

Research Article

A User-Based Valuation Model for PT GoTo Gojek Tokopedia Tbk

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Abstract: Digitalization process and implementation have been playing a vital role in human daily activities. Digitalization has solved thousands and various issues and problems occurring in daily human activities. Not only humans but various businesses have also adopted digitalization to be implemented in their daily operations in order to create efficiency, effectiveness, and value propositions to customers and also to be applied to the company/firm operations. An example would be PT. GoTo Gojek Tokopedia Tbk. The company's source of revenue is acquired through the digitalization processes and adoption of digital technology to accommodate its platforms, such as the marketplace, rider-hailing services and e-wallet services. Going in line with the evolving outstanding breakthrough of technology and digitalization, corporate financial valuation also must adjust and upgrade their valuation approach and techniques in order to value those digital companies in order to be relevant. Through this research, the elaboration and implementation of user-based valuation techniques to PT. GoTo Gojek Tokopedia will be conducted. This approach/technique values a company through the amount of users (Assets). From the findings, it is shown that the company is overvalued compared to the current market cap and price per share.

Keywords: Digital company, Valuation, User-based valuation.

I. INTRODUCTION

In 2020 (Ritter and Pedersen), the definition and term of "digitalization" in the context of business refers to the integration and expansion of digital technology inside a business model that aims to provide a worthwhile and cost-effective value proposition to its clientele. In this instance, digitization refers to the domain of digitization that goes beyond just converting analog form to digital technology for business processes Ritter & Pedersen (2020). Businesses use digitalization in the current world to provide their clients with improved products and services and to become more competitive with respect to their rivals. Due to this advancement and new economic business model, the corporate financial world must adapt the valuation technique in order to be relevant in valuing the new economic business model. The most difficult thing is that the business has been growing but still performs a negative EBITDA and EAT. Due to this recent disparity, regardless of the performance of the digital company, the majority of investors now value the (market cap) of a digital company based on its active users with a negative EBITDA (Sorensen and Hessellund, 2019). They began valuing digital business models with new ones instead of the traditional ones (DCF, FCFF, Relative). The approach/method of valuation was called a "user-based valuation." There is also the argument that users are more important, rather than revenue, which determines a digital company's true worth. For digital businesses, the greater their user base or subscriber base, the greater the potential revenue stream in the long run and the sustainability of the company. While there is still room for improvement and modification in the valuation model of digital enterprises, the user-based valuation model/approach presented in this study represents the most appropriate and pertinent model at this time. Additionally, Damodaran (2018) stated that both present and past "tech investors" determine a digital company's value based on the total number of active users.

II. LITERATURE REVIEW

A) PESTEL Analysis

Pestel is an external analysis tool that is used to analyze, examine and observe the external environment that is happening in the surroundings that may or potentially (both positively and negatively) affect a business/individual (Menet, 2016). The PESTEL analysis is differentiated (classified) and divided into several contexts, which are the political, economical, social, technological, environmental and legal. Here are the elaborations of the classifications (Hans, 2018);

1. Political: various political events that may cause the business's internal operations. The government could do these events, political parties and the labor community. Through these events, businesses should conduct strategies and breakthroughs in order not to be affected.
2. Economical: economical refers to the economic situations that are currently happening or occurring. The economic events are rising inflation, deflation, economic instability and volatility occurring in the country, and exchange rates.



3. Social: in the context of the social environment, the events that could affect the internal operations of the businesses are the change in the market behavior, changes in cultural expectations, the social norms occurring and lastly, the current trend demanded.
4. Technological: technological aspects refer to and are illustrated as the technological change occurring and the implementation of technological advancement in the environment. Businesses must be able to adapt to this context as the world currently focuses on digitalization and technology implementation.
5. Environmental; environmental issues are the environment's major events that might give potential delay to the business growth of the business. These issues include global warming, climate change, environmental offsets and regulation, and sustainability (SDGs). In addition, the factors could be done by minimizing the negative impact done to the environment.
6. Legal; legal external factors are the new (launched) regulation and the laws conducted by the government that should be followed by the company. In recent days, sometimes new laws could disadvantage the company, and they should find alternative ways to counter it.

B) Valuation.

In the world of corporate finance, a firm/entity valuation refers to the determining overall economic (business) value of a company through its net income (I/S), cash flow generated during the year, and balance sheet (B/S). On the other hand, as the world has evolved and lots of new economic business models are arising, new valuation model approaches are appearing, where companies are valued from various aspects such as market, users, employee value, etc. (Williamson, 2020).

All new and upcoming valuation models would be valid, including aggregate and disaggregate (adopting any valuation models such as DCF modal), as long as they could determine the relevant subjectivity for the assumptions and the most suitable business (Damodaran, 2012). He added that one rule of thumb of a credible valuation model is that the true value price, assumption or value could not be determined by the willingness of other parties to pay but should be based on the data, market price and accounting price. With the right fundamentals, the proper and relevant present value could be acquired after determining the future value (Muniesa and Dognova, 2020).

The accurate data in the valuation of a business is crucial, as valuation has various purposes (Damodaran, 2012). The purposes of business valuations are: i) use as portfolio management in the company, ii) use in the merger and acquisition analysis of a company, and lastly, iii) valuation of a business is used in corporate finance to analyze and acquire information for business decision interest.

C) User-based Valuation.

User-based valuation model is an alternative(new)/new valuation approach in valuing an economic value of a business (mostly digital platform/digital company) through its number of active users' (Damodaran, 2018). This valuation model adopts the combination of disaggregate (specific) and DCF model features valuation. Furthermore, in order to conduct this valuation model, there must be three components that must be valued, and the three-figure below will elaborate the processes, which are (V=value);

$$\text{Equity Value} = (V_{\text{existing users}'} + V_{\text{potential new users}'} - V_{\text{corporate expense drag}}.$$

Equation (II.1)

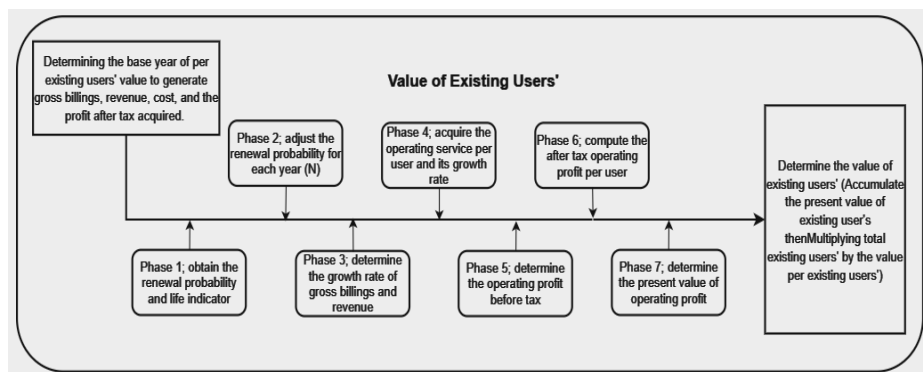


Fig 1. Computation Process of Existing Users' Value

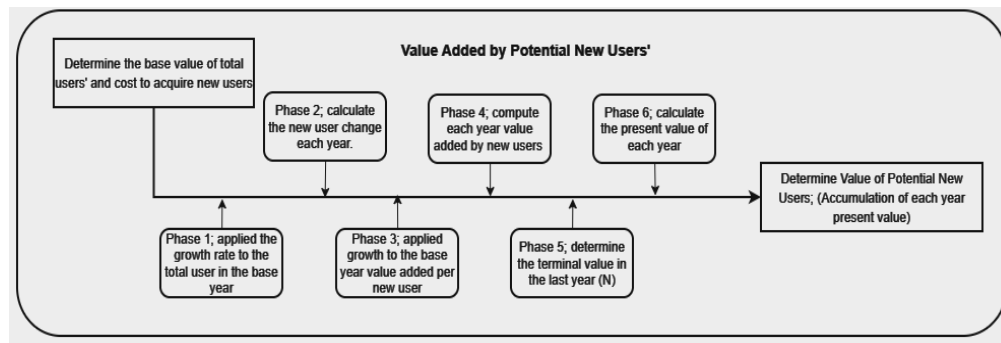


Fig 2. Computation Process of Potential New Users' Value

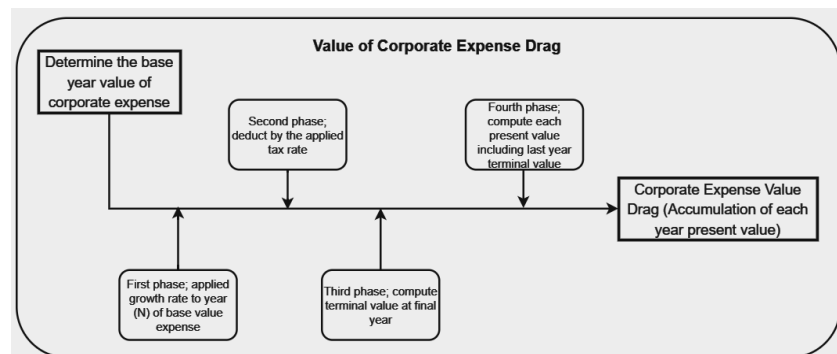


Fig 3. Computation Process of Corporate Drag Value

D) Previous Research and Study.

Based on the topics of user-based valuation, there are only two pieces of research that have ever been conducted, and these research are the research conducted by Damodaran (2018) entitled "User and Subscriber Economics; Value Dynamics" and the other paper is done by Hessellund and Sorensen (2019) with a title of "Valuation of Digital Platforms". The research made by Damodaran encompasses and includes the elaboration of user-based valuation and the comparison of three company valuation approaches results of Netflix, Uber and Amazon. It is shown from the research that Uber is the most outstanding company followed by Amazon and Netflix. On the other hand, the valuation conducted by Hessellund and Sorensen elaborates on the difference between the value of the company acquired through user-based valuation and the market cap and price per share. To acquire the price per share, the research divides the value of the equity by the current share outstanding in the year.

E) Research Methodology.

The research is done by using a qualitative descriptive approach, which includes the computation and external subjective analysis towards and in determining the results. Furthermore, the data is collected through and from the i)financial statement stated in the IDX of PT. GoTo Gojek Tokopedia from the year 2021-2023, ii)the "Number of Annual Transacting User's (ATU) of GOTO Group" that will determine the users' of the company and lastly, iii)external data supporting secondary data from websites and journals. To conduct an depth analysis of the data, first, the research will collect, accumulate and filter the findings. Then after acquiring all of the needed data, the research will compute the user-based valuation and then will compare it with the current market cap in the first and second quarter and the price per share.

III. RESULTS AND DISCUSSION

A) PESTEL Analysis Findings.

Herby are the findings acquired from all of the environment and surroundings of the company that might negatively impact the growth and internal operation of the company. The six factors are;

1. Political; the political factors would be coming from the regulation adjusted and made by the government. This would be crucial as currently there are lots of demonstrations of riots from both the labor community and ride-hailing drivers to increase their wages etc. (CNBC, 2022). These factors could possibly affect the company costs and impact the increase in operating costs overtime.
2. Economy; the economic factors would be the inflation rate of Indonesia (3-4%) on average and the GDP per capita growth rate (World Bank, 2024) that might affect the corporate expense; both of these will determine the result of the valuation.

3. Social: social factors refer to the behavior, character and trends in the business environment. As mentioned by Sarjono et al. (2022) and Santoso & Napitupulu (2018), the Indonesian market is very price sensitive, and price is the most determinant factor towards the loyalty of customers to the marketplace. Furthermore, other competitors, such as Shopee, have burnt multiple times higher burning rates (incentive) to customers (Setyowati, 2024). This could be a threat towards the company financially, either they must increase the incentives or a negativity of income will be faced.
4. Technology: as digital technology has been rising in the market and being adopted by the competitors of the business, GoTo must apply and implement the digital technology towards the company operations; otherwise, the company will be left out of the competition, etc. Although the investment in technology could decrease the net profit in the short-run, the company would benefit in terms of additional users and a long-run benefit.
5. Environmental: since the industry has produced lots of pollution and carbon recently coming from their operation process (Tirachini, 2020), the government has reminded the company to minimize the carbon pollutants and conduct better waste management. Due to this, the company made the '3zero' program, which is; zero carbon, waste and obstacle. By this program there will be a possibility of lowering the net profit of a company since costs are allocated (GoTo, 2024).
6. Legal: according to the law and regulation, there are two fields of regulation that the company must comply with and adapt to its changes; they are i) transportation ride-hailing and customer data protection (Muljanto, 2023) and ii) the law of labor (Rosadi & Tahira, 2018).

B) User-based Valuation Findings

a. Value of Existing Users

Table 1: Calculation of Existing Users' Value

Value of Existing Users' (expressed in BILLION rupiah)																
/User	Base Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Max Life Indicator		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Membership Survival	1	0,95	0,90	0,86	0,81	0,77	0,74	0,70	0,66	0,63	0,60	0,57	0,54	0,51	0,49	0,46
Gross Billings	358	429	514	615	736	882	1,056	1,264	1,514	1,812	2,17	2,598	3,11	3,724	4,459	5,338
Net Revenue	218	261	313	375	449	537	643	770	922	1,104	1,322	1,583	1,895	2,269	2,717	3,253
Cost of Operating Service	100	118	139	165	194	229	271	320	377	445	526	621	732	864	102	120
Operating Profit	118	143	173	209	254	307	372	450	544	658	796	962	1,162	1,404	1,696	2,049
Tax Rate	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
Operating Profit After Tax	92	106	122	140	161	185	213	245	281	323	371	427	490	562	645	740
PV of Operating Profit		86	81	76	71	66	62	58	55	51	48	45	42	39	37	34
Value/User	857															
Life of User	15															
Number of Existing Users (in million)	67.65															
Value of Existing Users	57,987															

Source; Author

To determine the value of existing users' first we need to determine the membership survival at 95% (quite high as it is a freemium application). Secondly, the research must determine the base value of gross billings and the net revenue and apply the same growth rate by weighting equally these three components year 2022 - 2023: i) revenue growth rate, ii) ARPU growth rate and iii) users' growth rate. Here, we acquire a growth rate of 19.7%. Afterwards, the research will determine the cost of operating service ((total revenue/service current users cost) * net revenue/user)) per user and applied the growth rate of 18.01% using the formula below;

$$\begin{aligned}
 \text{Growth OPEX} &= (\%VOE) \cdot \text{ARPU growth rate} + (1 - \%VOE) \cdot \text{inflation rate (chapter 3)} \\
 &= \text{18.01\%}
 \end{aligned}$$

(III.1)

After acquiring the expense cost, the research will then continue to deduct the revenue and operating cost in each year to acquire the operating profit before tax and then deduct it again with the flat tax rate of 22% (PwC, 2023) to acquire the value profit after tax. Last but not least, before obtaining the final results of the value of existing users, the present value should be calculated from the operating profit after tax of each user by discounting it by WACC of 22.65%. Finally, accumulating all of

the present value in each year and multiplying it by the total of existing users will acquire the value of existing users of **57,987.872 (57,987) million rupiah**.

b. Value of Potential New Users

Table 2: Calculation of Potential New Users' Value

Value of Potential New Users' (expressed in BILLION rupiah)											
/User	Base Year	1	2	3	4	5	6	7	8	9	10
Total users (number, millions)	67.65	71.73	76.06	80.65	85.52	90.68	96.15	105.31	115.35	126.34	138.38
New Users (number, millions)		4.3	4.6	4.9	5.2	5.5	9.2	10.0	11.0	12.0	13.2
Value per New Users	66	68	70	73	76	78	81	84	87	90	93
Value Added by New Users		296	325	357	392	430	746	845	958	1,086	1,232
Terminal Value											698
Present Value		363	489	659	887	1,194	2,539	3,53	4,908	6,825	14,872
Value Added by New Users	36,271										

Source; Author

To get the value of potential added of new users, first, the researcher should determine the base year total users and apply a different growth rate to years 1-5, years 6-10 and above 10 years. For the first segment year growth rate, it is applied at 6.03% (referring to the company users' growth from 2022 to 2023). Then, the second segment growth rate is applied by the growth of digital companies at 9.53% (Statista, 2023), and the third segment growth refers to Uber growth conducted by Damodaran (1%). After that, the change in new users per year is calculated. Then, we determine the value added per new user by deducting the value per existing user and the cost to acquire per new user, then apply a growth rate of inflation (3.5%) until the final year. Furthermore, we multiply the value per new users' and the change in new users' (previously). Before the last section, the terminal value is computed using the formula below;

$$\begin{aligned}
 \text{Terminal value} &= \frac{\# \text{Total users}' \cdot \text{Terminal growth rate} \cdot \text{Value per new users} \cdot (1 + \text{Inflation rate})}{(\text{WACC} - \text{Inflation})} \\
 \text{Terminal value} &= \frac{(138.38 * 1\% * 93,431) * (1 + 3.50\%)}{(22.65\% - 3.50\%)} \\
 &= \mathbf{698,877 \text{ million rupiah}}
 \end{aligned}$$

(III.2)

Last but not least, compute all of the year's present value (acquired from the value added by users each year), then the research would acquire a value added by new users of **36,271,717 (36,271) million rupiah**.

c. Value of Corporate Expense Drag.

Table 3: Calculation of Corporate Expense Drag Value

Value of Corporate Expense Drag (expressed in BILLION rupiah)											
/User	Base Year	1	2	3	4	5	6	7	8	9	10
Corporate Expense	11,835	12,299	12,782	13,283	13,803	14,344	14,907	15,491	16,098	16,73	17,385
Tax Rate (%)		22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
After-Tax Corporate Expense		9,593	9,97	10,36	10,767	11,189	11,627	12,083	12,557	13,049	13,56
Terminal Value		None									92,184
PV of Corporate Expense		7,822	6,627	5,615	4,758	4,031	3,416	2,894	2,452	2,078	13,73
Value Drag Expense		53,428									

Source; Author

From the table on the previous page, to acquire the corporate drag expense, we should determine the base year. Then, we need to formulate and apply the growth of 3.92% acquired from the average gdp per capita growth and inflation of the

last 10 years. Afterwards, we deduct it with the flat tax rate of 22% (PwC, 2023) and conduct a terminal value to the final using the formula below;

$$\text{Final year terminal value (n)} = \frac{\text{Final year after tax corporate expense} \cdot (1 + \text{Risk free rate})}{(\text{WACC} - \text{Risk free rate})}$$

$$\begin{aligned} \text{Final year terminal value (n)} &= \frac{(13,560,947 \cdot (1 + 6.92\%))}{(22.65\% - 6.92\%)} \\ &= 92,184,563 \text{ million rupiah} \end{aligned}$$

(III.3)

Finally, after obtaining the terminal value at the end of the year, the researcher is going to find each year's present value (for the end/final year, the terminal value is included in the computations). To acquire the value of corporate expense drag, all of the present value is added and acquired the value of **53,428,041 (53,428) million rupiah**.

d. Value of the Company using User-Based Valuation Method.

Table 4: Calculation of User-Based Valuation

Total User Based Valuation Approach in (000 IDR)	
Existing Users' Value	57,987,872
Value of Additional Users'	36,271,717
Total User Value	94,259,589
Corporate Value Expense	53,428,041
Value of Operating Assets	40,831,548
Cash 23'	30,688,417
Firm Value	71,519,965
Short-term Debt 23'	12,822,544
Value of Equity (PT GoTo Gojek Tokopedia Tbk)	58,697,421

Source; Author

From the Table above, it is shown that to acquire the value of PT. GoTo Gojek Tokopedia, first, we should add the existing users' value (**58,697,421 million rupiah**) and the potential new users' value (**36,271,717 million rupiah**). Afterwards, we deduct the results above with corporate expense drag value (**53,428,041 million rupiahs**) to acquire the value of operating assets of **40,831,538 million rupiahs**. Last but not least, at the end of the computation, we add the cash equivalent of **30,688,417 million rupiahs** and deduct with the short-term debt (**12,822,544 million rupiahs**), resulting in a value of equity of an equity value of **58,697,421 million rupiahs**.

C) Comparison with the Current Market.

The total value of the company using a user-based (PT. GoTo Gojek Tokopedia) is 58,697,421 million rupiah. In addition, in the year 2023, it issued a total number of shares of 1,201,409 million. From this data, the price per share of the company is 48.86 rupiah. Furthermore, for benchmarking the amount of PBV (2.93x) and PER (-22.65).

Compared with the data acquired (findings) from the company history, the company's median market value in the first quarter of 2024 is +-104,522,583 million rupiahs, and the value per share is +-87.00 rupiah (Yahoofinance, 2024). Here, it is shown that the company is overvalued by 43.84%. On the other hand, in the second quarter of 2024, it acquires a market cap of +- 81,695,812 million rupiahs and a median value per share of +-68.00 rupiah, the company is overvalued by 28.15% compared to the user-based valuation acquired (Yahoofinance, 2024).

IV. CONCLUSION

1. From the PESTEL analysis and findings, the most influential factors that could affect the company both in the short and long-term run are the economic and social factors. Economical factors come from the inflation rate and the rises of GDP per capita growth (from the calculation findings), and the social factors come from the 'shifting behavior' of Indonesian customers that are offered cheaper prices from other markets; moreover, most of it has no loyalty (Setyowati, 2024).
2. From the user-based computation, the value of PT. GoTo Gojek Tokopedia is **58,697,421 million rupiah** (including adjustment in cash and debt) with **Rp 48.86 price per share**. The value is acquired from the value of existing users of **57,987,872 million rupiahs** (+) potential users of **36,271,717 million rupiahs** (-) corporate expense value of **53,428,041 million rupiahs**.
3. From the comparison part, the researcher aims to compare the user-based valuation results and the median value of the company market cap and price per share in the first and second quarters of 2024. The benchmark is using PBV (2.93x) and PER (-22.65). From both of the comparisons, PT. GoTo Gojek Tokopedia Tbk is;

- a. Overvalued by **43.84%** compared to the median market cap in the first quarter of 2024 (+**104,522,583 million rupiah**) and +**87.00 rupiah** (price per share).
- b. Overvalued by **28.15%** compared to the median market cap in the first quarter of 2024 +**81,695,812 million rupiah market** and +**68.00 rupiah** (price per share).

V. REFERENCES

- [1] Acs, Z., Szerb, L., & Audretsch, D. (2021). The Evolution of the Global Digital Platform Economy; 1971-2021. *Small Business Economics*, 57. <https://doi.org/10.1007/s11187-021-00561-x>
- [2] CNBC Indonesia. (2021, May 18). *GoTo Lahir, Seberapa Kuat Hasil Merger Gojek & Tokopedia Ini?* CNBC Indonesia. Retrieved June 13, 2024, from <https://www.cnbcindonesia.com/tech/20210518125005-37-246285/goto-lahir-seberapa-kuat-hasil-merger-gojek-tokopedia-ini>
- [3] CNBC Indonesia. (2022). *Ojol Demo DPR Minta Jadi Pegawai, Ini Response Grab dan Gojek*. CNBC Indonesia. Retrieved June 13, 2024, from <https://www.cnbcindonesia.com/tech/20220829155451-37-367481/ojol-demo-dpr-minta-jadi-pegawai-ini-respons-grab-dan-gojek>
- [4] Damodaran, A. (2012). *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, University Edition*. Wiley.
- [5] Damodaran, A. (2018). *User and Subscriber Economics: Value Dynamics*. NYU Stern. Retrieved June 13, 2024, from <https://pages.stern.nyu.edu/~adamodar/pdfiles/country/UserValuation2018New.pdf>
- [6] GoTo. (2024). *5 Saham Sektor Perusahaan GoTo*. Retrieved June 13, 2024, from <https://www.gotocompany.com/corporate-governance/nr>
- [7] Hans, B. (2018). Business Environment - Conceptual Framework and Policies. *International Educational Scientific Journal*, 4(3), Page 67-74.
- [8] Hein, A., Schrieck, M., & Riasanow, T. (2020). Digital Platforms Ecosystem. *Electrons Market*, 30. <https://doi.org/10.1007/s12525-019-00377-4>
- [9] Hesselund, K., & Sorensen, T. (2019). Valuation of Digital Platforms, Valuing Companies with Negative Profits and Millions of Users'.
- [10] IDX. (2023). *5 Saham Sektor Teknologi dengan Market Cap Terbesar, Ada yang Kalahkan Valuasi GOTO*. IDX Channel. Retrieved June 13, 2024, from <https://www.idxchannel.com/market-news/5-saham-sektor-teknologi-dengan-market-cap-terbesar-ada-yang-kalahkan-valuasi-goto>
- [11] Menet, G. (2016). The Importance of Strategic Management in International Business; Expansion of PESTEL Method. *International Business and Global Economy Journal*, 35(2), 261-270. <https://doi.org/10.4467/23539496IB.16.062.5643>
- [12] Muljanto, Tobing, G. L., & Widiarty, W. S. (2023). Legal Protection of the Rights and Obligations of Online Ojek Drivers Based on Partnership Agreements in Terms of Indonesian Positive Law. *Jurnal Scientia*, 12(3). <https://doi.org/10.58471/scientia.v12i03.1544>
- [13] Muniesa, F., & Doganova, L. (2020). The Time that Money Requires; Use of the Future and Critique of the Present in Financial Valuation. *Cambridge University Press (Finance & Society)*, 6(2). <https://doi.org/10.2218/finso.v6i2.5269>
- [14] PwC. (2024). *Indonesian Pocket Tax Book 2023*. PwC. Retrieved June 14, 2024, from <https://www.pwc.com/id/en/pocket-tax-book/english/pocket-tax-book-2023.pdf>
- [15] Rastogi, N., & Trivedi, M. K. (2016). Pestle Technique - A Tool to Identify External Risks in Construction Projects. *International Research Journal of Engineering and Technology*, 3(1).
- [16] Reuver, M. d., Sorensen, C., & Basole, R. (2018). The Digital Platform; A Research Agenda. *Journal of Information and Technology*, 33(2). <https://doi.org/10.1057/s41265-016-0033-3>
- [17] Ritter, T., & Pedersen, C. L. (2020). Digitization Capability and the Digitalization of Business Models in the Business-Business Firms; Past, Present and Future. *Journal of Industrial Marketing Management*, 86. <https://doi.org/10.1016/j.indmarman.2019.11.019>
- [18] Rosadi, S. D., & Tahira, Z. (2018). Consumer Protection in Digital Economy Era; Law in Indonesia. *Yustisia Jurnal Hukum*, 7(1).
- [19] Santoso, G. J.A., & Napitupulu, T. A. (2018). Factors Affecting Seller Loyalty in Business E-Marketplace; A Case of Indonesia. *Journal of Theoretical and Applied Information Technology*, 96(1).
- [20] Sarjono, H., Suprpto, A. T., Zulayka, A., & Gunawan, A. (2022). Consumer Loyalty to the Use of e-Marketplace in Indonesia; A Systematic Literature Review. *Proceedings of the European International Conference on Industrial Engineering and Operations Management*.
- [21] Setyowati, D. (2024). *Bakar Uang Rp 40 Triliun, Transaksi Shopee Tembus Rp 1.238 Triliun - E-commerce Katadata.co.id*. Katadata. Retrieved June 13, 2024, from <https://katadata.co.id/digital/e-commerce/65e6b73cf2bc1/bakar-uang-rp-40-triliun-transaksi-shopee-tembus-rp-1238-triliun>
- [22] Statista. (2024). *Digital Commerce - Indonesia*. Statista. Retrieved June 14, 2024, from <https://www.statista.com/outlook/dmo/fintech/digital-payments/digital-commerce/indonesia>
- [23] Statista. (2024). *GoTo Group: annual transacting users 2023*. Statista. Retrieved March 20, 2024, from <https://www.statista.com/statistics/1343707/goto-group-annual-transacting-users/>
- [24] Tirachini, A. (2020). Ride Hailing, Travel Behavior and Sustainable Mobility; an International Review. *Transportation Journal*, 47. 10.1007/s11116-019-10070-2
- [25] Williamson, B. (2020). Making Markets through Digital Platform; Pearson ed-business, and (e)valuation of higher education. *Journal of Critical Studies in Education*, 62(1). <https://doi.org/10.1080/17508487.2020.1737556>
- [26] World Bank. (2023). *GDP per capita growth (annual %) - Indonesia | Data*. World Bank Data. Retrieved June 14, 2024, from <https://data.worldbank.org/indicator/NY.GDP.PCAP.KD.ZG?locations=ID>
- [27] Yahoo Finance. (2024). *PT GoTo Gojek Tokopedia Tbk (GOTO.JK)*. Yahoo Finance.