Strategic Implementation Comparison of the Indonesian Telecommunications Industry Along Pre-Pandemic Until Post-Pandemic Covid 19 Era

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Abstract

Pandemic situation forced all of people to work remotely. People depend on information technology to be able to work remotely. Telecommunication industries which an industry that contributes to the success of implementation information technology on remote working, have an increase in terms of demand due to the pandemic. AS result telecommunication industries must align their strategic implementation to their strategic formulation to enable survive the pandemic conditions. This paper will look and analyze how telecommunications industry in Indonesia refine their strategic implementation to their strategic formulation to answer the pandemic challenge. It was found that telecommunications industry that aligning their strategic implementation to their strategic formula, have a significant effect on their revenue on pandemic and post-pandemic era.

Keywords

Strategy Implementation, Porter Generic Strategy, Vision Statement, Mission Statement, Pandemic

1. Introduction

Telecommunication Industries in Indonesia has been improved so fast due to digitalization especially in during the pandemic. The Pandemic becoming a world citizen to di "Stay at Home" on daily basis, many organizations did a "Work from home" style to decrease the spread of the virus (Wu et al., 2020). In this case, pandemic becomes an accelerator of digital transformation and of course they must provide top-notch service to support the transformation and achieve competitive advantage on market share in the time of crisis(Reuschl et al. 2022). Besides, traditional communication services periodically decline in service traffic due to acceleration of digital ecosystem (Pramudita and Nurcahyo 2019). Openness of international market to Indonesia also a trigger for telecommunication company to speed up their global transformation (Wibowo and Nurcahyo 2020). To enhance the company's competitiveness, it is important for a telecommunication company to foster sense of innovation to improve their services (Nurcahyo et al. 2021).

There are many options of telecommunication services in Indonesia, one of them are Indosat, & XL Axiata. According to Databooks Katadata they served 286.27 million consumers in Juni 2021. 169,2 consumers were led by state owned telecommunications company, followed by Indosat 60.3 million, and XL Axiata 56.77 million as shown in Figure 1.

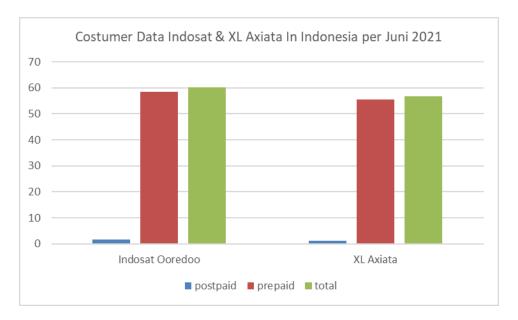


Figure 1. Customer Data Indosat& XL Axiata in Indonesia

The shown opportunity challenges Telecommunication Industries to redefine the Strategic Formulation (David & David, 2016) and implement strategic implementation to answer the market opportunities. Some Telecommunication Industries across the world assume that strategy is a step that limited to achieving short-term goal, which ignore the implementation of vision and mission statement to their organization structure and product that they deliver. This led to Telecommunication Industries only focusing on filling the market in the short-term range without caring about the long-term solution.

Alignment of Strategy formulation with strategic implementation is an important thing that must be done by an organization, if the company wants to achieve not only short-term goals but to achieve the long-term objectives and sustain the organization. This research will discuss how a company defines their vision and mission according to the situational conditions which is pandemic (Barrutia and Echebarria 2021) and how they implement it in 2 different situations. The product or services that a company sold will be analyzed whether it is in line with the mission statement or not. The revenue data of both companies will be tested using statistical approach to show whether there are any differences between a company that implement strategic formulation and a company that does not fit the implementation of strategic formulation during pandemic. By knowing the significance effect of strategic formulation for Indosat and XL Axiata, this research aims to know whether there is any effect to each company in terms of revenue. This research arranged in the following manner. Section 2 describes the literature review. Section 3 discusses methods. Section 4 explains data collection. Section 5 elaborates Result and Discussion. Section 6 provide conclusion. References are provided at the end.

1.1 Objectives

The objectives of this research are:

- 1. To obtain and breakdown the information of telecommunication industries Strategic Formulation.
- 2. To obtain the information of Porter's generic strategies implementation of telecommunication industries.
- 3. To obtain the relationship between the effect of strategic formulation and company revenue growth.

2. Literature Review

2.1. Vision and Mission Statement

Vision and mission are fundamental things that need to be clarified first when formulating a strategy. Vision statement is a statement that states "What the company wants to become?" (David and David 2016). A sharp vision statement will be a good foundation for a company to develop mission statement. Another definition of vision statement can be described as a focus and purpose to reach the destination where organization aims to go (Allen et al. 2018). In other hand, mission statement is also an important thing. Mission statement holds statement that states "What product or

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services that we are selling" (David and David 2016). Mission statement also defined by Kanze D. that it is a guidance to help align the day-to-day decision and making all of the process of an organization have common goal (Kanze et al. 2021). Mission often calls as a journey to reach the vision statement created earlier (Allen et al. 2018, Mansi et al. 2017).

2.2. Strategies

Many of the organizations have Strategic Management as a goal for competitive advantages (Porter, 1985). Competitive advantage is an output to get an advantage from the rival based on their resources, activities, and product (David and David 2016). In that case, many organizations aiming to get that output, before the organization gets the competitive advantage, they must create the strategy itself. Strategic management creating a way for organizations to plan, implement, and evaluate based on their internal factors, and external factors (David & David, 2016). Strategic management is becoming a long-term plan for organization, creating strategy to penetrate the market, making a sustainable business, and becoming the top in industry. (Porter 1985). The word strategy itself is based on military perspective, to overcome the enemy with goals to win the war (Şentürk 2012). On the other hand, creating a good strategy does not come easily, organization do plan and analysis.

Strategic management focuses on allocating resources, minimizing cost, and reducing the damage(Kızıloglu and Serinkan 2015) in the internal, but on the external, determine what our rival capabilities, market focus, and market share (David and David 2016). For the internal purpose, we can look up Resource Based Value (RBV) for the measurement. The point of RBV is to allocate and determine the resources the organization had. Such as machine capacity, Production Experience, and the use of the technology are also key factors (Wernerfelt, n.d.). For the External focus, gaining a market share is one of the advantages, for the measurement we can use Market Based View (MBV). Gaining trust from customers, different with other competitor, and fulfilling what customer needs is factor to becoming success market segment orientation (Jaworski and Kohli 1993). in Plan analysis must use a lot of data, decent tools, and methodology. Especially with improvement of data analytics, data processing for creating a decision is unnecessarily slow and hard (Li et al. 2022). The fast data processing, the fast analysis could be made. For the tools, an organization can use Five force model to indicate the industry organization to jump into or using Five force model to indicate the strategy of the organization (Porter 1985).

3.1. Porter Generic Strategies

Porter's general strategy is seen as an important part of management theory that explains how a company behaves against competitors in a particular industry. The term "overall strategy" refers to a wide range and capabilities that create a competitive advantage, regardless of industry, organization type, or size (Herbert TT Deresky H 1987 as cited in Islami et al. 2020).

A cost leadership strategy requires a company to be the lowest cost producer of a product or service in order to achieve above average profits, even if the prices charged are not above the industry average. Differentiation strategies include creating a customer perception that a product or service is superior to others based on brand, quality, and performance, and allowing them to charge a premium price. Focus strategies include differentiating in narrow market segments or applying cost leadership strategies (Stonehouse and Snowdon 2007) To effectively analyze the strategies of telecommunications Industries in Indonesia, each of the porter generic strategies is identified and analyzed individually. This is to ensure a detailed empirical review.

3. Methods

The methods used in this research are data collection from XL and Indosat, annual report regarding company vision and mission statement, company strategy implementation, company revenue that based on 3 phases of condition prepandemic, pandemic, and post pandemic. From the data we could conclude which company aligned their strategic formulation in their strategic implementation precisely. The company revenue data will be analyzed using t-test to see if there is any significant effect between companies that align the strategic formulation and strategic implementation precisely. T-test is a type of statistical method to find the significant difference between two groups. T-test also used to determine whether the hypothesis is true or not, with calculating data from two groups. T-test conducted in this research is using the help of python programming language by integrating several libraries such as pandas, scipynumpy, and seaborn.

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4. Data Collection

For the analysis of the strategy implementation before and after pandemic in telecommunication industry, we choose PT XL Axiata Tbk, and PT IndosatTbk for our source. The two companies are our main data collection for this research.

PT XL Axiata Tbk began in 1989 as a telecommunication provider, 7 years after the organization regulated for System GSM 900 in three areas, Jakarta, Bandung, and Surabaya. In 1998, they launched a pre-paid product called ProXL, gave service to their customers. Re-branding in 2004 changing their logo and changing their product from ProXL into Jempol (Pre-Paid) and Xplor (Post-Paid). After one year, XL Axiata publicly announced their IPO in BEJ (Bursa Efek Jakarta) with code EXCL. In 2008, XL Axiata launched 3G services in their coverage area. XL Axiata receive many awards in their career in Indonesia, some of those are 1st PR Indonesia Relations Awards & summit (Primas 2016), CSR awards in 2017, Telecom Asia Awards in 2017, and Forst& Sullivan Asia Pasific ICT awards in 2018.

PT IndosatTbk established in 1967, and in 1980, Indonesian government owned 100% of the Indosat, but in 1994, Indosat listed in Indonesia Stock Exchange (BEI) and New York Stock Exchange. But in 2002, Indosat sold to Singapore technologies and TeleMedia company, and then Indosat sold again to Qatar telecom (QTEL). In 2015 Indosat rebranded into "IndosatOoredoo" for their brand image and identity, to liberated customers for digital freely experience. Since 2006, Indosat had given benefit to more than 4.2 million for their Corporate Social Responsibility (CSR) in 3 Pillars, Digital Talent Education, Women Empowerement, and Disaster Emergency Response.

From the company above, we get data from the Quartal report from each organization in year range 2019 to 2021. Data consists of Revenue, and expenses, but we are focusing on Revenue for each quarter. We extract data based on revenue stream each quartal, sorting it based on year. And next we classified it based on 3 categories, Pre-pandemic, Pandemic, and Post-pandemic as shown in Table 1.

| Conditions | Month | Revenue | |
|-----------------|-------|---------|---------|
| Conditions | Month | XL | Indosat |
| | Q1 | 5,974 | 6,046 |
| 2019 | Q2 | 6,295 | 6,245 |
| (Pre-pandemic) | Q3 | 6,466 | 6,562 |
| | Q4 | 6,415 | 7,264 |
| | Q1 | 6,500 | 6,523 |
| 2020 (Pandemic) | Q2 | 6,587 | 6,929 |
| , | Q3 | 6,576 | 7,140 |
| | Q4 | 6,523 | 7,334 |
| 2021 | Q1 | 6,250 | 7,345 |
| (Post-Pandemic) | Q2 | 6,728 | 7,638 |
| | Q3 | 6,827 | 8,072 |
| | Q4 | 6,962 | 8,333 |

Table 1 Operational revenue data of each telecommunication industries in each phase in IDR Billion

5. Results and Discussion

5.1 Vision and Mission Breakdown

To first clarify differences in vision and mission statement in telecommunication industries, Annual Report breakdown conducted to identified statement. XL Axiata Integration Annual Report 2020, shown the company vision is "Become the chosen service provider telecommunications data with high integrity in Indonesia" and mission is "Embrace the world closer together in a straightforward way for a better life". Then Indosat Annual Report 2020, shown the company Vision is "Become Indonesia's leading digital telco company", and mission are "Leader in Providing Digital Touch Points, Strong Player in Key Geographies, and Fast and Focused Player". Vision and Mission Statement of two companies realized through core value as follows:

Table 2. Core Values Statements

| No. | Company | Core Values | Remarks |
|-----|---------|--------------------------|--|
| | | Uncompromising Intregity | Have high ethical standards, zero tolerance for unethical behavior |
| | | T G | Full of enthusiasm to work together, ensuring all processes are carried out to |
| 1 | XL | Team Synergy | achieve common goals |
| 1 | | Simplicity | Doing our best to provide solutions that are easy to use and exceed customer |
| | | Simplicity | expectations |
| | | Exceptional Performance | Always enthusiastic in giving the best performance |
| | Trust | | Think positively, walk the talk and can be relied on. |
| , | Indosat | Care | Demonstrate concern, respect and serve wholeheartedly. |
| | maosai | Youthful Spirit | Energetic, dynamic and dare to be a change driver. |
| | | Passion To Be the Best | Strive for excellence through continuous service improvement and refinement |

Both XL and Indosat have a unique and global vision statement that shows where they want to become. This vision statement could be great companies' foundation to develop their mission statement.

By looking at the mission statement, XL have a less mission statement than Indosat. Also, XL has more general mission statements than Indosat that states their mission statement into 3 different mission statements. David (2016) mentions that a company that formalized their mission statement has twice the average return on stakeholder.

With mission and vision statement for both companies, they had produced core values based on Table 2. Core values for XL are in the middle, for internal and external, creating team synergy to give the best performance service for the user. But for Indosat, their core values more into external side which is user, with extra push on the youth generation for the market segment.

5.2 Product and Mission Alignment along Pre-Pandemic Era until Post-Pandemic Era

Product and Mission alignment can follow by breakdown the highlighted Corporate Strategy along Pre-Pandemic until Post Pandemic time then compared to the existing vision and mission statement. Highlighted corporate action of two companies examine as follows:

Table 3. Highlight corporate Strategy to Product and Mission Alignment

| No. | Company | Corporate Strategy | | |
|-----|---------|-----------------------------|----------------------------------|------------------------------|
| | | Pre-Pandemic (2019) | On-Pandemic (2020) | Post-Pandemic (2021) |
| 1 | XL | In 2019, XL focus on key | XL main strategy is to | The launch of XL SATU, |
| | | areas, Network | achieve operational excellence | the first convergence |
| | | modernization, fiberization | to become Fully Converged | product in the market, the |
| | | and digitization as 4G and | Digital Player that first in the | Company steady steps to |
| | | 5G future backbone | Indonesian telecommunications | Become a Number One |
| | | | industry include mobile business | Convergence Operator in |
| | | | digitization and increase the | Indonesia. |
| | | | presence of broadband services. | |
| | | XL Axiata strengthens the | XL Axiata continues to work on | Company and majority |
| | | Application Program | preparing the network for the | shareholder, Axiata |
| | | Interface (API) | implementation of 5G services. | Investment Indonesia, |
| | | architecture. So that it is | A number of initiatives has been | signed a joint venture took |
| | | expected to facilitate the | implemented to increase | 66.03% shares of PT Link |
| | | process of digitizing | capacity network and network | Net Tbk worth IDR 8.7 |
| | | information technology | efficiency which includes radio, | trillion. This is one of the |
| | | with customers, internal, | transport, and core. Numerous | strategies to support vision |
| | | and strategic partners | 5G trials has also been | of being an Operator |
| | | | implemented since 2017 ago | Number One Convergence |
| | | | until at the moment. One that | in Indonesia |

| | | Running dual brand strategy - XL and Axis which was launched in 2016. The XL brand is targeted at the White Collar and segment Blue Collar who values SIMPLICITY & experience good data. While the Axis brand is intended for teenage who need the kinds of apps and services that wanted and needed, such as gaming and online communities. Postpaid brand, XL Prioritas (Prio) targets the premium segment with offers Innovative smartphone bundling. With experience quality customers, supported by network investment and expansion | just did is a trial of Dynamic Spectrum Sharing (DSS) 4G/5G. Enhancing Mobile business digitization and increase the presence of broadband services. digitizing XL, including Prioritas, and Axis. Digital distribution model, increasing digital advertising, and digitizing customer service. This strategy is also in line with the needs of today's society. Consumer behavior and consumer preferences in interacting with various types of services changed drastically due to Covid-19. | XL remain focused approach to customers where offer segmented by brand (XL and Axis) with the proposition different products are main strength to help overcome intense competition in the industry this. XL are the company most digitally focused with income percentage highest from data, and penetration percentage tallest smartphone in the industry. |
|---|---------|---|--|--|
| 2 | Indosat | Focusing on delivering improved customer experience through attractive and innovative products and services supported by good 4G quality. This approach guided our efforts on multiple fronts, from network roll out to customer interfaces to product offerings for both retail and enterprise segments. | In 2020 we continue focus and continue with our products and services at 'Simple, Transparent, Relevant and Worry- Free' to our customers and impacting significant increase 11.6% of our service cellular revenue for 2020, the highest growth among the nation's top 3 operators. | customers are the company's main focus. Indosat will continue to invest in modernizing key infrastructure and developing the network to enhance the best experience for customers. then encourage simple and transparent services and provide more service innovations. In the future we will provide better services for our customers and support the Indonesian government to provide better infrastructure for Indonesia's Digital Economy |
| | | IndosatOoredoo Business expanded its fiber optic network to serve approximately 4,500 companies and grew its submarine cable network through the INDIGO consortium, | Indosat deepened synergy with Google and Facebook, by enhancing user experience with Facebook flex, operator store and Google MDP, non-telco partners, as well as local content creators and various local stakeholders. Created a new framework to facilitate over-the- | Indosat completed their business merger after receiving all required regulatory and shareholder approvals. After the merger, the company's name changed into IndosatOoredoo Hutchison. Under the |

| | top (OTT) bundling and added new partnerships with Viu, Amazon Prime Video, Netflix, Vidio, MOBA and leading RPG gaming partners: PUBG, Free Fire and Mobile Legends. | merger, IndosatOoredoo Hutchison will have a greater scale with better financial strength and expertise along with the ownership of superior network, talents, and strategic partnerships. |
|--|--|--|
| Indosat continued to provide simple and transparent high value offers for customers, but with clearly delineated limits. We also customized packages and offers to be region-specific. By structuring our offers in such a way that they delivered high value for which customers did not mind paying more, IM3 Ooredoo was able to push price increases for different product variants five times over the year | IM3 OoredooPrepaid's portfolio, continued to promote the launching of the Freedom Internet and Freedom Quota Harian packages as 'best value for money' products. These products offer easy-to-use features for account management and account top-ups, which were well received by the market. | Indonesia's economic situation, which has not fully recovered due to the pandemic, requires the community, especially young people, to have a priority scale in determining needs. This makes them wiser in managing their finances and selective when choosing the products, they need. Understanding these conditions, IM3 Ooredoo now offers a 2.5GB Freedom Internet package at a superefficient price of Rp. 9,900 for a 5-day active period, allowing customers to continue to be connected and still manage their spending. |

Table 3 shown that both companies have been consistently executing their mission from Pre-Pandemic until Post-Pandemic, but Indosat got more align rather than XL. Over three years Indosat has focused on maintaining customer experience, while excel also concerns on consumer but more focus on product innovation through digitalization.

Based Porter General Strategic to examine product strategies, XL have more segmented product rather than Indosat. Indosat through their product, IM3 (prepaid and postpaid) use cost leadership strategies to target board consumer using low-cost promotion over three years. XL though XL Brand, Axis, & XL Priority, three of them use different strategies. XL Brand use cost focus targeting blue collar & white collar, Axis use cost leadership targeting teenager, and XL Priority use differentiation focus targeting premium user.

5.3 Statistical test alongPre-Pandemic Era until Post-Pandemic Era

Based on previous explanations on 5.2 it is known that Indosat implementation is more aligned along the pre-pandemic era until post-pandemic era than XL. Statistical test then conducted to see whether any significant difference between a company which aligned their strategic implementation with strategic formulation to their revenue, and a company which not aligned precisely.

The statistical test used in this research is t-test to compare the value of revenue from company that align their strategic implementation with their formulation precisely and the one who does not align precisely. To continue the analysis, it must be checked first whether the data is valid for calculated in statistical test. The data need to follow some rules

such as the data must be independent to each other, and the data must be normally distributed. As shown in Figure 2 show histogram of total data Indosat and XL and Figure 3 show Data distribution of revenue Indosat and XL along 3 phases of pandemic, both explains that one in which the majority of data points are relatively similar, meaning they occur within a small range of values with fewer outliers on the high and low ends of the data range. This means the data is normally distributed as total and if separated by phase.

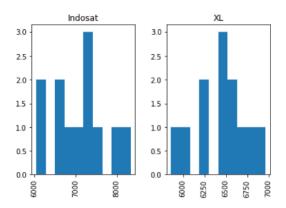


Figure 2. Histogram of total data Indosat and XL

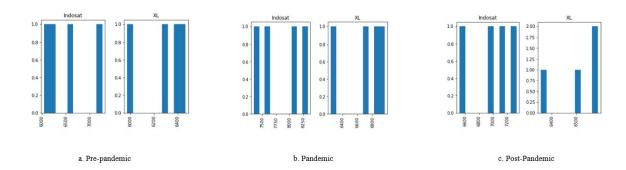


Figure 3. Data distribution of revenue Indosat and XL along 3 phases of pandemic

Table 4. Normality and homogeneity test of XL and Indosat revenue data through 3 phases of pandemic

| Level of Significance | 0.05 |
|-----------------------------------|-------------|
| Shapiro-wilks XL Result Range | 0.275-0.378 |
| Shapiro-wilksIndosat Result Range | 0.569-0.833 |
| Levene Result Range | 0.133-0.312 |

Shapiro-wilks test was also conducted to see whether the data is normally distributed or not, the small value indicated the sample is not normally distributed, you can reject null hypothesis based on certain threshold. The result shown in Table 4that all of XL and Indosat p-value is more than 0.05, so it can be concluded that the data is normally distributed. And it is also shown that the levene test result is above level of significance which shows that the data is have same variance, so it could be analyze using student t-test.

T-test then conducted in 3 phases of pandemic which consist of pre-pandemic, pandemic, and post pandemic. And show the result of t-test conducted in 3 phases of pandemic.

Table 5. T-test p-value result of revenue comparison between XL and Indosat

| Level of Significance | 0.05 |
|---------------------------------|-------|
| T-test p-value of pre-pandemic | 0.434 |
| T-test p-value of pandemic | 0.006 |
| T-test p-value of post-pandemic | 0.039 |

From Table 5, the p-value of t-test in pre-pandemic era show 0.434 which larger than 0.05. It can be concluded that there is no significant difference between the revenue of company that align the implementation of strategic formulation more precise and the less one. It is possible because of in Pre-pandemic era, the needs of people with telecommunication services are normal, and people still could afford more expensive services without considering another need.

Interesting results show when the era shifts from pre-pandemic to pandemic and post pandemic. The p-value of t-test in pandemic and post pandemic era is 0.006 and 0.039 which are below the level of significance. The box plot of revenue differences is shown in Figure 4.

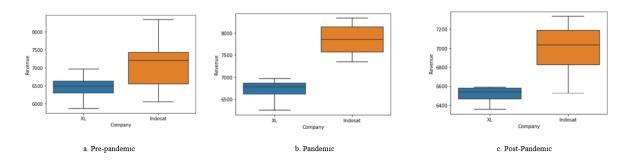


Figure 4. Box plot of revenue difference between XL and Indosat in 3 pandemic phases

This concludes that there are significant differences between the revenue of companies that align the implementation of strategic formulation more precisely and the less one. This can be caused by several factor, the major factor is in Q3 Post-pandemic era, Indosat merge with Hutchinson 3 Indonesia which give Indosat opportunities to have varies of telecommunication products that Hutchinson sell before, this align with Indosat first mission which wants to be Leader in Providing Digital Touch Points. Also, Indosat gains operational benefit from the merger of Indosat and Hutchinson. Indosat will gain the ownership of Hutchinson Base Transceiver Station (BTS) which Indosat coverage larger than before. Through the merger activity Indosat also could shutdown duplicated infrastructure so it could cut operational costs more. The merger activity also aligns with Indosat second mission statement which is Strong Player in Key Geographies. In other hand XL try to merge with LinkNet the one of leading Enterprise Internet Services Provider in Indonesia to variate their product and to spread their services coverage. This step is still in progress and predicted to close the deal at Q3 of 2022.

6. Conclusion

COVID-19 is a blessing in disguise for telecomunication industry, As more businesses enable remote work and consumers switch to unlimited plans, they can support remote working across all industries as long they can adapt to strategic implementation allign with vision & mission Statements. From the Result and discussion section above it can be concluded that XL and Indosat have form their vision statement unique and global, so it can be a good foundation for mission statement, and Indosat have more detailed mission statement than XL have. Also based on Porter Generic Strategies, XL maintain three strategies (cost leadership, cost focus, differentiation focus) then Indosat maintain one strategy (cost leadership), Indosat focus on develop one strategy reflect to more align with the company mission. By Aligning strategic implementation with strategic formulation plays key role in gaining revenue, can be concluded from the result of t-test in pandemic and post pandemic, there are significant differences between the revenue of company that align the implementation of strategic formulation more precise and the less one. The limitation of this research was focusing only on revenue performance. We emphasize the empirical study about the

Telecomunication sector in Indonesia. The future research may consider the additional information such as crisis management respons, government policy, and investment activities done by the company.

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