ENHANCING PT AJSE LIFE INSURANCE BUSINESS GROWTH USING THE DIGITAL PLATFORM THROUGH THE SUCCESS OF MAJOR INDONESIA’S INSURANCE COMPANIES

Yunika Adiyono, Kinsenary Tjendrasa, Sylviana Maya Damayanti
School of Business Management, Institut Teknologi Bandung, Indonesia
Email: yunika_adiyono@sbm-itb.ac.id, kin.tjendrasa@sbm-itb.ac.id, sylvianamaya@sbm-itb.ac.id

Abstract
The COVID-19 pandemic profoundly affected Indonesia's economy, particularly its insurance industry, leading to a surge in Digital Financial Innovation (DFI) and Financial Technology (Fintech). Despite a low insurance coverage rate of 3.18% in 2021, the Financial Services Authority (OJK) is advocating for technological integration. This research aimed to reforecast PT AJSE's financial performance amid the digital transformation in insurance, analyzing data from 2018 to 2022 from top life insurance players and employing quantitative methods to forecast PT AJSE future performance. The results indicate that DFI has enhanced profitability in top life insurance companies, suggesting significant benefits for PT AJSE, a small insurer with growth potential. By adopting DFI, PT AJSE could see improvements in income and assets, with three projected scenarios showing varied outcomes. The study recommends that PT AJSE strategically integrate DFI into its operations, enhance digital marketing skills among employees, develop customer-centric digital services, and leverage its association with a major e-commerce platform for market penetration.

Keywords: Digital Financial Innovation (DFI) Impact, Financial Forecasting, Insurance Technology Market Strategies, Insurance Financial Ratio Analysis, Scenario-Based Forecasting.

Introduction
The COVID-19 pandemic, beginning in March 2020, significantly impacted Indonesia's economic sector, particularly evident in its financial institutions (Astuti & Mahardhika, 2020). This period was marked by a notable downturn in the economy, with a contraction of 5.32% in the second quarter of 2020. The pandemic brought about substantial changes in operational norms, especially for financial institutions, which had to quickly adapt to Work from Home (WFH) regulations (Susilawati et al., 2020). This shift necessitated a rapid embrace of digital technologies to ensure continued operational efficiency. Alongside these changes, there was a marked increase in the use of Financial


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Technology (FinTech), driven by heightened internet usage across Indonesia (Manawar et al., 2023). The pandemic, thus, served as an unexpected catalyst for the expansion and innovation within the FinTech sector (Jameaba, 2020). Despite the overall growth in the digital economy, the Indonesian insurance sector faced stagnation, with a mere 3.18% of the population covered by insurance in 2021. The sector confronted several challenges, including complex claims processes, high premium rates, and a general atmosphere of mistrust. Recognizing these issues, the Financial Services Authority (OJK) advocated for the adoption of Digital Financial Innovation (DFI), specifically Insurtech, as a strategic response (Rauniyar et al., 2021). Insurtech, which involves the integration of technology to enhance insurance services and customer experience, was identified as a key tool for companies to overcome the operational challenges of the pandemic and to improve service delivery (Catlin et al., 2018).

As the life insurance industry accelerates towards digitalization, a trend further propelled by regulatory initiatives, PT AJSE as a focus of this research will also face this digitalization era and evolving market demands. Established in 2013, the company has been a traditional player in the market, primarily focusing on standard insurance offerings. However, with the industry's shift to digital platforms since 2020, PT AJSE's conventional methods of marketing and product distribution have increasingly faced challenges. The company's operation needs to assess the condition in which traditional marketing strategies are replaced by digital methods. This situation places PT AJSE in a precarious position, highlighting the urgent need to adapt and integrate more innovative digital strategies. The success of PT AJSE in this transforming landscape will depend heavily on its ability to redefine its marketing approach, leveraging digital channels to connect with its audience and avoid potential revenue losses. Embracing this digital shift should be considered heavily as a strategic move for PT AJSE as in Industry, it is a necessary evolution to remain competitive and relevant in an industry that is rapidly moving away from traditional business models.

PT AJSE, established in 2013 and having undergone several ownership changes, exemplifies these challenges. Initially focused on traditional insurance products, PT AJSE shifted in 2022 to introduce simpler and more affordable insurance products, targeting the low to middle-income segments in Indonesia. As the life insurance industry leaders are compelled in the imperative of optimizing digitalization strategies to enhance financial performance, with additional push by regulatory initiatives, PT AJSE faces a pressing challenge. The company must effectively leverage and adapt to this changing landscape to avert potential revenue loss in the future.

Based on the background that has been stated above, the research question of this study are (1) How does the implementation of Digital Financial Innovation affect the profitability ratio in Life insurance leaders in Indonesia for the period 2018-2022? (2) What is the financial projection for PT AJSE in the future after considering the implementation of Digital Financial Innovation? (3) What is the recommendation for PT AJSE in order to catch up with changing online insurance market?
Enhancing PT AJSE Life Insurance Business Growth Using the Digital Platform Through the Success of Major Indonesia’s Insurance Companies

The primary objective of this research is to explore the benefits and strategic pathways for PT AJSE to thrive in the digital insurance market. This involves assessing the company's potential financial performance in the context of adapting to the changing online insurance market landscape. The research aims to identify actionable steps and recommendations for PT AJSE to navigate this transition effectively and mitigate potential business losses.

Research Methods

Research methodology serves as a systematic approach to address a research question. Creswell (2014) emphasized the importance of selecting a methodology that aligns with the research objectives and questions. Hence, the design should show a systematic approach to research, encompassing the selection of appropriate methods for data collection, analysis, and interpretation. As clear rational is needed behind methodological choices, ensuring ethical and reliable research practices.

Quantitative method is used by author to forecast PT AJSE’s financial performance after ensuring the impact of DFI implementation and conforming the result to the profitability impact of Top 7 life insurance companies in Indonesia after implementing DFI on 2018-2022. Below is the framework that author use for this study:

![Research Methodology Diagram](image)

**Figure 1. Research Methodology**

Data Collection Method

Primary data, as defined by Kumar (2011), is information collected first-hand, tailored to the research's specific needs, resources, and capabilities. In this study, the
initial financial projection data from PT AJSE is considered primary data. Conversely, secondary data is information acquired indirectly through existing sources like books, journals, previous research, and reports. This research utilizes financial statements from the top 7 life insurance companies, available on their websites and publications, to understand each company's position in implementing Digital Financial Innovation (DFI), categorizing these as secondary data.

The population is described as a whole group of data, activities, interesting objects and other things to be taken and further investigated (Sugiyono, 2018). This is described in regards of the research's step to identify the impact of DFI to Top 7 player’s in Indonesia. As elucidated by Santoso (2017), a sample denotes a subset of data procured or selected from a larger population. This concept is further expounded upon by Sugiyono (2018), who characterizes a sample as a representative segment of the entire population. Hence, the merit of a well-chosen sample lies in its ability to accurately mirror the population it is drawn from.

For this study, the selection of samples adheres to the purposive sampling technique. The rationale behind this choice of sampling method is rooted in its alignment with the research's goals, problems, and objectives. In which understanding the impact of DFI implementation towards Life Insurance sector in Indonesia, as the sample already reflected the 66% market share based on premium/revenue factor. The sample for this step will be using top 7 Companies with largest market share in Life Insurance sector in Indonesia. The period will take a look from 2018 – 2022 financial performance.

**Data Analysis Method**

Descriptive statistics are a type of statistics used to describe or give an overview of an object being studied through sample data or its population, providing general conclusions without conducting in-depth analysis (Sugiyono, 2017). This analysis is done to ensure the impact of Digital Finance Innovation (DFI) on Company's profitability ratio namely Return On Asset (ROA), for the 2018-2022 period, with data in the form of numbers that are statistically processed.

The classical assumption test is a prerequisite for conducting panel data regression analysis, especially if the common effect is chosen. This method uses SPSS software for testing classical assumptions, and the tests to be used are as follows:

1) Residual Normality Test: This test checks if the residuals from a regression model are normally distributed. The Normal P-P Plot of regression standardized residual is used, where normality is indicated if the points scatter around and follow the diagonal line.
2) Autocorrelation Test: This test assesses the correlation of errors over time or place in a linear regression model. The Durbin-Watson (DW) Test is used, where no autocorrelation is indicated if the DW value is between du and 4-du, while values outside this range suggest autocorrelation.
3) Heteroskedasticity Test: This test checks if the variances of residuals are equal across observations. A scatterplot between Z prediction (ZPRED) and its residual values (SRESID) is analyzed. Homoskedasticity is indicated by a scatter above and below the
origin point without a regular pattern, while a regular pattern suggests heteroskedasticity.

The hypothesis test in this research is useful to determine whether the impact of DFI is significant to top life insurance companies’ profitability and the tests are consists of:

1) Simultaneous Test (F Test): Determines if all variables in the model jointly influence the dependent variable. A significance value less than 0.05 indicates acceptance of the alternative hypothesis.

2) Coefficient of Determination (R Test): Measures how much variation in the dependent variable is explained by the independent variables, with values closer to one indicating a greater influence.

3) Partial Test (t test): Assesses the influence of individual explanatory variables on the dependent variable. The null hypothesis is rejected or accepted based on the t statistic.

Simple Linear Regression Analysis is used to analyze the linear relationship between the independent variable (implementation of DFI factors) and the dependent variable (profitability ratio). The model includes is as below:

$$\text{ROA} = \beta_0 + \beta_1 \text{DIG}(t) + \epsilon$$

In where:

- **ROA**: Profitability ratio
- **$\beta_0$**: Constant
- **$\beta_1$** – $\beta_{11}$: Regression coefficients
- **DIG**: Digitalization (Implementation of DFI factors)
- **$\epsilon$**: Error level

These tests collectively aim to evaluate the impact and significance of DFI on the profitability ratios of life insurance companies.

**Defining Assumptions**

The process of defining assumptions relevant for forecasting includes a strategic analysis known as Trend Analysis, which encompasses both trend identification and statistical data analysis. This analysis is primarily focused on assessing the financial performance and growth patterns of leading life insurance companies in Indonesia from 2018 to 2022, while also considering broader market trends. The central objective of this process is to aid in the determination of key assumptions by closely examining how the industry's transition to digital methodologies has influenced revenue and expense growth trends. This analysis provides critical benchmarks and essential insights that form the foundation for constructing a realistic and well-informed forecasting model.

Moreover, PT AJSE's affiliation with one of Indonesia's largest e-commerce entities, which holds a significant market share, further justifies this benchmarking approach. The e-commerce platform's extensive reach and digital expertise offer a solid
foundation for PT AJSE to anticipate changes in expected financial performance driven by digitalization. This affiliation not only enhances PT AJSE's visibility in the market but also provides valuable insights into consumer behavior and digital engagement. These insights are pivotal for crafting a forward-looking digital strategy that taking into account top life companies’ real financial result, aligning with our company’s ability to leverage digital tools to enter this market segment successfully.

The insights derived from this analysis will directly contribute to shaping the assumptions underlying PT AJSE's financial forecasts. A thorough understanding of these revenue and expense growth trends is vital, as it not only reflects the historical financial performance in the context of digital transformation but also aids in anticipating future financial patterns. This focus ensures that the forecasting for PT AJSE is rooted to the empirical data but also considering the evolving digital dynamics of the insurance industry.

In essence, this Trend Analysis acts as a foundational tool in the construction of reliable forecasting assumptions for PT AJSE, ensuring that the company’s financial projections are both reflective and adaptive to potential future changes in the digital insurance landscape.

**Forecasting Financial Projection**

After determining assumptions, the author proceeds to forecast based on PT AJSE's existing financial projections by employing scenario analysis. This technique allows for the creation of a broad range of potential forecasts, including extremes. The research uses PT AJSE's current financial projections, grounded in empirical data and business strategies, and adapts them based on the impacts of Digital Financial Innovation (DFI) within the company's operational context. This method combines PT AJSE's established forecasting practices with new scenarios to assess potential variances. The scenario analysis utilizes the existing 2023 financial forecasts to explore various potential outcomes for PT AJSE's financial projection up to 2028, divided into three primary scenarios:

1) **Best Scenario:** The scenario will be developed from PT AJSE's initial forecast for 2023, with modifications to reflect the implementation of Digital Financial Innovation. The adjustments will be based on expected outcomes, established through data analysis and the formulation of assumptions.

2) **Middle Scenario:** This scenario adjusts the initial projection to account for a reality where the impacts of Digital Financial Innovation are realized, but to a lesser extent than the best scenario is reached. The scenario will be based on author’s risk analysis due to certain risk that should be considered as it tempers the full potential of DFI.

3) **Worst Scenario:** This scenario is anchored in PT AJSE's 2023 initial forecasts, extending the current expectations into the future without the implementation of any significant strategic initiatives or DFI. In this scenario, the company does not implement DFI and obtain the benefits of it, effectively maintaining the status quo, and resulting in a forecast that mirrors the existing projections without any improvement.
Results and Discussion

External and Internal Analysis

Author performed external and internal business situation analysis. The external analysis through PESTLE analysis reveals a complex interplay of factors shaping the Indonesian life insurance market, crucial for PT AJSE’s response to Digital Financial Innovation. The Five Forces Analysis indicates high competition among existing insurers, a medium threat from new digital entrants, and a moderate level of substitute products. While buyer bargaining power remains small, it is growing due to increased financial literacy and digital access. The supplier power in technology and related services is also moderate. These analyses underscore the competitive and digitally evolving insurance landscape in Indonesia, highlighting the necessity for PT AJSE to adapt and enhance its strategies in response to these external factors, ensuring sustained profitability and market relevance.

For the internal analysis, PT AJSE's strengths are analyzed through a VRIO framework, focusing on unique product offerings, association with a major e-commerce platform, and financial support from its parent group. The company’s ability to offer unique and affordable insurance products is valuable in attracting new market segments, especially younger demographics. However, these products are not particularly rare or difficult to imitate. The association with a leading e-commerce platform in Indonesia provides a valuable and somewhat rare distribution channel, though this too can be imitated by competitors. The commitment from the parent group for capital injection offers value in terms of regulatory compliance and business growth, but like product offerings, this aspect is neither rare nor hard to imitate. The effectiveness of these resources and capabilities largely hinges on the strategic planning and organizational execution by PT AJSE.

The SWOT analysis of PT AJSE highlights its strengths, weaknesses, opportunities, and threats. Strengths include leveraging its association with a major e-commerce platform for digital distribution, adapting to government support in financial literacy, and positioning itself in the growing insurance market. However, challenges include navigating complex regulations, balancing traditional product strategies with digital innovation, and the competitive digital landscape. Opportunities for PT AJSE lie in engaging with the expanding economy through digital platforms, targeting younger demographics, and incorporating InsurTech innovations for enhanced services and operational efficiency. Threats include the fast-paced digital market where maintaining a competitive edge is challenging, and the presence of digital financial alternatives which could act as substitutes for traditional insurance products.

Based on the overall internal and external analysis, author has conducted a risk analysis to evaluate the likelihood and impact of various threat and opportunities based on SWOT analysis which could influence PT AJSE’s position in the Insurance Industry.
The analysis also considers whether PT AJSE's strengths as analyzed in VRIO are sufficient to navigate and surmount these challenges.

**Statistic Result**
The descriptive analysis of the profitability variables (ROA) and frequency of Digital Financial Innovation (DFI) implementation showed a range of values, with ROA varying significantly and a majority of the sample implementing DFI at high frequency.

**Classical Assumption Testing Result**
1) Normality Test: The normality test indicated that the residuals from the regression model are normally distributed, as shown by the distribution of data around the diagonal line in the Normal P-P Plot.
2) Autocorrelation Test: The Durbin-Watson test results showed no autocorrelation in the regression model, with the dW value falling between the defined range.
3) Heteroskedasticity Test: The scatterplot for the heteroscedasticity test displayed data points spread around the origin, indicating no heteroscedasticity issue in the regression model.

**Hypothesis Test**
1) Simultaneous Test (F Test): The F test demonstrated a significant influence of the independent variable (digital) on the dependent variable (profitability), with a significance value of less than 0.05.
2) Coefficient of Determination (R Test): The coefficient of determination indicated that the digitalization variable could explain 10.4% of the variance in profitability, with the rest influenced by other variables.
3) Partial Test (t test): The partial test results showed a positive impact of DFI on profitability, with the hypothesis accepted based on the significance value.

**Simple Linear Regression**
The simple linear regression analysis confirmed a positive relationship between DFI and profitability, with DFI positively impacting profitability. This result forms the basis for developing financial projections for PT AJSE, incorporating a positive assumption about the impact of DFI on future financial performance.

**Forecasting Assumptions**
These assumptions are based on historical data of top life insurance companies and market data, considering PT AJSE’s affiliate with a major e-commerce platform in Indonesia. The forecasting includes three scenarios: best, middle, and worst. The best scenario predicts a higher premium growth rate due to DFI, while the middle scenario adopts a more conservative approach, considering market competition and regulatory challenges. The operational efficiency and marketing costs are expected to improve with increased DFI adoption, with the best scenario showing the highest efficiency and cost reductions. The forecasting for regulatory costs aligns with PT AJSE's asset base, and
other financial metrics remain consistent with the initial projections, focusing primarily on the impact of DFI implementation.

Forecasting Scenario

In the best-case scenario, PT AJSE is expected to see significant growth from 2023 to 2028, with premium revenue increasing from IDR 139.558 million to IDR 171.487 million. This growth is attributed to effective digital strategies. While costs related to acquisition, reinsurance, and administration are projected to rise, reflecting investments in digital infrastructure, the company’s commitment to digital innovation, including DFI implementation costs starting in 2024, is expected to enhance operational efficiencies. The EBIT is projected to remain stable, indicating that revenue growth will cover the incremental costs and maintain profitability. The balance sheet shows a healthy financial position, with total assets nearly doubling and a substantial growth in total equities, indicating strong equity growth and potential shareholder value.

The middle scenario forecasts a moderate upward trend in premium revenues for PT AJSE, expected to rise from IDR 138.370 million in 2023 to IDR 164.312 million by 2028. This scenario considers the risks associated with DFI implementation. Costs related to acquisition and reinsurance are projected to increase proportionally to revenue growth. Total income is expected to rise, reflecting the company’s financial improvement. Expenditures such as regulatory, marketing, and DFI implementation costs will increase steadily, with EBIT fluctuating but ending slightly above the worst-case scenario. The balance sheet in this scenario indicates robust growth in total assets, liabilities, and equities, suggesting a firm foundation for sustainable growth.

In the worst-case scenario, PT AJSE’s financial performance is expected to stagnate, mirroring the initial projection without significant improvement. Premium growth is anticipated to be minimal due to a lack of stimulation from digital innovation. Expenses, including acquisition, reinsurance, and administrative costs, may not benefit from DFI-driven cost savings, potentially maintaining or increasing their current levels. Administrative and regulatory expenses are expected to rise without the cost containment that DFI offers. Marketing and general administration costs could also increase if the company continues traditional methods. The balance sheet reflects constrained growth, indicating a company facing market challenges without the competitive advantages of DFI. This scenario highlights the importance of DFI in driving growth and operational efficiency.

Scenarios Comparison

For the year 2028, PT AJSE’s financial forecast illustrates diverse trajectories under three scenarios such as best, middle, and worst. Each is influenced by the degree of DFI adoption. In the best-case scenario, the company’s strategic embrace of DFI is expected to generate a total income of IDR 168.984 million, with an EBIT of IDR 70.219 million, signaling strong digital driven growth and profitability. The middle scenario forecasts a
tempered yet positive outcome, with income at IDR 161.914 million and EBIT at IDR 64.882 million, reflecting cautious optimism amidst competitive and operational headwinds.

The worst case scenario, which contemplates no enhancement in DFI efforts, predicts the lowest income at IDR 156.513 million and an EBIT of IDR 59.307 million, pointing to the critical role of DFI in bolstering financial performance. Despite varying income levels, operational expenses and insurance costs remain relatively stable, underscoring effective cost management.

Asset projections range from IDR 613.858 million in the best-case scenario to IDR 602.945 million in the worst case, demonstrating resilience in asset growth. Equities follow a similar pattern, from IDR 412.166 million down to IDR 401.253 million, indicative of the company's robust equity position even in challenging scenarios. Liabilities hold steady at IDR 201.692 million across all scenarios, showcasing a consistent approach to financial obligations. This spectrum of outcomes highlights the significance of DFI in shaping PT AJSE’s financial future and underscores the company's solid foundation in facing various market conditions.

Conclusion

Impact of DFI on Profitability (2018-2022): The impact of DFI on the profitability of the life insurance industry in Indonesia from 2018 to 2022 demonstrates the role of digitalization in enhancing financial performance. For PT AJSE, this trend offers a blueprint for transforming potential weaknesses into strengths. By integrating DFI, PT AJSE can address existing challenges in operational efficiency and market competitiveness, turning them into areas of robust performance and competitive advantage. The financial outlook, considering DFI implementation, predicts not only an improvement in key financial metrics such as total income, EBIT, and asset positions but also signifies a strategic shift towards a more resilient and adaptable business model.

Financial Outlook for PT AJSE Considering DFI Implementation: PT AJSE's financial projections with the expected assumptions which mostly surround DFI integration predict a favorable uplift in financial indicators. Although DFI implementation may require substantial investment in the start, the scenarios analyzed from best to worst indicate that the strategic digital advancements are expected to yield long-term financial benefits. These benefits include improved total income, EBIT, and stronger asset and equity positions, which collectively suggest that DFI is a valuable investment for future growth and market adaptability.

Strategic Digitalization for PT AJSE: In navigating the evolving online insurance market, PT AJSE's move towards DFI implementation is a proactive step in aligning with market trends while setting a foundation for future operation. The initial costs, though impacting short-term margins, are essential for long-term gains. This approach aligns with the need to convert identified threats—such as the rapidly changing digital landscape and intense market competition—into opportunities for operational efficiencies, enhanced customer experiences, and new revenue streams. Thus, prioritizing
digitalization is not just a response to market trends but a strategic decision to leverage digital transformation as a core component of PT AJSE’s business strategy. This approach ensures that PT AJSE not only addresses its current weaknesses but also harnesses digital innovation as a driver for sustained growth and market leadership in the digital-first insurance landscape.

As a recommendation, PT AJSE should refocus its strategy approach on integrating Digital Financial Innovation (DFI) into its core operations, capitalizing on technology investments, and harnessing synergies with its associated e-commerce platform to enhance digital marketing and develop customer-centric services. This strategy calls for a shift towards employee digital skill enhancement, particularly in digital marketing, to support the evolving DFI objectives. Additionally, PT AJSE is advised to revise its financial projections, considering the revenue potential from digital channels and Insurtech scalability, while nurturing a digital-first culture within the organization. Balancing innovation with robust risk management and compliance is crucial, ensuring the company remains agile and resilient in the rapidly changing digital landscape. This comprehensive recommendation aims to elevate PT AJSE’s digital presence, streamline processes, and secure a competitive edge in the digital arena.

**BIBLIOGRAPHY**


