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Revenue Projection of the Post-Merger PT Indosat Ooredoo Hutchison Tbk for 2025 Using the Least Squares Method Based on Historical Data 2020–2024

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ABSTRACT

Indonesia's telecommunications industry faces complex dynamics due to digital transformation and strategic mergers among operators. This research aims to analyze historical revenue patterns of PT Indosat Ooredoo Hutchison Tbk for the 2020-2024 period and project 2025 revenue using the least square method. Secondary data was obtained from official company financial reports verified through multiple sources. Least square analysis was applied with 2022 established as the base year to facilitate mathematical calculations. Research findings reveal consistent revenue growth trends from IDR 27.93 trillion (2020) to IDR 55.89 trillion (2024), with a significant 49% surge in 2022 post-merger. The obtained regression equation is Y = 42,636,389 + 7,576,289X, yielding a 2025 revenue projection of IDR 65.37 trillion, representing 17% growth compared to the previous year. These findings indicate successful merger synergies in creating sustainable growth momentum. Strategic implications demonstrate the necessity for optimizing digital infrastructure investments, expanding market segmentation, and enhancing operational efficiency to achieve projection targets. This research provides practical contributions for corporate strategic decision-making and proves the effectiveness of quantitative methods in telecommunications industry financial planning.

Introduction

Background of the Study

The telecommunications sector stands as one of Indonesia's most vibrant and strategically significant industries, experiencing unprecedented transformation amid the digital revolution sweeping across Southeast Asia. This industry's evolution has been shaped by multiple converging forces: accelerating technological innovation, shifting consumer behaviors toward data-intensive services, and government initiatives promoting nationwide digital inclusion. Within this dynamic landscape, PT Indosat Ooredoo Hutchison Tbk emerges as a major player, serving millions of subscribers across the Indonesian archipelago with comprehensive mobile, internet, and data connectivity solutions.

The year 2022 marked a watershed moment for the company through its strategic consolidation with Hutchison 3 Indonesia, fundamentally reshaping Indonesia's telecommunications competitive structure. This merger created not merely a larger entity, but a transformed organization facing the complex challenge of harmonizing operations, integrating technologies, and capturing synergies while maintaining service excellence. As the merged entity navigates its post-consolidation journey, management confronts critical questions about sustainable growth trajectories and optimal resource deployment strategies.

Revenue forecasting emerges as an indispensable management capability in this context. Beyond serving as a simple financial prediction exercise, accurate revenue projection functions as the cornerstone for comprehensive corporate planning—informing infrastructure investment decisions, guiding market expansion strategies, shaping budget allocations, and establishing performance benchmarks. The telecommunications industry's capital-intensive nature and rapid technological obsolescence cycles amplify the importance of reliable forecasting methodologies.

Traditional accounting approaches, however, frequently prove inadequate for capturing the nuanced dynamics of modern telecommunications businesses. Conventional cost accounting systems typically allocate expenses based on simplistic volume metrics, failing to recognize how different service lines and customer segments consume resources differently. This limitation becomes particularly problematic in telecommunications, where infrastructure costs remain largely fixed while service delivery patterns vary dramatically across customer types and usage profiles.

For PT Indosat Ooredoo Hutchison specifically, least square analysis provides crucial insights into post-merger performance dynamics. Has the consolidation delivered anticipated synergies? Do revenue trends suggest successful market positioning? What growth trajectory appears most probable given historical patterns?

These questions demand systematic analytical frameworks rather than intuitive assessments.

This research undertakes comprehensive analysis of PT Indosat Ooredoo Hutchison's revenue evolution across the 2020-2024 period, deliberately encompassing pre-merger baseline years, the transformative merger year itself, and subsequent consolidation phases. Applying least square methodology to this longitudinal dataset enables both retrospective pattern identification and prospective 2025 revenue projection. The investigation's dual objectives academic contribution to quantitative business analysis methodologies and practical decision support for corporate management position it at the intersection of theoretical rigor and applied relevance.

Research Questions

First, what patterns characterize PT Indosat Ooredoo Hutchison Tbk's revenue performance throughout the 2020-2024 timeframe? This question directs attention toward identifying trends, inflection points, and growth rate variations across the observation period, with particular interest in discerning merger-related impacts on financial performance.

Second, how can least square regression methodology be effectively deployed to generate reliable 2025 revenue projections for PT Indosat Ooredoo Hutchison Tbk? This methodological question explores the technical application of quantitative forecasting techniques, examining data preparation, model specification, coefficient estimation, and projection derivation processes.

Research Objectives

This study pursues three interconnected objectives aligned with the research questions:

Primary Objective: To conduct systematic analysis of PT Indosat Ooredoo Hutchison Tbk's historical revenue patterns spanning 2020 through 2024, identifying underlying trends and structural shifts in financial performance. This historical analysis provides essential foundation for understanding the company's current competitive position and growth trajectory.

Secondary Objective: To implement least square regression analysis for generating empirically-grounded 2025 revenue projections, demonstrating the practical application of quantitative forecasting methodology within Indonesia's telecommunications context. This objective emphasizes methodological rigor and technical precision in analytical execution.

The convergence of these objectives positions this investigation as both scholarly contribution to business analytics literature and practical resource for

telecommunications industry stakeholders navigating Indonesia's rapidly evolving digital economy landscape.

Theoretical Framework

1. Foundation of Forecasting Theory

The theoretical foundation of this research rests upon the fundamental principles of business forecasting, which Armstrong (2001) defines as a systematic process of estimating future events through the analysis of historical patterns and trend identification. Within the corporate finance context, forecasting serves as a critical decision-making instrument that enables management to anticipate market dynamics and formulate proactive strategies (Makridakis et al., 2008).

2. Least Square Regression Method: Mathematical Principles and Applications

The conceptual framework distinguishes between two primary forecasting paradigms: qualitative and quantitative methodologies. While qualitative approaches rely heavily on expert judgment and subjective assessment, quantitative methods employ mathematical models grounded in empirical data analysis (Montgomery et al., 2015). This research adopts the quantitative paradigm, specifically utilizing the least square regression technique, recognizing its superiority in providing objective, replicable, and statistically robust predictions when historical data exhibits consistent patterns.the research gap that the article seeks to address. If the study proposes hypotheses, they must be clearly formulated based on the literature review and theoretical framework, specifying the relationships between the variables to be tested.

The least square method represents a cornerstone statistical technique initially developed by Carl Friedrich Gauss in the early nineteenth century. The fundamental logic underpinning this technique involves identifying the line of best fit that most accurately represents the relationship between independent variables (time periods) and dependent variables (revenue figures).

The mathematical formulation follows a linear equation:

- $Y = a + bX$
- Y represents the forecasted value 'a' denotes the Y-intercept indicating baseline value
- X equals zero, 'b' signifies the slope coefficient reflecting rate of change, and X represents the time variable.

Calculation of these parameters involves deriving coefficient 'b' through the formula:

- $b = [n(\Sigma XY) - (\Sigma X)(\Sigma Y)] / [n(\Sigma X^2) - (\Sigma X)^2]$,

followed by determining 'a' using:

- $a = (\Sigma Y - b\Sigma X) / n$, where 'n' indicates the number of observations in the dataset.

However, when employing a base year approach in the analysis, the computational process becomes substantially simplified. The base year method involves coding time periods such that the middle year of the observation period receives a value of zero, with preceding years assigned negative values and subsequent years assigned positive values. This strategic coding ensures that ΣX equals zero, thereby eliminating certain terms from the original formulas. Under this simplified framework, the calculations reduce to:

- $a = \Sigma Y/n$
- $b = \Sigma XY/\Sigma X^2$

This mathematical elegance not only reduces computational complexity but also minimizes potential calculation errors while maintaining statistical accuracy. Draper and Smith (2014) advocate for this approach particularly when working with odd-numbered time series, as it centers the analysis around the median observation point and provides more intuitive interpretation of the intercept coefficient.

3. Revenue Analysis in Telecommunications Context

Revenue constitutes the lifeblood of corporate sustainability, representing the total inflow of economic benefits derived from ordinary business operations. Brigham and Houston (2019) conceptualize revenue as the primary metric reflecting a company's market acceptance and competitive positioning. Within telecommunications specifically, revenue generation involves complex interactions between subscriber base expansion, average revenue per user optimization, and service portfolio diversification.

Contemporary telecommunications revenue streams have evolved beyond traditional voice services toward data-centric offerings. Kenney and Zysman (2016) document this sectoral transformation, noting that mobile data, cloud connectivity, internet services, and digital content delivery now constitute primary revenue drivers. Understanding these evolving patterns becomes essential for accurate forecasting, as growth trajectories differ substantially across service categories.

4. Strategic Merger Theory and Synergy Realization

Corporate mergers represent transformative strategic decisions undertaken to achieve objectives unattainable through organic growth alone. Gaughan (2017) categorizes merger motivations into several domains: economies of scale realization, market power enhancement, geographic expansion, technology acquisition, and managerial synergy capture. Within telecommunications particularly, consolidation

frequently aims to reduce infrastructure redundancy, expand spectrum holdings, and strengthen competitive positioning against dominant market leaders.

Synergy theory suggests that combined entity value should exceed the sum of individual component values, commonly expressed through the formula 2+2=5. However, Damodaran (2016) cautions that synergy realization remains inherently uncertain and often falls short of initial projections. Multiple empirical studies reveal that between 50-70% of mergers fail to achieve anticipated value creation, frequently due to cultural integration challenges, operational complexity underestimation, or strategic misalignment.

For PT Indosat Ooredoo Hutchison, the 2022 merger with Hutchison 3 Indonesia represented a calculated strategic response to Indonesia's intensifying telecommunications competition. The consolidation aimed to combine Indosat's established brand recognition and extensive distribution network with Hutchison's technological capabilities and spectrum assets. Analyzing post-merger revenue trends provides empirical evidence regarding synergy realization effectiveness and combined entity market performance.

5. Time Series Analysis and Trend Identification

Time series analysis examines data points collected sequentially over time to identify underlying patterns, trends, and cyclical behaviors. Box and Jenkins (2015) pioneered modern time series methodology, establishing frameworks for decomposing observed values into trend, seasonal, cyclical, and irregular components. Trend analysis specifically focuses on identifying long-term directional movements within data, distinguishing genuine structural shifts from temporary fluctuations.

Three primary trend patterns characterize time series data: upward trends indicating sustained growth, downward trends reflecting decline, and horizontal trends suggesting stability. Montgomery et al. (2015) emphasize the importance of accurately identifying trend patterns before selecting appropriate forecasting techniques, as method effectiveness depends critically on alignment with underlying data characteristics.

The least square method proves particularly effective for capturing linear trends within time series data. When historical observations demonstrate relatively consistent growth or decline patterns without substantial volatility, linear regression provides parsimonious yet powerful forecasting capability. However, practitioners must remain cognizant of method limitations, particularly its unsuitability for capturing non-linear relationships, abrupt structural breaks, or cyclical fluctuations.

Method

1. Research Design and Approach

This investigation employs a quantitative methodology with a descriptive-analytical framework. The study is classified as applied research, designed to implement the least square technique for forecasting the revenue trajectory of PT Indosat Ooredoo Hutchison Tbk. The research adopts an exploratory nature, utilizing secondary data sources derived from corporate financial statements to examine historical patterns and project future revenue performance.

2. Data Sources and Temporal Scope

The empirical evidence employed in this investigation comprises secondary data acquired from authoritative and verified sources. The research timeline encompasses a five-year historical dataset spanning from 2020 through 2024, with forward-looking projections extending to 2025. This temporal selection was deliberately chosen to capture the pre-merger landscape, the merger implementation phase, and the post-consolidation period, thereby enabling a holistic assessment of organizational performance. The primary data repositories for this research include:

- Consolidated Annual Reports of PT Indosat Ooredoo Hutchison Tbk covering the 2020-2024 fiscal years
- Quarterly Financial Disclosure Documents submitted to the Indonesia Stock Exchange
- Financial statements publicly disseminated through the company's official digital portal (ioh.co.id)

3. Research Variables and Operationalization

This investigation incorporates two principal variables:

Dependent Variable (Y):

- Annual revenue figures of PT Indosat Ooredoo Hutchison Tbk denominated in Indonesian Rupiah

Independent Variable (X):

- Temporal dimension (calendar year) transformed into coded numerical format utilizing 2022 as the baseline reference year (X = 0)

4. Data Collection Protocol

Data acquisition was executed through systematic documentary analysis by accessing the corporation's official financial disclosures. The collection procedure followed a structured sequence encompassing the following stages:

- Source Identification Phase: Identifying and authenticating relevant and credible data repositories
- Data Extraction Phase: Extracting annual revenue metrics from authorized financial documentation
- Data Verification Phase: Conducting cross-validation procedures across multiple sources to ensure precision and consistency
- Data Compilation Phase: Organizing the collected information into formats appropriate for statistical examination

5. Research Limitations and Constraints

This study acknowledges several inherent limitations that warrant recognition:

- Methodological Constraints: The least square technique presupposes a linear relationship, which may not comprehensively capture the multifaceted dynamics inherent in telecommunications business operations
- External Variable Exclusion: The analytical framework does not incorporate exogenous variables such as macroeconomic conditions, regulatory modifications, or technological disruptions
- Temporal Boundaries: Despite utilizing a five-year dataset, this duration remains relatively constrained for identifying long-term business cyclical patterns
- Merger Impact Considerations: The transformational effects of the 2022 merger may influence the representativeness of historical trends for future projection purposes

Results And Discussion

1. Company Financial Performance

Year	Income data measured in millions	Growth
2020	Rp27.925.661	7%
2021	Rp31.388.311	12,40%
2022	Rp46.752.319	48,95%
2023	Rp.51.228.782	9,57%

2024	Rp.55.886.870	9,09%

a. 2020 Financial Performance

- Aggregate revenue reached IDR 28 trillion, reflecting a 7% year-over-year increase

b. 2021 Financial Performance

- Total revenue attained IDR 31.39 trillion, demonstrating a 12.4% annual growth rate

c. 2022 Financial Performance

- Comprehensive revenue achieved IDR 46.7 trillion, marking an exceptional 49% surge compared to the preceding year

d. 2023 Financial Performance

- Overall revenue escalated to IDR 51.2 trillion, representing a 9.6% upward trajectory from the previous period

e. 2024 Financial Performance

- Total revenue culminated at IDR 55.88 trillion with a 9.09% growth rate relative to the prior fiscal year

2. Implementation of Least Square Methodology

The year 2022 was designated as the base year (X=0) within the least square framework to streamline computational processes and facilitate data analysis. Therefore:

Year	X	Income data measured in millions	XY	X2
2020	-2	Rp27.925.661	(55.851.322)	4
2021	-1	Rp31.388.311	(31.388.311)	1
2022	0	Rp46.752.319	0	0
2023	1	Rp51.228.782	51.228.782	1
2024	2	Rp55.886.870	111.773.740	4
total	0	Rp213.181.943	75.762.889	10

Regression Coefficient Computation

Formulae applied:

- $a = \Sigma Y/n$
- $b = \Sigma XY/\Sigma X^2$

Calculated values:

- a = 213,181,943/5 = 42,636,389
- b = 75,762,889/10 = 7,576,289

Derived Regression Equation: Y = a + bX

- Y = 42,636,389 + 7,576,289X

Revenue Projection for Fiscal Year 2025

Given X = 3 (calculated as 2025 - 2022 = 3)

- Y_{2025} = 42,636,389 + 7,576,289(3)
- Y_{2025} = 42,636,389 + 22,728,867
- Y_{2025} = 65,365,256

The projected revenue for fiscal year 2025 is IDR 65,365,256 million (or IDR 65.37 trillion)

The projection outcomes reveal that PT Indosat Ooredoo Hutchison Tbk maintains exceptionally positive growth momentum, with anticipated revenue reaching IDR 65.37 trillion in 2025. This trajectory reflects the successful execution of merger strategies and realized synergies implemented since 2022 (Ansoff, 1987). According to Porter's framework (1985), such consistent growth patterns demonstrate sustainable competitive advantages within the telecommunications industry.

The substantial 49% revenue elevation in 2022 following the merger demonstrates the effectiveness of horizontal consolidation strategies (Chatterjee, 1986). Hitt et al. (2001) articulate that successful telecommunications mergers generate value creation through economies of scale, expanded market penetration, and enhanced technological capabilities. The data substantiates that IOH has successfully achieved anticipated synergy targets.

PT Indosat Ooredoo Hutchison Tbk's revenue projection of IDR 65.37 trillion for 2025 demonstrates highly promising growth potential. However, achieving this

target requires implementing comprehensive and integrated strategies encompassing infrastructure investment optimization, digital service diversification, market expansion, and operational efficiency enhancement. Through applying the outlined strategic recommendations, IOH can maintain growth momentum and strengthen its competitive position within Indonesia's dynamic telecommunications industry.

Conclusion

1. Historical Revenue Trend Analysis (2020-2024)

PT Indosat Ooredoo Hutchison Tbk has demonstrated a remarkably positive and consistent revenue growth trajectory throughout the 2020-2024 period. The company's financial performance showed continuous upward momentum, expanding from IDR 27.93 trillion in 2020 to IDR 55.89 trillion by 2024. This progression illustrates the organization's strong capacity to navigate and adapt within the dynamic telecommunications industry landscape.

The most dramatic transformation phase occurred in 2022 following the consolidation with Hutchison 3 Indonesia, generating an exceptional 49% revenue surge that reached IDR 46.75 trillion. This phenomenon demonstrates that the merger strategy successfully created advantageous synergies while simultaneously strengthening the company's competitive positioning within Indonesia's telecommunications sector.

The 2023-2024 period reveals a stabilization phase characterized by more measured yet consistent expansion (9.6% in 2023 and 9.09% in 2024). These figures indicate successful operational integration and optimal realization of merger synergies.

2. Linear Trend Analysis Method Application

The implementation of the least square methodology, utilizing 2022 as the base year (X=0), has produced the linear regression equation Y = 42,636,389 + 7,576,289X. This approach proved highly effective in identifying consistent linear growth patterns, with coefficients demonstrating a robust correlation between temporal progression and corporate revenue.

Through systematic mathematical computation, PT Indosat Ooredoo Hutchison Tbk's revenue projection for 2025 is estimated to reach IDR 65.37 trillion, representing approximately 17% growth compared to 2024 figures. This forecast reflects optimistic expectations for continued expansion, driven by post-merger consolidation and successful adaptation to digital transformation initiatives.

References

Ansoff, H. I. (1987). *Corporate strategy* (Rev. ed.). Penguin Books.

Armstrong, J. S. (2001). *Principles of forecasting: A handbook for researchers and practitioners*. Kluwer Academic Publishers.

Box, G. E. P., & Jenkins, G. M. (2015). *Time series analysis: Forecasting and control* (5th ed.). John Wiley & Sons.

Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of financial management* (15th ed.). Cengage Learning.

Chatterjee, S. (1986). Types of synergy and economic value: The impact of acquisitions on merging and rival firms. *Strategic Management Journal*, *7*(2), 119-139.

Damodaran, A. (2016). *Investment valuation: Tools and techniques for determining the value of any asset* (3rd ed.). John Wiley & Sons.

Draper, N. R., & Smith, H. (2014). *Applied regression analysis* (3rd ed.). John Wiley & Sons.

Gaughan, P. A. (2017). *Mergers, acquisitions, and corporate restructurings* (7th ed.). John Wiley & Sons.

Hitt, M. A., Harrison, J. S., & Ireland, R. D. (2001). *Mergers and acquisitions: A guide to creating value for stakeholders*. Oxford University Press.

Kenney, M., & Zysman, J. (2016). The rise of the platform economy. *Issues in Science and Technology*, *32*(3), 61-69.

Makridakis, S., Wheelwright, S. C., & Hyndman, R. J. (2008). *Forecasting methods and applications* (3rd ed.). John Wiley & Sons.

Montgomery, D. C., Jennings, C. L., & Kulahci, M. (2015). *Introduction to time series analysis and forecasting* (2nd ed.). John Wiley & Sons.

Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press.

PT Indosat Ooredoo Hutchison Tbk. (2020-2024). *Consolidated Annual Reports*D *(2020-2024)*. Obtained From https://ioh.co.id

PT Indosat Ooredoo Hutchison Tbk. (2020-2024). *Quarterly Financial Disclosure Documents*. Indonesia Stock Exchange.