

Liquidity Ratio Analysis and its Impact on Financial Performance on Pt. Telkom Indonesia Tbk Periode 2021-2024

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ABSTRACT

This research aims to analyze financial ratios to assess the Company's Financial Performance at PT Telekomunikasi Indonesia Tbk. This research is related to the object of research, namely the company in a certain period. By collecting data information related to the company and adjusted to the research objectives. The method used in this study is a quantitative descriptive research method, namely collecting data and processing a company's financial data in the form of financial statements contained in [the www.idx.co.id website](http://www.idx.co.id) and also from the official website of PT. Telekomunikasi Indonesia Tbk directly, namely <https://www.telkom.co.id/sites>. The type of data used is secondary data. Based on the results of the analysis of this study, it shows that the financial performance of PT. Telekomunikasi Indonesia Tbk in terms of Liquidity Ratio from the results of Financial Calculations for 5 (five) periods from 2017 to 2021 with the following quantitative values: *Current Ratio* 104.8%; 93.5%; 71.5%; 67.3%; 88.6%. *The Quick Ratio* is 103.4%; 92.4%; 70.5%; 65.9%; 87.5%, has not met industry standards while *the Cash Ratio* in 2017 is 55.4%, has met industry standards, and in 2018 to 2020 it is 37.6%; 31.2%; 29.8%, has not met industry standards, then in 2021 it is 55.4%, which has met industry standards. Then in terms of Profitability Ratio using *the calculation of Net Profit Margin (NPM)* is 25.5%; 20.6%; 20.3%; 21.7%; 23.7%, has met industry standards, *Return On Investment (ROI)* is 16.5%; 13.1%; 12.5%; 12.0%; 12.2%, and *Return On Equity (ROE)* is respectively valued at 29.2%; 23.0%; 23.5%; 24.5%; 23.3%, both of which have not met industry standards. The results of the analysis of this research can be concluded that the Financial Performance of PT. Telekomunikasi Indonesia Tbk can be said to be in an unhealthy state.

INTRODUCTION

The rapid development of the economy makes people more critical in thinking to keep up with the development of economic information. One of the economic information used is financial information from a company, which is in the form of financial statements that are used for the company concerned to report its financial state and condition to interested parties, especially for investors, creditors, and the company's management itself. The company is required to present the financial statement information clearly and completely so that it can be used optimally by its users.

In addition, the rapid development of the economic world also requires good company management. For the management, good knowledge of accounting will help in managing the company's finances. A company's financial health can be assessed through its financial statements, primarily the balance sheet and income statement, along with other supplementary reports. The balance sheet analysis reveals the company's financial position at a given point in time, while examining the income statement offers insight into the company's operational performance and business results over a period.

PT. Telekomunikasi Indonesia, Tbk is a company engaged in telecommunications, information, and digital media. In carrying out its role for society, especially at a time when various aspects of people's lives are transforming endlessly towards digitalization, PT. Telekomunikasi Indonesia, Tbk is required to be able to improve the company's performance, by providing quality digital solutions and the best community experience, with strong and high digital capabilities, and continuing to innovate in adopting information and digital technology.

PT. Telekomunikasi Indonesia, Tbk also has an online shopping platform that continues to be developed, namely *blanja.com*. As part of the digital economy ecosystem, this initiative is designed to enable faster, easier, and more cost-effective marketing of a wide range of products while expanding market reach. These three IDN components, together with their supporting ecosystem, form the core foundation upon which Telkom is positioning itself to lead the development of Indonesia's digital economy. PT. Telekomunikasi Indonesia, Tbk has a company performance that continues to increase, until in 2019 PT. Telekomunikasi Indonesia, Tbk produced good results with fairly encouraging profitability in the midst of various pressures from the business world at the national and global levels, which at that time was the beginning of the Covid-19 pandemic.

The Covid-19 pandemic has affected society across nearly every sector on an unprecedented scale. For PT. Telekomunikasi Indonesia, Tbk., the challenges brought on by the pandemic have instead been viewed as an opportunity to accelerate digital transformation by delivering information and communication technology services and solutions. As one of the nation's key components, PT. Telekomunikasi Indonesia, Tbk. has embraced a renewed commitment to help both the public and the Indonesian government navigate the pandemic and recover to face the future ahead. The company offers a range of

services and solutions to the wider community, supported by digital connectivity infrastructure, digital platforms, and digital services.

Broadly speaking, the liquidity ratio and profitability ratio stand out as key indicators within financial statements. When a company's liquidity and profitability ratios show favorable results, this typically reflects strong overall performance. Given the significance of financial ratio analysis for both internal and external stakeholders in understanding a company's financial position and performance as outlined above, the author is motivated to present this final project under the title "**Analysis of Liquidity Ratio and Profitability Ratio to Measure Financial Performance at PT. Telekomunikasi Indonesia**"

Problem Formulation

Based on the title that has been made, namely "Analysis of Liquidity Ratio and Profitability Ratio to Measure Financial Performance at PT. Telekomunikasi Indonesia Tbk", and the background that has been described above, the formulation of the research problem is as follows:

- a. How is the liquidity at PT. Telekomunikasi Indonesia Tbk for the 2021-2024 period?
- b. How is the profitability of PT. Telekomunikasi Indonesia Tbk for the 2021-2024 period?
- c. How is the financial performance of PT. Telekomunikasi Indonesia Tbk as measured using the liquidity ratio and profitability ratio for the 2021-2024 period?

RESEARCH OBJECTIVES

The purpose of the research is to find out:

- I. To find out the liquidity ratio at PT. Telekomunikasi Indonesia Tbk for the 2021-2024 period
- II. To find out the profitability ratio at PT. Telekomunikasi Indonesia Tbk for the 2021-2024 period
- III. To find out the financial performance of PT. Telekomunikasi Indonesia Tbk using liquidity ratio and profitability ratio for the 2021-2024 period

LITERATURE REVIEW

Financial Management

Management is needed by all organizations in order for organizational goals to be achieved. With good management, the organization can manage all activities in the organization to be more effective and efficient. According to KD Wilson (2020:1), financial management is fundamentally concerned with raising funds and utilizing them efficiently, with the ultimate goal of maximizing wealth for shareholders.

According to Irham Fahmi (2014:02), financial management combines both science and art in discussing, examining, and analyzing how a financial manager utilizes all of a company's resources to raise funds, manage them, and allocate them, with the goal of generating profit or prosperity for shareholders while ensuring the company's business sustainability. Meanwhile, David Wijaya (2017:2) defines financial management as encompassing financial oversight

activities such as budgeting, financial planning, cash management, credit, investment analysis, and fund-raising efforts. Dadang Prasetyo Jatmiko (2017:1), on the other hand, describes financial management as involving the planning, direction, monitoring, organization, and control of a company's financial resources.

A similar view is offered by Kariyoto (2018:3), who defines financial management as an integration of science and art that observes and analyzes a financial manager's efforts in utilizing all of a company's human resources to secure, manage, and distribute funding, with the aim of delivering profit or welfare to shareholders and sustaining the economic entity's business operations.

According to Sutrisno (2017:3), financial management covers all company activities related to expenditure, comprising three key efforts: Efforts to obtain company funds at the lowest possible cost.

Efforts to use the data efficiently. And the efficiency of allocating funds in business activities. Based on some of the definitions of financial management above, it can be concluded that the definition of financial management is one of the functions of management regarding all activities in the company that are related to all activities in raising funds, managing funds, and distributing funds that aim to provide welfare for the shareholders in the company.

According to Prastowo, as cited by Rusnawati and Maulana (2020:83), the elements of a company's financial performance are directly tied to performance measurement as presented in the income statement, with net income frequently serving as a key performance metric or a basis for other measures.

Fahmi (2017:142) describes financial performance as an analysis conducted to assess the extent to which a company has properly and correctly applied financial implementation standards, such as preparing financial statements that comply with SAK (Financial Accounting Standards) or GAAP (Generally Accepted Accounting Principles), among other requirements.

Financial performance also represents a formal effort to evaluate a company's efficiency and effectiveness in generating profit and maintaining a specific cash position. Measuring financial performance allows for insight into the company's financial growth and future development prospects. A company is considered successful when it has met the specific performance targets it has set for itself (Hery, 2018:25).

Financial Performance Benefits

According to Efriyanti et al. (2012:301), performance appraisal offers the following benefits for management:

1. It measures the achievements an organization has attained within a specific period, reflecting its level of success in carrying out its activities.
2. Beyond assessing overall organizational performance, performance measurement can also evaluate how individual units contribute to achieving the organization's broader goals.
3. It serves as a basis for shaping the company's future strategy.
4. It offers guidance for decision-making and organizational activities, both at the general level and within specific divisions or departments.

5. It functions as a foundation for setting investment policies aimed at boosting the company's efficiency and productivity.

Financial performance can be assessed through ratio analysis, which uncovers relationships between financial components and provides a basis for comparison, revealing conditions or trends that would otherwise go unnoticed when examining individual ratio components in isolation.

Financial Performance Analysis

Financial performance can be evaluated using several analytical tools. Based on technique, Jumingan (2016:242) categorizes financial analysis into eight types:

1. Comparative financial statement analysis examines financial statements across two or more periods, highlighting changes in both absolute amounts and relative percentages.
2. Trend analysis identifies whether a company's financial condition is moving upward or downward over time.
3. Common-size (percentage per component) analysis determines what percentage each investment represents relative to total assets or total liabilities.
4. Analysis of working capital sources and uses determines the amount of working capital resources generated and used by comparing two time periods.
5. Analysis of cash sources and uses assesses a company's cash position along with the underlying causes of cash changes over a specific period.
6. Financial ratio analysis examines the relationship between specific items on the balance sheet and income statement, both individually and in combination.
7. Gross profit change analysis identifies a company's profit position and the factors driving changes in profit.
8. Break-even point analysis determines the sales level a company must reach to avoid incurring losses.

RESEARCH METHODS

The research employs a descriptive method. Descriptive research, as defined by Sugiyono (2017:59), is conducted to determine the value of one or more independent variables without making comparisons or establishing relationships between variables. In this study, the descriptive approach is applied to assess the financial performance of PT. Telekomunikasi Indonesia listed on the IDX during the 2021-2024 period.

The approach used in this study is a quantitative approach. The process starts from a theory, then is derived into a research hypothesis accompanied by measurement and operational concepts, then empirical generalizations that rely on statistics, so that it can be concluded as research findings.

Research Venue and Schedule

Research Place

This research was carried out at PT. Telekomunikasi Indonesia, Tbk which is listed on the IDX for the 2021-2024 period by taking data through the www.idx.co.id website. and <https://www.telkom.co.id/sites>. In the form of secondary data in the form of time series.

Research Time

The research period started from April to July 2022. The researcher chose to conduct research because PT Telekomunikasi Indonesia, Tbk as the best company from the company in the field of business, type of goods and telecommunication and information services.

This research method uses a descriptive qualitative research method. Where this research method is a research method that focuses on explaining the research object and discussion as it is carried out by means of observation/observation, interviews, and studying documents.

RESULTS AND DISCUSSION

- 1) When viewed from the results of the liquidity ratio calculation, we can see that from 2017 to 2021 the Current Ratio of PT. Telekomunikasi Indonesia Tbk has not reached industry standards because the rate of increase in current assets has not increased, so the company is in a state of poor health. Meanwhile, when viewed from the calculation of the profitability ratio, the Net Profit Margin (NPM) of PT. Telekomunikasi Indonesia Tbk from 2017 to 2021 in the table above shows that every year there are always fluctuations, but the percentage achieved always exceeds industry standards, so the company can be said to be in a very healthy state.
- 2) When viewed from the results of the calculation of the liquidity ratio in the Quick Ratio position of PT. Telekomunikasi Indonesia Tbk in the period 2017 to 2021 did not reach industry standards because the level of current assets decreased while the level of inventory and current debt increased, so the company can be said to be in an unhealthy state. Then if you look at the Return On Investment (ROI) of PT. Telekomunikasi Indonesia Tbk from 2017 to 2021 did not reach industry standards, because the company's return on investment level was reduced so that the company could be said to be less healthy.
- 3) And if you look at the position of the Cash Ratio from the calculation of the liquidity ratio at PT. Telekomunikasi Indonesia Tbk in 2017 reached industry standards, because the rate of cash increase per year is greater than the rate of increase in current debt, so the company is said to be in a very healthy state. However, in 2018 to 2020 the Cash Ratio did not reach the industry standard. This is because the amount of cash and the annual increase rate is smaller than its current debt, so the company is said to be in an unhealthy state. Then in 2021 the cash ratio increased again and reached industry standards, so it can be said that the company is in a very healthy state. Meanwhile, the calculation of the company's profitability ratio at the Return On Equity (ROE) position of PT. Telekomunikasi Indonesia Tbk from 2017 to 2021 did not reach industry standards, because the capital owned was not able to generate profits for shareholders, in this condition the company was said to be in an unhealthy state.

Research Limitations

Based on the researcher's direct experience throughout this study, several limitations were encountered—factors that future researchers should take into consideration to further strengthen their own work, given that this research

inevitably has shortcomings requiring improvement in subsequent studies. Some of these limitations include the following:

1. It is difficult to deepen the data. This is because the main tool in data collection is instruments, so that researchers find it difficult to get more data and what is written in it.
2. Long in the research planning process. Before seeking valid direct data, the researcher must prepare the research plan strictly in the form of a research proposal. This activity often takes a long time. There is a limited short research time.

CONCLUSION

Based on the results of the analysis and discussion carried out in this study which is related to "Analysis of Liquidity Ratio and Profitability Ratio to Measure Financial Performance at PT. Telekomunikasi Indonesia Tbk". So the following conclusions can be drawn:

Liquidity Ratio

Analysis of financial ratios at PT. Telekomunikasi Indonesia Tbk for the last 5 (five) years, namely the period from 2017 to 2021, was measured using the liquidity ratio using the calculation of the Current Ratio that has not met industry standards with a value of 104.8%; 93,5%; 71,5%; 67,3%; 88,5%. Then the Quick Ratio at PT. Telekomunikasi Indonesia Tbk, has not met industry standards with a value of 103.4%; 92,0%; 70,5%; 65,9%; 87,5%. And the Cash Ratio in 2017 was 55.4%, which met industry standards, while in 2018 to 2020 it was 37.6%; 31,2%; 29.8%, has not met industry standards, but in 2021 with a value of 55.4%, which means that it has met industry standards.

Profitability Ratio

Based on the results of the calculation using the analysis of the profitability ratio measured using the Net Profit Margin (NPM) of PT. Telekomunikasi Indonesia Tbk from 2017 to 2021 has met industry standards with a value of 25.5%; 20,6%; 20,3%; 21,7%; 23,7%. Meanwhile, the Return On Investment (ROI) generated over the last 5 (five) years, namely the period 2017 to 2021, has not met industry standards with a value of 16.5%; 13,1%; 12,5%; 12,0%; 12,2%. Likewise with the Return On Equity (ROE) produced by PT. Telekomunikasi Indonesia Tbk's calculations have not met industry standards with a value of 29.2%; 23,0%; 23,5%; 24,5%; 23,3%.

Financial Performance in terms of Liquidity Ratio and Profitability Ratio

Financial performance at PT. Telekomunikasi Indonesia Tbk is seen in terms of liquidity ratio from the results of the calculation of financial statements for the last 5 (five) years, namely from 2017 to 2021 which is measured using the calculation of the current ratio, and the quick ratio is categorized in the "Not Healthy" state, while the cash ratio in 2017 is categorized in the "Very Healthy" state, but in 2018 to 2020 it is categorized in the "Less Healthy" state. then in 2021 the situation rose again and was categorized as "Very Healthy".

Financial performance at PT. Telekomunikasi Indonesia Tbk is seen in terms of profitability ratio which is measured using the calculation of Net Profit Margin (NPM) for the last 5 (five) years, namely from 2017 to 2021 is categorized

in a state of "Very Healthy", while the calculation of Return On Investment (ROI), and Return On Equity (ROE) is categorized in a state of "Not Healthy".digital makes it very easy for people to carry out activities for their living needs.

SUGGESTIONS

1. The company is expected to be able to increase its current assets from its own capital without having to increase its current debt so that the company can fulfill its current obligations on time when it is due so that the loyalty of the relationship to the company can be maintained.
2. The company is expected to further improve the company's financial performance based on the calculation of its liquidity ratio and profitability ratio which always fluctuates from year to year, in order to maintain the survival of the company and even grow and develop even better and of course supported by good management.
3. The company is expected to increase Liquidity and Profitability by increasing its current assets by minimizing its current debt, as well as going directly to the field to ensure what interests are needed by its consumers. This is intended as a sales strategy to increase sales to be even better by expanding the range of openings domestically and internationally.

BIBLIOGRAPHY

- Abdullah, R., & Pasaribu, V. L. D. (2025). Digital Marketing Strategies in Marketing Evangeline Products to Increase Company Competitiveness at PT. Griff Prima Abadi. *Contemporary Journal of Applied Sciences*, 3(4), 175-184.
- Agatha, D. C., & Pasaribu, V. L. D. (2025). THE EFFECT OF PRODUCT QUALITY AND PRICE ON CONSUMER PURCHASING DECISIONS OF PLASTIC HOUSEHOLD APPLIANCES PRODUCTS AT PT. BE BEST INTERNATIONAL IN TANGERANG CITY. *Journal of Applied Research in Multidisciplinary Sciences*, 1(3), 37-45.
- Amalia, A. F., & Pasaribu, V. L. D. (2022). The Effect of Service Quality and Price on Consumer Satisfaction in Jakarta Dental Project Clinic Patients. *Syntax Literacy; Indonesian Scientific Journal*, 7(9), 13703-13726.
- Apriliani, R., & Pasaribu, V. L. D. (2025). Analysis of the Application of Customer Relationship Management to Support Skincare Repurchase Interest on the Tiktok WJ LOVE Platform. *International Journal of Asian Business and Development*, 1(4), 231-244.
- Ariqa, N., & Pasaribu, V. L. D. (2024). The Effect of Service Quality and Company Image on Customer Satisfaction of Ubasyada Cooperative in Ciputat Market, South Tangerang. *Asian Journal of Applied Business and Management*, 3(3), 277-290.
- Alfadillah, M. R., & Pasaribu, V. L. D. (2025). Analysis of Effective Promotion Strategies in Online Transportation Companies Impacting Their Use. *International Journal of Asian Business and Development*, 1(4), 245-254.
- Al Jabar, L., & Pasaribu, V. L. D. (2024). The Strategic Leadership Role of Foundation Leaders in Improving the Quality of Education at Various Levels Education: Case Study on Bi Ashokal Hajar Foundation. *Manager: Journal of Management Science*, 7(2), 63-85.

- Darmawan, M. F., & Pasaribu, V. L. D. (2024). The Influence of Product Quality and Promotion on Purchase Decisions at Kedai Kopi Melati Ciputat. *BUDGETING: Journal of Business, Management and Accounting*, 5(2), 1106-1117.
- Erpan, A. A., & Pasaribu, V. L. D. The Effect of Promotion and Price on the Purchase Decision of 1 Liter Cooking Oil Product at Indomaret Babakan Pocis Fzc6 Parung Bogor. *Scientific Journal of Sound Management*, 3(1), 90-103.
- Fahrezi, M. R., & Pasaribu, V. L. D. (2024). The Effect of Service Prices and Service Quality on Consumer Satisfaction at PT. Paramita Tire Workshop Cipete, South Jakarta Period 2023. *Global Journal Indexing*.
- Fatrechia, S. T., & Pasaribu, V. L. D. (2025). Digital Marketing Strategy Brand Awareness in Increasing Sales in the Fashion Industry Based on Online Data. *Indonesian Journal of Accounting and Financial Technology*, 4(1), 81-96.
- Fernando, J., & Pasaribu, V. L. D. (2024). The Effect of Price and Quality of PVC Bathroom Door Products on Purchase Decisions in PD. True Prosperity in East Pondok Kacang. *BUDGETING: Journal of Business, Management and Accounting*, 5(2), 696-706.
- Frawesti, M., & Pasaribu, V. L. D. (2025). The Effect of Service Quality and Price on Consumer Purchasing Decisions at Alfamart Lebak Picung Branch Rangkasbitung. *Contemporary Journal of Applied Sciences*, 3(9), 585-598.
- Hakim, A. R., & Pasaribu, V. L. D. (2025). Analysis of Customer Satisfaction of Mortar Cement at PT. Alam Gemilang Ghaizi Rangkasbitung. *Indonesian Journal of Accounting and Financial Technology*, 4(1), 67-80.
- Hasan, M. A., & Pasaribu, V. L. D. (2024). The Effect of Service Quality and Price on Consumer Satisfaction at Jakmart Stores in PD. Pasar Jaya Kendari. *BUDGETING: Journal of Business, Management and Accounting*, 5(2), 1158-1174.
- Hardiansyah, N. F., & Pasaribu, V. L. D. (2024). Analysis of Healthy Alert Personal Selling Strategy at PT Mitra Antar Putra in South Jakarta. *Asian Journal of Applied Business and Management*, 3(2), 101-118.
- Haryoko, U. B., Pasaribu, V. L. D., & Ardiyansyah, A. (2020). The Effect of Price and Service Quality on Consumer Satisfaction in Wedding Organizers. *POINT: Journal of Economics and Management*, 2(1).
- Hidayat, L., & Pasaribu, V. L. D. (2025). THE EFFECT OF PRICE AND SERVICE QUALITY OF VACCINE AND GROOMING SERVICES ON CONSUMER SATISFACTION AT THE SAVANNA PETSHOP IN REMPOA. *Journal of Intellectuals Insan Cendikia*, 2(5), 9041-9052.
- Jalaludin, H., & Pasaribu, V. L. D. (2025). ANALYSIS OF SOCIAL MARKETING AND DIGITAL MARKETING ON THE ESTABLISHMENT OF DIGITAL WASTE BANK UNIT POINTS IN SERANG CITY BANTEN. *Journal of Applied Research in Multidisciplinary Sciences*, 1(3), 190-204.
- Lidya, V., & Pasaribu, D. (2018). Analysis of the Effect of Promotion, Product Quality and Packaging Design on Purchasing Decisions. *Lamongan Islamic University*.

- Makarim, F., & Pasaribu, V. L. D. (2025). Analysis of Factors of Customer Purchasing Power for Fashion Products in the Digital Era. *Contemporary Journal of Applied Sciences*, 3(6), 345-356.
- Mulyadi, M., & Pasaribu, V. L. D. (2024). The Influence of Service Quality and Price on Purchase Decisions at PT Lautan Berlian Utama Motor West Jakarta. *ACADEMIC: Journal of Economics & Business Students*, 4(1), 147-154.
- Muttaqin, A. K., & Pasaribu, V. L. D. (2024). The Influence of Digital Marketing and Word Of Mouth on Online Product Purchase Decisions on Tokopedia E-Commerce (Case Study on Regular S1 Management Study Program Students C, Thursday University of Pamulang). *Economics and Digital Business Review*, 5(2), 943-970.
- Nabila, D. P., & Pasaribu, V. L. D. (2025). The Influence of Service Quality and Price on Purchasing Decisions at Rika Motor Workshop in Johar Baru, Central Jakarta. *Indonesian Journal of Applied and Industrial Sciences*, 4(2), 287-306.
- Qurbani, D., & Pasaribu, V. L. D. (2019). The Influence of Brand Image and Brand Trust on Prudential Syariah Customer Brand Loyalty at PT. Futuristik Artha Gemilang (Case study at the branch office of the Prudential Syariah agency PT. Futuristic Artha Gemilang South Jakarta). *Journal of Competitive Marketing*, 2(3), 121-135.
- Pahrudin, P., & Pasaribu, V. L. D. (2024). The Influence of Work Motivation and Work Discipline on Employee Performance at PT Tunas Mekar Farm, Bogor Regency. *Asian Journal of Applied Business and Management*, 3(2), 172-186.
- Pangestu, D. P., & Pasaribu, V. L. D. (2025). QRIS Ease of Access Strategy and its Impact on Public Interest in Digital Payment in Sumbermulyo Village, Pesanggaran, Banyuwangi. *Contemporary Journal of Applied Sciences*, 3(4), 197-208.
- Pasaribu, V. L. D. (2023). The Influence of Service Quality and Price on Customer Satisfaction (CV. Electrical Engineering). *International Journal of Integrative Sciences*, 2(8), 1223-1238.
- Pasaribu, V. L. D., Septiani, F., Rahayu, S., Lismiatun, L., Arief, M., Juanda, A., ... & Rahim, R. (2021). Forecast Analysis of Gross Regional Domestic Product based on the Linear Regression Algorithm Technique. *TEM Journal*, 10(2), 620-626.
- Pasaribu, V. L. D., & Haryoko, U. B. (2023). Analysis of the Effect of Customer Satisfaction of Internet Service Providers Using Structural Equation Modeling. *International Journal of Integrative Sciences*, 2(9), 1445-1458.
- PASARIBU, V. L. D. (2015). ANALYSIS OF THE INFLUENCE OF PROMOTION, PRODUCT QUALITY AND PACKAGING DESIGN ON BRAND PERCEPTION THAT HAS AN IMPACT ON PURCHASING DECISIONS FOR VASELINE BRAND HAND AND BODY LOTION. *Source*, 130771(1,160,097,156), 1-22.
- Pasaribu, V. L. D. (2020). The Influence of Store Atmosphere on Purchase Decisions at De'Cost Giant Restaurant Pamulang Square South Tangerang. *Managerial: Journal of Management and Information Systems*, 19(2), 156-167.

- Pasaribu, V. L. D. (2018). Analysis of the Influence of Promotion, Product Quality and Packaging Design on the Purchase Decision of Citra Brand Hand and Body Lotion (Case Study of Carrefour Pamulang, South Tangerang). *J. Marketer. Competitive*, 1(4), 77-92.
- Pasaribu, V. L. (2022). The Influence of Brand Image and Product Quality on TVS Motorcycle Purchase Decisions. *Business Management Journal*, 18(1), 37-49.
- Pasaribu, V. D., & Prayoga, M. S. (2019). The Effect of Hem Batik Shirt Product Quality on Customer Satisfaction in the Sahara Indah Batik Home Industry. *Journal of Competitive Marketing*, 2(2), 77-83.
- Pasaribu, V. L. D., & Setiawan, R. (2024). The Influence of Product Quality and Service Quality on Purchase Decisions at Optik Sejahtera Depok. *ACADEMIC: Journal of Economics & Business Students*, 4(1), 155-163.
- Pasaribu, V. L. D., & Husein, M. A. (2024). The Influence of Product Quality and Prices on Government Brand Products (Foodstation) on Purchasing Decisions at Jakmart Pasar Jaya Cikini. *Formosa Journal of Multidisciplinary Research*, 3(4), 199-210.
- Puspitasari, D., & Pasaribu, V. L. D. (2025). The Influence of Service Quality and Promotion on Purchasing Decisions at Emado's Restaurant at PT. Emado's Kebab Indonesia, Ceger Raya Branch-Pondok Aren, South Tangerang. *Indonesian Journal of Applied and Industrial Sciences*, 4(2), 273-286.
- Ramadhani, R., & Pasaribu, V. L. D. (2025). Qualitative Study on the Implementation of the Partnership Model Without Capital in the Development of AA Theft Business. *Indonesian Journal of Accounting and Financial Technology*, 4(1), 97-110.
- Septiani, F., Pasaribu, V. L. D., Elburdah, R. P., & Rahayu, S. (2023). The Marketing Strategy of Saving and Loan Cooperatives in South Tangerang: the Use of SWOT Analysis. *International Journal of Integrative Sciences*, 2(9), 1479-1490.
- Situmorang, D. H., & Pasaribu, V. L. D. (2024). The Influence of Digital Marketing and Service Quality on Purchase Decisions at Dujourexclose Online Shop. *BUDGETING: Journal of Business, Management and Accounting*, 5(2), 1360-1372.
- Sunatajaya, H., & Pasaribu, V. L. D. (2025). The Influence of Electronic Word of Mouth and Product Quality on the Decision to Purchase Car Carpet Products at CJ Accessories Stores at BSD Autopart. *Contemporary Journal of Applied Sciences*, 3(8), 529-542.
- Sutiawan, A., & Pasaribu, V. L. D. (2025). The Effect of Price and Promotion on Consumer Satisfaction at Avocado Kocok 88 Entrepreneurship, Poris Indah Branch. *Contemporary Journal of Applied Sciences*, 3(6), 329-344.
- Ramadhani, R., & Pasaribu, V. L. D. (2025). Qualitative Study on the Implementation of the Partnership Model Without Capital in the Development of AA Theft Business. *Indonesian Journal of Accounting and Financial Technology*, 4(1), 97-110.

- Tifani, R. A., & Pasaribu, V. L. D. (2024). Analysis of Customer Satisfaction Based on Product Quality at Setritiga Bermuda Coffee and Eatery Pamulang. *Formosa Journal of Multidisciplinary Research*, 3(7), 2467-2478.
- Juda, A. P. (2024). The Influence of Brand Awareness and Word of Mouth on the Decision to Use the FLIP Application (Case Study of Young Mothers in the dBestMom Community). *Asian Journal of Applied Business and Management*, 3(2), 89-100.
- Yulianti, I. N., & Pasaribu, V. L. D. (2024). The Influence of Promotion and Price on Buyer Satisfaction of Luwak White Coffee Products at Pondok Aren Distributors. *Asian Journal of Applied Business and Management*, 3(2), 161-172.
- Wagiman, A. O., & Pasaribu, V. L. D. (2026). The Influence of Service Quality and the Use of Digital Marketing on Service Purchase Decisions at Mandiri Steel's Las Jaya Workshop. *SCIENTIFIC JOURNAL OF ECONOMICS AND MANAGEMENT*, 4(2), 731-741.
- Purnomo, D., Rakhmadani, D.P., Lubis, M.R.H., & Purbaya, M.E (2022). SEO Keyword Optimization For Digital Marketing Improvement
- Febriyantoro, M.T. & Arisandi, D. (2018). The Utilization of Digital Marketing for Micro, Small and Medium Enterprises in the Era of the ASEAN Economic Community.
- Gumilang, R.R. (2019). The implementation of digital marketing to increase sales of home industrial products.
- Jasri,. Arfan, N., Hasanuddin., & Hasan, H.A. (2022) The Application of Digital Marketing in an Effort to Increase Income for Micro, Small and Medium Enterprises.
- Abdurrahman,. Firdaus, D., & Nugroho, A.A. (2023) Variations of Marketing Models in the Digital Era
- Budiantini, A., Sutihat, A. & Risthi, A. (2023) Utilization of Digital Marketing as a Product Marketing Strategy to Increase MSME Profits
- Avriyanti, Shinta. (2020)The Role of E-Commerce to Increase Competitive Advantage in the Industry 4.0 Era