - TATO before
Z	-0,257	-0,171	-1,457
Asymp. Sig (2-tailed)	0,797	0,864	0,145

Based on the results of the Wilcoxon Signed Rank Test for testing the first hypothesis, namely the *Return on Asset* (ROA), *Net Profit Margin (*NPM), and *Total Asset Turnover* (TATO) variables in the retail sector, the significance value for the ROA variable is 0.797, the NPM variable is 0.864, and the TATO variable is 0.145. All three variables have a significance value greater than 0.05 (α> 0.05), which means that H1 is rejected. Therefore, it can be concluded that there is no significant difference in *Return on Asset* (ROA), *Net Profit Margin* (NPM), and *Total Asset Turnover* (TATO) in the retail sector between before and after the operation of digital companies based on *online* applications.

Table 9 *Wilcoxon Signed Rank Test* Transportation Sector

Test Statistics			
	ROA After - ROA Before	NPM after - NPM before	TATO after - TATO before
Z	-1,153	-1,363	-1,572
Asymp. Sig (2-tailed)	0,249	0,173	0,116

Table 9 shows the second hypothesis testing in this study. The test results on the *Return on Asset* (ROA), *Net Profit Margin* (NPM), and *Total Asset Turnover* (TATO) variables show a significance value of more than 0.05. The ROA variable has a significance value of 0.249, NPM of 0.173, and TATO of 0.116. This means that H2 in this study is not supported or rejected. Therefore, it can be concluded that there is no significant difference in *Return on Asset* (ROA), *Net Profit Margin* (NPM), and *Total Asset Turnover* (TATO) in the transportation sector between before and after the operation of digital companies based on *online* applications.

Table 10 *Wilcoxon Signed Rank Test* Media Sector

Paired Samples Test									
Paired Differences									
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2 - tailed)
					Lower	Upper			
Pair 1	ROA Before - ROA After	0,064	0,059	0,021	0,015	0,113	3,077	7	0,018
Pair 2	NPM Before - NPM After	0,077	0,082	0,029	0,009	0,146	2,658	7	0,033
Pair 3	TATO Before - TATO After	0,144	0,137	0,049	0,029	0,258	2,959	7	0,021

Table 10 shows that the *Return on Asset* (ROA) variable has a significance value of 0.018, *Net Profit Margin* (NPM) of 0.033, and *Total Asset Turnover* (TATO) of 0.021. Because the

significance value of the three variables is smaller than the significance level of 0.05 ($\alpha < 0.05$), then H3 is accepted. This means that there is a significant difference in *Return on Asset* (ROA), *Net Profit Margin* (NPM), and *Total Asset Turnover* (TATO) in the media sector between before and after the operation of digital companies based on *online* applications.

IV. Discussion and Research Results

A. Significant Differences in Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO) of Retail Sector Companies

The results of this study indicate that Return on Asset, Net Profit Margin, and Total Asset Turnover in retail sector companies between the period before and after the implementation of e-commerce do not show significant differences or in other words the first hypothesis test shows H1 is rejected. The results of this study are in line with Kamaluddin's research (2021) which states that Return on Asset in retail subsector companies between the period before and after the implementation of e-commerce shows an insignificant difference, which means that the implementation of e-commerce has not made a positive contribution when measured by Return on Asset. Incumbent companies change business processes to e-bussiness in the company's operational activities, so there is no significant decrease or difference in the Return on Asset of incumbent companies.

Based on the results shown in table 4.7, it can be seen that the Net Profit Margin variable in retail sector companies between the period before and after the implementation of e-commerce also does not show a significant difference. The absence of a significant difference in Net Profit Margin is in line with the research of Julia & Hendratno (2020). This can be caused by the operation of digital companies that use online applications, incumbent retail sector companies change their marketing and product sales strategies so that they can compete with digital companies according to the statement from the previous study. With the data object of PT Ace Hardware Indonesia Tbk, they stated that there was no significant difference in data testing conducted on the Net Profit Margin ratio. In the study, it was mentioned that PT Ace Hardware Indonesia has introduced ruparupa.com as a platform that provides a solution for people to buy ACE Hardware Indonesia products even in areas that do not have physical outlets. Although customer satisfaction tends to be higher when shopping directly at outlets, this innovation proves itself as a significant alternative for customers who prefer to shop online in this era, rather than having to visit outlets directly.

PT Sumber Alfaria Trijaya Tbk also launched the Alfagift application in 2015. The innovations made by PT Sumber Alfaria Trijaya cause them to survive in this era of technological disruption. In addition, other retail companies such as PT Erajaya Swasembada Tbk also adapt to technological changes by selling through online applications such as shopee, Tokopedia, and Lazada. Erafone, which is one of the retailers owned by Erajaya Group, joined the Shopee application in 2017 as one of the ways to deal with technological disruption.

In the Total Asset Turnover variable, the results of research conducted by researchers are in line with research conducted by Suryani & Nasri (2020) which concluded that there was no significant difference between Total Asset Turnover before and after the implementation of e-commerce in retail sector companies. This proves that the operation of digital companies based on online applications has not been able to increase company activities.

Although there was no significant increase in the Total Asset Turnover variable, in retail sector companies there was also no decrease as seen from the average in the descriptive statistical analysis, this indicates that retail sector companies have successfully adapted to the

technological developments needed in the disruption era. The increase in total asset turnover indicates that the company has excess total assets and existing assets are fully utilized to increase sales.

In industrial organization theory, it is stated that companies develop competitive strategies as a result of external pressures. This research is in accordance with this theory, namely that companies develop their management capabilities in order to implement the chosen strategy in accordance with market competition so as to prevent potential losses and survive in this era of technological disruption.

B. Significant Differences in Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO) of Transportation Sector Companies

The results of this study indicate that there is no significant difference in Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO) in the transportation sector between before and after the operation of digital companies based on online applications. The results of this study are in line with research conducted by Cahyaningtias & Rosyadi (2023) which states that there is no significant difference between before and after the existence of online transportation because it tends to fluctuate before the existence of online transportation. This can occur due to the collaboration carried out by companies with companies based on online applications which is a form of digitizing their services. An example is the collaboration carried out by an incumbent company such as PT Blue Bird which is a form of digitizing its services. Blue Bird has collaborated with PT Aplikasi Karya Anak Bangsa or better known as Gojek since 2017. Gojek as a digital company collaborates by adding Blue Bird taxi booking services in its application called GoBlueBird. These reservations can be made in all cities where Blue Bird taxis operate so that the opportunity to get customers will be more using online applications. This is an innovation made by conventional transportation companies to continue to develop their business and survive the era of technological disruption.

However, when viewed from the average on descriptive statistical analysis based on the company's financial statements, it shows that there is a decrease in Return on Asset, Net Profit Margin, and Total Asset Turnover after 2016. This is the beginning of the operation of online applications managed by digital companies which are the preferred mode of transportation for the public. This decline is consistent with research conducted by Agun & Cahyaningsih (2019) who used PT Express Trasindo Utama as the object of their research. In the study, it stated that the decline in Net Profit Margin occurred in losses in 2016 and 2017 due to increasingly fierce business competition in both years. While the decrease in Return on Assets was caused by the company reducing its assets by making sales and the decrease in Total Asset Turnover was caused by a decrease in fixed assets due to fixed assets sold by the company.

The main cause of the decline in the three variables is because people began to switch from conventional transportation to online transportation. The underlying reason for the change is that the tariff charged by conventional transportation is considered higher because it uses a taximeter that can only be known after boarding the vehicle. While online transportation offers more affordable and transparent rates through the application, allowing users to know the costs that will be incurred in advance. In addition, the advantages of online transportation are that users can use a variety of payment methods such as cash or with balances on the payment system in the application that can be filled with a variety of digital banking services. Access to

online transportation is also easier, more effective, and efficient, allowing users to book a vehicle quickly and practically only through their smartphone. In addition, a sense of trust and security is also an important factor, because the driver's data has been verified by the online transportation service provider.

In industrial organization theory, it is assumed that most companies competing in a particular segment have control over the same resources and adopt similar strategies. This is appropriate in transportation sector companies, where some companies have collaborated with digital companies based on online applications to increase their sales. The implementation of these strategies requires company management that is able to think creatively so that it can achieve competitive advantage in the era of technological disruption.

C. Significant Differences in Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO) of Media Sector Companies

The results of this study indicate that there are significant differences in Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO) in the media sector between before and after the operation of digital companies based on online applications. The test results carried out using descriptive statistical analysis show that there was a decrease between 2013-2015 and 2017-2019. This research is in line with previous research conducted by Rahman & Jumhana (2020) which used the object of one of the media sector companies, namely PT Surya Citra Media Tbk. In his research, it was stated that Net Profit Margin, Return on Asset, and Total Asset Turnover decreased in 2014-2018. This can occur because of the easy and cheap access to internet services in this era of technological disruption. The influence of the complexity of the mass media industry has led to the emergence of a trend of change in the consumption patterns of Indonesian society, which has shifted from conventional to more dominant towards digital. This change is a process that cannot be avoided by mass media industry players, both in broadcasting and printing.

In broadcast media, with the effectiveness offered by online applications, television users are more likely to watch with their smartphones. Online media that can be accessed easily with smartphones are Netflix, iFlix, Amazon Prime Video, and Youtube. Through video platforms on smartphones, users can watch videos anywhere supported by streaming technology. Unlike television, users can get a wide selection of content or movies, without having to depend on a system that can be accessed anytime and anywhere. Therefore, these online applications can disrupt the existence of broadcast media companies by reducing the frequency of television viewers. This is proven by research conducted by Haqqu & Ersyad (2020) which states that the frequency of adolescents watching television programs is less than 3 times, which is 57.1%.

In research conducted by Andarini (2022), one of the incumbent companies in the media sector, PT Media Nusantara Citra Tbk, launched RCTI + as an OTT (over the top) application in 2019. This indicates that after the research period, PT Media Nusantara Citra Tbk innovated by digitizing its broadcasting.

The main principle of the industrial theory of organization is that firm performance is largely determined by industry forces (external) rather than internal factors.

Technological development is one of the main external causes that lead to changes in the financial performance of companies. Incumbent companies in the media sector can use strategies that are suitable for this era of disruption so that they will generate returns that exceed the average. In addition, decision makers within the company must be rational and committed to acting in the interests of the company so that it can maintain its existence in the era of technological disruption.

V. CONCLUSION

The purpose of this study is to obtain empirical evidence whether there are differences in financial performance as measured by Return on Asset (ROA), Net Profit Margin (NPM), and Total Asset Turnover (TATO) in retail, transportation, and media sector companies before and after the operation of digital companies based on online applications in the era of technological disruption. Based on the results of descriptive statistical analysis and hypothesis testing that has been done previously, it can be concluded as follows:

A. There is no significant difference in Return on Asset, Net Profit Margin, and Total Asset Turnover in retail sector companies between before and after the operation of digital companies based on online applications.
B. There is no significant difference in Return on Asset, Net Profit Margin, and Total Asset Turnover in transportation sector companies between before and after the operation of digital companies based on online applications.
C. There is a significant difference in Return on Asset, Net Profit Margin, and Total Asset Turnover in the media sector between before and after the operation of digital companies based on online applications.

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