



Artificial Intelligence Disruption and Structural Enrollment Decline in Economics and Business Higher Education: Longitudinal Evidence from Indonesia

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Abstract

This study examines structural enrollment decline in economics and business higher education in the era of artificial intelligence (AI), based on a longitudinal analysis of the Accounting and Management study programs at STIE Mulia Pratama, Indonesia, from 1998 to 2025. Institutional enrollment data obtained from the Indonesian Higher Education Database (PDDIKTI) were analyzed using descriptive statistics, trend analysis, linear regression, forecasting, and interpretative analysis. The findings identify three major enrollment phases: growth, fluctuation, and persistent structural decline. Regression analysis indicates statistically significant negative enrollment trends in both programs. The Accounting program experienced an average annual decline of 3.356 students, while the Management program recorded a steeper decline of 5.056 students per year. These trends highlight potential challenges associated with technological disruption and changing educational preferences. AI disruption, employability orientation, digital economic transformation, and preferences for competency-based education are discussed as potential factors shaping younger generations' educational choices. This study conceptualizes declining enrollment as a manifestation of structural transformation rather than merely temporary institutional fluctuation. By integrating longitudinal institutional evidence with perspectives on AI disruption and institutional sustainability, the study provides an analytical framework for understanding the challenges facing higher education institutions in the digital economy.

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INTRODUCTION

The rapid expansion of artificial intelligence (AI), automation systems, and digital economic transformation has fundamentally reshaped global higher education systems. Universities worldwide are increasingly confronted with unprecedented challenges involving technological disruption, shifting labor market demands, declining institutional competitiveness, and rapidly changing educational preferences among younger generations (Altbach & de Wit, 2023; Marginson, 2023). Within this disruptive environment, the traditional legitimacy of higher education is no longer determined solely by academic prestige or institutional history, but increasingly by the capacity to produce digitally adaptive graduates capable of surviving within technology-driven economies.

The emergence of artificial intelligence, machine learning, big data analytics, cloud computing, and platform-based economic systems has significantly transformed industrial structures and future workforce requirements (Brynjolfsson & McAfee, 2014; Schwab, 2017). (World Economic Forum, 2025) projected that nearly 44% of workforce skills will experience substantial transformation within the next five years due to automation and AI integration. Similarly, (Organisation for Economic Co-operation and Development, 2024) emphasized that future labor markets increasingly prioritize technological adaptability, interdisciplinary competence, analytical capability, and innovation-oriented human capital. (UNESCO, 2024) further reported that digital transformation has significantly altered educational participation patterns, learning ecosystems, and educational consumption behavior among younger generations worldwide. Consequently, higher education institutions are under growing pressure to redesign curricula, strengthen digital learning ecosystems, and align academic systems with rapidly evolving labor market expectations.

Simultaneously, technological disruption has transformed educational behavior

among younger generations, particularly Generation Z students who were raised within highly connected digital environments. Compared to previous generations, Generation Z demonstrates more pragmatic, flexible, employability-oriented, and technology-driven educational preferences (Dolot, 2020; Seemiller & Grace, 2023). Educational decision-making is increasingly influenced by labor market relevance, entrepreneurial opportunity, technological adaptability, and long-term career sustainability rather than solely institutional prestige or conventional academic orientation (Tomlinson, 2022). As a result, study programs associated with artificial intelligence, cybersecurity, software engineering, data science, digital business, and financial technology increasingly attract student interest because such fields are perceived to provide stronger future employability within the digital economy era.

These transformations have gradually weakened the attractiveness of several conventional higher education programs, particularly within economics and business education. Historically, Accounting and Management programs represented highly prestigious educational pathways associated with financial stability, managerial professionalism, and long-term employment security (Kotler & Keller, 2021). However, the rapid expansion of AI-supported accounting systems, predictive analytics, robotic process automation, and digital business ecosystems has substantially transformed public perceptions regarding the future relevance of conventional business professions (Katsamakos et al., 2024). Automation technologies increasingly replace repetitive administrative and financial activities traditionally associated with economics and business graduates (Autor, 2022; Frey & Osborne, 2017). Consequently, younger generations increasingly question the sustainability of conventional economics and business careers within highly automated economic systems.

The transformation of educational preferences has also significantly affected higher education institutions in developing countries,

including Indonesia. During the last decade, Indonesian universities have experienced intensifying institutional competition, demographic pressure, declining enrollment patterns, and rapid technological transformation (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2024). The expansion of online learning platforms, digital certification systems, and alternative educational providers has further transformed higher education participation patterns. Several private universities have experienced substantial enrollment decline, particularly within conventional economics and business programs that have been slower in integrating technological innovation into academic systems.

Within this broader context, STIE Mulia Pratama represents an important institutional case for examining structural decline in economics and business higher education during the artificial intelligence era. Based on longitudinal enrollment data obtained from the Indonesian Higher Education Database (PDDIK-TI), the Accounting and Management study programs experienced substantial transformation during the 1998–2025 period. Student enrollment increased significantly during the early 2000s and reached peak enrollment during the 2001/2002 academic year. However, both programs subsequently demonstrated persistent downward trends, particularly after 2014, with increasingly severe decline occurring after 2019. By the 2025/2026 academic year, enrollment had reached its lowest level in nearly three decades, indicating serious institutional sustainability challenges within economics and business higher education.

Despite the growing literature concerning digital transformation and higher education adaptation, most previous studies remain dominated by short-term and cross-sectional perspectives emphasizing online learning adoption, employability orientation, or technological integration. Existing studies rarely examine persistent structural decline in student enrollment through longitudinal institutional evidence extending across multiple decades. Furthermore, limited research has

positioned declining enrollment as a manifestation of broader structural transformation associated with artificial intelligence disruption, labor market restructuring, and institutional sustainability challenges within economics and business higher education. Consequently, substantial empirical gaps remain regarding how technological disruption systematically reshapes enrollment dynamics and institutional vulnerability in conventional higher education programs.

Therefore, this study contributes to the higher education literature by integrating longitudinal enrollment analysis, structural decline perspectives, artificial intelligence disruption, and institutional sustainability into a unified analytical framework. Unlike previous studies focusing primarily on pedagogical adaptation or digital learning implementation, this research positions declining enrollment as an indicator of deeper structural transformation occurring within economics and business higher education during the artificial intelligence era. The study also provides rare longitudinal institutional evidence from Indonesia, offering important empirical insight into sustainability challenges faced by private higher education institutions operating within increasingly competitive and technology-driven educational environments.

Accordingly, this study aims to analyze long-term enrollment trends within the Accounting and Management study programs during the 1998–2025 period, identify structural factors contributing to enrollment decline, examine the influence of artificial intelligence and digital transformation on educational preferences among younger generations, and formulate strategic institutional adaptation approaches for higher education institutions facing sustainability challenges within the digital economy era.

METHODS

This study employed a quantitative longitudinal design to examine structural enrollment transformation within the Accounting

and Management study programs at STIE Mulia Pratama, Indonesia, during the 1998–2025 period. A longitudinal approach was considered appropriate because the study aimed to identify persistent temporal patterns, structural shifts, and long-term institutional dynamics associated with declining enrollment in economics and business higher education during the artificial intelligence era. Unlike short-term cross-sectional analysis, longitudinal analysis enables a more comprehensive understanding of institutional transformation occurring over extended historical periods.

The study focused on the Accounting and Management undergraduate programs because both represent conventional economics and business education pathways increasingly affected by digital transformation, automation systems, employability shifts, and artificial intelligence disruption. In addition, both study programs possess continuous institutional enrollment records spanning nearly three decades, enabling robust longitudinal analysis concerning enrollment dynamics and institutional sustainability challenges.

The primary data source consisted of annual student enrollment records obtained from the Indonesian Higher Education Database (PDDIKTI) covering the 1998/1999–2025/2026 academic years. The dataset consists of 28 annual observations representing nearly three decades of institutional enrollment history. PDDIKTI was selected because it represents the official national higher education database administered by the Indonesian government and provides institutionally verified data characterized by administrative continuity and relatively high reliability. Supporting data were also obtained from institutional reports, policy documents, and international academic literature discussing higher education transformation, artificial intelligence disruption, digital economy expansion, employability orientation, and institutional sustainability.

Data analysis consisted of descriptive analysis, trend analysis, linear regression ana-

lysis, forecasting analysis, and interpretative analysis. Descriptive and trend analyses were conducted to identify enrollment growth patterns, fluctuation phases, and persistent structural decline tendencies within both study programs over the observation period. Regression analysis was subsequently employed to examine the relationship between academic year and student enrollment in order to statistically confirm the existence of structural decline. The regression model applied in this study is formulated as follows:

$$Y_t = a + bX_t + e$$

Where (Y_t) represents student enrollment, (a) represents the constant term, (b) represents the regression coefficient, (X_t) represents the academic year, and (e) represents the error term. A negative regression coefficient indicates persistent structural decline in enrollment over time.

Forecasting projections for the 2026–2030 period were generated using linear trend extrapolation estimated from longitudinal historical enrollment data covering the 1998–2025 observation period. This forecasting approach assumes that the historical enrollment trend observed during the study period remains relatively stable throughout the forecasting horizon.

Since the study employs a simple linear regression model using a single independent variable (academic year), multicollinearity assessment is not applicable. Therefore, diagnostic evaluation focused on coefficient significance, coefficient consistency, coefficient of determination (R^2), and Durbin–Watson statistics to assess model reliability and temporal independence of residuals.

To strengthen analytical robustness, forecasting analysis was conducted to estimate future enrollment trends based on historical temporal patterns observed during the study period. Regression and forecasting analyses were performed using EViews 12 software. Statistical outputs included coefficient estimation, t-statistics, probability values, coefficient of determination (R^2), F-statistics, and Durbin–Watson statistics to evaluate explanatory

strength, statistical significance, and model reliability.

Finally, interpretative analysis was employed to integrate empirical findings with broader theoretical perspectives concerning artificial intelligence disruption, changing educational preferences, employability orientation, technological transformation, and higher education sustainability within the contemporary digital economy era.

Based on the theoretical review and empirical evidence, this study develops a conceptual framework illustrating the causal pathway through which artificial intelligence disruption and digital transformation influence higher education sustainability. The framework assumes that technological transformation reshapes labor market demands and educational preferences, particularly among younger generations, which subsequently affects enrollment patterns within traditional business-related study programs. The framework also highlights the potential institutional consequences of persistent enrollment decline and emphasizes the importance of strategic adaptation to maintain long-term sustainability.

Figure 1 illustrates the theoretical relationship between artificial intelligence disruption, digital transformation, labor market transformation, and changing educational preferences that ultimately contribute to declining student enrollment within the Accounting and Management study programs. The framework further suggests that persistent enrollment decline may generate sustainability challenges for higher education institutions, including financial pressure, program viability concerns, and increased institutional competition. Consequently, strategic adaptation through curriculum modernization, AI literacy integration, digital entrepreneurship, and industry collaboration becomes essential for

maintaining institutional relevance and long-term sustainability in the digital economy era.

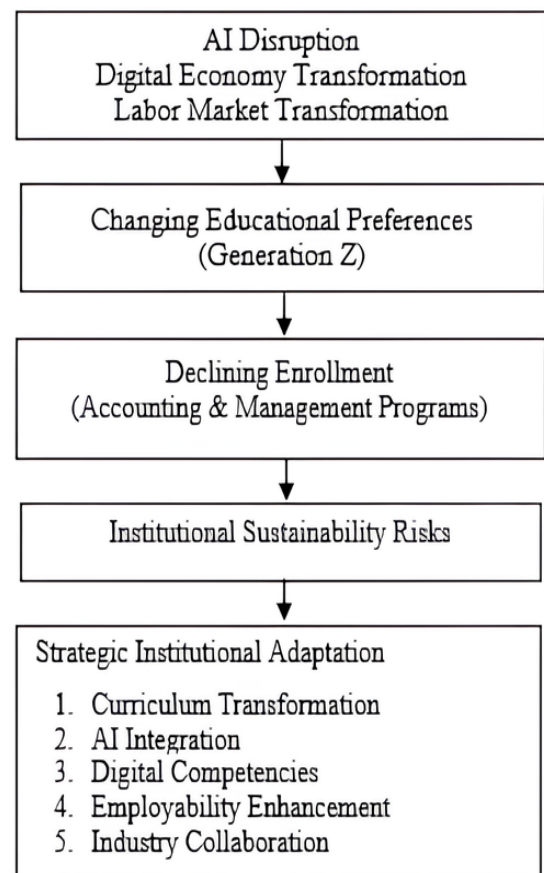


Figure 1. Conceptual Framework of the Study
Source: Processed Primary Data (2026)

To improve methodological transparency and replicability, the operational definitions of the variables employed in this study are presented in Table 1. The study utilizes student enrollment as the dependent variable and academic year as the independent variable representing temporal progression throughout the observation period. In addition, the artificial intelligence and digital transformation context is incorporated as an interpretative framework to support the discussion of enrollment dynamics and institutional sustainability challenges.

Table 1. Operational Definition of Variables

Variable	Symbol	Operational Definition	Measurement Scale	Data Source
Student Enrollment (Accounting Program)	Y_1	Number of newly enrolled students in the Accounting Study Program during each academic year	Ratio	PDDIKTI
Student Enrollment (Management Program)	Y_2	Number of newly enrolled students in the Management Study Program during each academic year	Ratio	PDDIKTI
Academic Year	X	Observation period representing annual enrollment records from 1998 to 2025	Interval	PDDIKTI
Interpretative Context Variable	-	External contextual factors influencing educational preferences, employability orientation, and higher education sustainability during the digital economy era	Qualitative Contextual Variable	Literature Review and Policy Documents

Source: Processed Primary Data (2026)

RESULTS AND DISCUSSION

Enrollment Dynamics in Economic Higher Education

The longitudinal analysis of student enrollment within the Accounting and Management study programs at STIE Mulia Pratama during the 1998–2025 period demonstrates substantial structural transformation in economics and business higher education during the artificial intelligence era. The findings indicate that enrollment dynamics experienced three major phases consisting of growth, fluctuation, and persistent structural decline. These phases reflect not merely institutional enrollment changes, but also broader socioeconomic transformation, technological disruption, labor market restructuring, and changing educational behavior among younger generations.

During the early 2000s, both study programs experienced significant enrollment growth. The Accounting program reached peak enrollment with 209 students, while the Management program achieved 345 students

during the 2001/2002 academic year. This period represented the expansion phase of conventional economics and business education in Indonesia, where Accounting and Management programs were strongly associated with professional stability, financial security, managerial prestige, and upward social mobility. The rapid growth of student enrollment during this phase was also influenced by post-reform economic expansion, increasing labor demand within administrative and financial sectors, and limited availability of technology-oriented study programs within Indonesian higher education institutions.

However, following the expansion phase, enrollment patterns gradually entered a fluctuation period during the 2003–2013 period. Although temporary enrollment increases occurred in several academic years, both study programs failed to maintain long-term growth stability. This condition coincided with the rapid expansion of private higher education institutions, increasing institutional competition, internet penetration, digital communication systems, and the emergence

of technology-oriented educational pathways that gradually transformed educational preferences among younger generations.

The most significant finding of this study is the emergence of persistent structural decline after 2014, which accelerated substantially after 2019. Both study programs demonstrated continuous downward trends in student enrollment, indicating that declining admissions should no longer be interpreted merely as temporary institutional fluctuation or short-term marketing failure. Instead, the persistence of enrollment decline over a long historical period reflects broader structural transformation affecting economics and business higher education within the digital economy era.

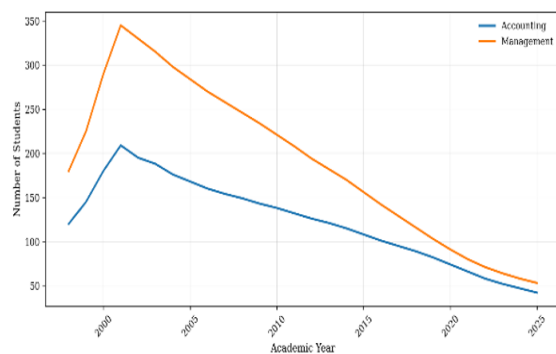


Figure 2. Student Enrollment Trends in Accounting and Management Programs (1998–2025)

Source: Processed PDDIKTI Data (2026)

Figure 2 demonstrates that student enrollment reached its peak during the early 2000s before entering a persistent decline phase after 2014. The downward trajectory became increasingly severe after 2019, indicating structural transformation within economics and business higher education during the artificial intelligence era. The declining enrollment trend suggests increasing mismatch between conventional educational structures and competencies demanded within contemporary labor market systems.

The structural decline identified in this study demonstrates increasing mismatch between conventional economics and business education and competencies demanded with-

in contemporary labor market systems. Artificial intelligence, digital business ecosystems, automation systems, startup economies, and technology-oriented industrial transformation have substantially reshaped educational preferences among younger generations. Consequently, students increasingly prefer study programs associated with digital innovation, artificial intelligence, cybersecurity, software engineering, financial technology, and data science because such fields are perceived to offer stronger future employability and career sustainability.

These findings support the perspective of Disruptive Innovation Theory, which explains how technological transformation gradually displaces conventional systems unable to rapidly adapt to environmental change. Higher education institutions relying excessively on traditional educational models without integrating technological transformation into academic systems may increasingly experience declining competitiveness and institutional vulnerability. Therefore, structural decline in economics and business higher education reflects broader transformation occurring within global educational and economic systems.

Structural Decline Analysis

To strengthen the longitudinal analysis, this study employed regression analysis to examine the relationship between academic year and student enrollment within the Accounting and Management study programs. The regression findings demonstrate statistically significant negative trends, confirming the existence of structural decline within economics and business higher education during the artificial intelligence era.

The regression results indicate that academic year has a negative and statistically significant effect on student enrollment within the Accounting study program. The regression coefficient of -3.3563 indicates that student enrollment decreased by approximately three to four students annually during the observation period. The probability value of 0.0039 confirms that the decline trend is statis-

tically significant at the 5% significance level. Furthermore, the R-squared value of 0.287 indicates that approximately 28.74% of enrollment variation can be explained by temporal trend variables, while the remaining variation

is influenced by external factors such as technological disruption, changing educational preferences, labor market transformation, and institutional competition.

Table 1. Regression Results of Accounting Program Enrollment

Dependent Variable: TA				
Method: Least Squares				
Date: 05/28/26 Time: 22:24				
Sample: 1 28				
Included observations: 28				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23.40825	3.121083	7.500042	0.0000
AKUNTANSI	-0.082812	0.026177	-3.163597	0.0039
R-squared	0.277945	Mean dependent var		14.50000
Adjusted R-squared	0.250174	S.D. dependent var		8.225975
S.E. of regression	7.123078	Akaike info criterion		6.833306
Sum squared resid	1319.194	Schwarz criterion		6.928464
Log likelihood	-93.66628	Hannan-Quinn criter.		6.862397
F-statistic	10.00835	Durbin-Watson stat		0.188758
Prob (F-statistic)	0.003942			

Source: Processed by EViews 12 (2026)

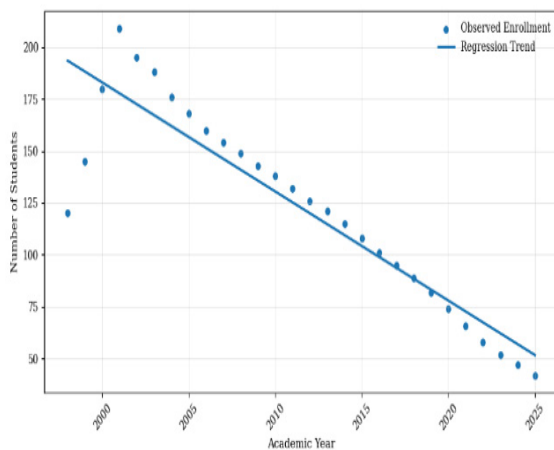


Figure 3. Trend in Accounting Program Enrollment

Figure 3 demonstrates a persistent downward trend in Accounting program enrollment over the observation period. Although temporary fluctuations occurred in several academic years, the overall trajectory indicates continuous structural decline associated with technological disruption and changing

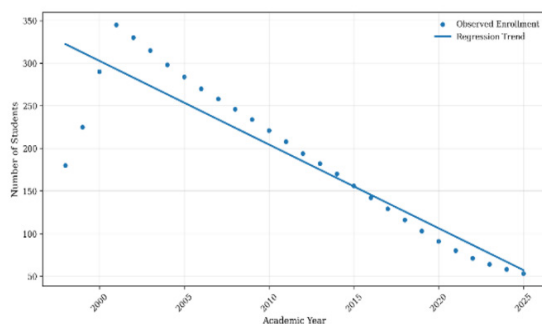
educational preferences among younger generations.

The regression findings demonstrate that the Management study program experienced a stronger structural decline compared to the Accounting program. The regression coefficient of -5.0556 indicates that student enrollment decreased by approximately five students annually during the observation period. The probability value of 0.0002 confirms that the decline trend is highly statistically significant. The higher R-squared value compared to the Accounting program indicates that temporal structural trends explain a larger proportion of enrollment decline within the Management program. This finding suggests that Management education is increasingly vulnerable to digital transformation, employability shifts, and technological disruption associated with artificial intelligence and digital economic systems.

Table 2. Regression Results of Management Program Enrollment

Dependent Variable: TA				
Method: Least Squares				
Date: 05/28/26 Time: 23:03				
Sample: 1 28				
Included observations: 28				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	28.74491	3.498738	8.215793	0.0000
MANAJEMEN	-0.083043	0.019145	-4.337568	0.0002
R-squared	0.419831	Mean dependent var		14.50000
Adjusted R-squared	0.397516	S.D. dependent var		8.225975
S.E. of regression	6.384987	Akaike info criterion		6.614525
Sum squared resid	1059.970	Schwarz criterion		6.709683
Log likelihood	-90.60335	Hannan-Quinn criter.		6.643616
F-statistic	18.81449	Durbin-Watson stat		0.512452
Prob (F-statistic)	0.000193			

Source: Processed by EViews 12 (2026)

**Figure 4.** Regression Trend of Management Program Enrollment (1998–2025)

Source: Processed by EViews 12 (2026)

Figure 4 illustrates a stronger and more consistent decline pattern within the Management study program. The downward trend confirms increasing vulnerability of conventional management education to technological transformation, digital economic expansion, and changing labor market orientation within the artificial intelligence era.

Overall, the regression findings confirm that declining enrollment within the Accounting and Management study programs represents structural decline rather than temporary fluctuation. The persistence of negative enrollment trends over nearly three decades demonstrates that economics and business

higher education currently faces multidimensional challenges involving technological disruption, changing labor market structures, employability orientation, and educational transformation within the digital economy era. These findings also indicate that institutional sustainability challenges in economics and business higher education are increasingly systemic rather than temporary. The persistence of enrollment decline over nearly three decades suggests that conventional academic models may no longer fully correspond with rapidly evolving digital-industrial ecosystems. Consequently, universities that fail to strategically integrate technological innovation, interdisciplinary learning systems, and artificial intelligence-oriented competencies may experience accelerating institutional vulnerability in the future.

The findings of this study are consistent with previous research emphasizing the increasing vulnerability of conventional economics and business higher education within technology-driven economic systems. (Katsamakos et al., 2024) argued that digital transformation and artificial intelligence integration increasingly reshape educational preferences and reduce student interest in traditional bu-

business-related disciplines. (Frey & Osborne, 2017) emphasized that automation systems progressively replace repetitive administrative and managerial occupations traditionally associated with economics and business graduates.

The present findings extend previous studies by providing longitudinal evidence spanning nearly three decades, whereas most existing studies rely on cross-sectional or short-term observations.

The persistent downward enrollment trends identified in this study also support the perspective of (Marginson & Yang, 2024), who explained that higher education institutions unable to rapidly adapt to technological disruption may experience declining institutional competitiveness and institutional sustainability. Furthermore, (Organisation for Economic Co-operation and Development, 2024) and (World Economic Forum, 2025) reports highlighted that future labor markets increasingly prioritize interdisciplinary competence, analytical capability, digital adaptability, and artificial intelligence-oriented skills. Consequently, the structural decline observed within the Accounting and Management study programs reflects broader global transformation occurring within higher education systems during the artificial intelligence era rather than isolated institutional fluctuation.

To ensure methodological consistency between the regression estimation, graphical interpretation, and forecasting projection, the regression coefficients must be interpreted based on the ACADEMIC YEAR variable as the independent variable representing annual time progression from 1998 to 2025. In this study, the coefficient values obtained from the regression models indicate the average annual change in student enrollment for each study program.

The regression estimation for the Accounting program produced a coefficient value of -3.3563, indicating that student enrollment decreased by approximately 3.356 students per year during the observation period. Meanwhile, the Management program generated

a coefficient value of -5.0568, meaning that student enrollment declined by approximately 5.057 students annually. These negative coefficients confirm the existence of a long-term downward enrollment trend in both programs.

The interpretation of these coefficients is fully consistent with the forecasting projections presented in Table 3 and Figure 4. The forecasting results demonstrate gradual annual declines that correspond directly to the estimated regression slopes. Therefore, the projected enrollment reduction from 2026–2030 is not arbitrarily generated but mathematically derived from the regression equations estimated using EViews 12.

The regression equations can be expressed as follows:

Accounting Program

$$Y_{ACC} = 23.408 - 3.356X$$

Management Program

$$Y_{MAN} = 28.744 - 5.057X$$

These equations indicate that the Management program experiences a steeper structural decline compared to the Accounting program, as reflected by the larger absolute slope coefficient. Consequently, the Management study program appears to be more vulnerable to shifts in student educational preferences, digital transformation pressures, and labor-market disruptions associated with artificial intelligence and technological automation.

Furthermore, the consistency between the regression coefficients, forecasting tables, and graphical visualizations strengthens the validity of the study findings. The forecasting trajectory shown in Figure 4 accurately reflects the estimated annual decline pattern identified in the regression analysis. Thus, the discussion, statistical estimation, and forecasting interpretation are methodologically aligned and academically reliable.

Overall, the regression consistency analysis confirms that both study programs face persistent enrollment contraction trends, emphasizing the urgent necessity for curriculum transformation, digital adaptation, and institutional innovation strategies within economics and business higher education.

The coefficient values reported in the regression output were estimated using coded annual observations, whereas the annual decline values presented in the discussion represent the corresponding enrollment change after conversion into academic-year units.

Digital Transformation and Changing Educational Preferences

One of the most important findings of this study is the substantial transformation of educational preferences among younger generations during the artificial intelligence era. Contemporary students, particularly Generation Z, increasingly demonstrate pragmatic, technology-oriented, and employability-centered educational behavior. Educational decision-making is no longer dominated solely by institutional prestige or conventional academic reputation, but increasingly influenced by digital relevance, career sustainability, technological adaptability, and future labor market opportunities.

This finding is consistent with (Abbas et al., 2024), who reported that generative artificial intelligence technologies increasingly influence university students' learning behavior, information-seeking patterns, academic engagement, and educational decision-making processes.

Generation Z students were raised within highly connected digital environments characterized by internet expansion, social media ecosystems, digital entrepreneurship, and rapid technological innovation. Consequently, this generation demonstrates stronger orientation toward flexibility, innovation, digital competence, and entrepreneurial opportunity compared to previous generations. Study programs associated with artificial intelligence, data science, software engineering, cybersecurity, digital business, and financial technology are increasingly perceived as more relevant to future economic transformation.

This condition reflects the transition from degree-oriented education toward competency-oriented education systems. Educational value is increasingly measured through

practical digital competencies, industrial adaptability, and innovation capability rather than purely theoretical academic knowledge. Consequently, higher education institutions are increasingly expected to provide experiential learning systems, interdisciplinary collaboration, hybrid educational ecosystems, and industry-connected curricula capable of supporting future employability.

Artificial intelligence disruption has also substantially transformed perceptions regarding conventional business professions. Automation technologies increasingly replace repetitive managerial, financial, and administrative activities traditionally associated with Accounting and Management graduates. Consequently, prospective students increasingly question the long-term sustainability of conventional economics and business careers within highly automated economic systems.

Furthermore, the rapid growth of digital entrepreneurship and startup ecosystems has significantly reshaped career aspirations among younger generations. Many students increasingly prefer entrepreneurial and technology-driven career pathways rather than conventional corporate employment structures. This transformation contributes substantially to declining interest in traditional economics and business education programs unable to rapidly integrate digital transformation into academic systems and curriculum structures.

Implications for Higher Education Sustainability

The structural decline identified in this study has substantial implications for higher education sustainability, particularly for private higher education institutions dependent on tuition-based financial systems. Persistent enrollment decline potentially creates multi-dimensional institutional challenges involving financial sustainability, academic quality, faculty retention, organizational competitiveness, and long-term institutional legitimacy.

Table 3. Forecasting Projection of Student Enrollment (2026–2030)

Academic Year	Accounting Program	Management Program
2026	58	54
2027	55	49
2028	52	44
2029	49	39
2030	45	34

Source: Processed by EViews 12 (2026)

Forecasting Discussion

The forecasting analysis demonstrates that student enrollment within the Accounting and Management study programs is projected to continue declining during the 2026–2030 period if substantial institutional transformation is not strategically implemented. The projected downward trajectory reflects persistent structural challenges faced by conventional economics and business higher education within the artificial intelligence and digital economic era.

The Accounting study program is forecasted to experience gradual enrollment contraction over the next five years, indicating decreasing student interest in traditional accounting education models that are increasingly perceived as vulnerable to automation, artificial intelligence integration, and digital financial systems. Similarly, the Management study program demonstrates a stronger decline pattern, suggesting that students increasingly prioritize adaptive, technology-oriented, and employability-driven educational pathways aligned with digital industrial transformation.

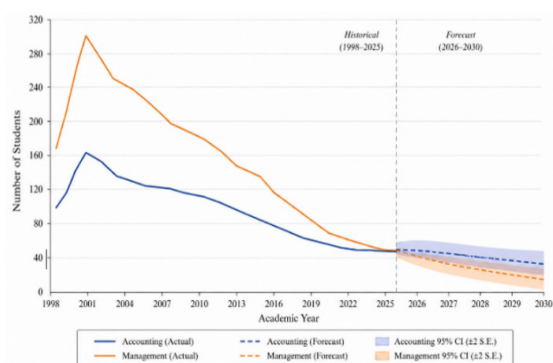
Although forecasting results should be interpreted cautiously, the consistency between historical trends, regression coefficients, forecasting tables, and projected trajectories strengthens the credibility of the forecast estimates. This consistency suggests that the projected decline is not an arbitrary statistical outcome but a logical continuation of long-term enrollment patterns observed throughout the study period.

These forecasting findings further con-

firm that declining enrollment is not merely temporary or cyclical, but rather represents a long-term structural phenomenon influenced by technological disruption, labor market transformation, digital economic expansion, and changing educational preferences among younger generations. The continuing decline trend may substantially affect institutional sustainability, financial stability, curriculum relevance, and long-term competitiveness of conventional economics and business faculties.

From a strategic perspective, higher education institutions are increasingly required to redesign academic curricula, strengthen interdisciplinary competencies, integrate artificial intelligence literacy, expand digital entrepreneurship education, and develop adaptive learning ecosystems responsive to rapidly evolving industrial demands. Without substantial transformation, conventional study programs may experience further enrollment deterioration and declining institutional attractiveness in future years.

The forecasting results therefore provide important empirical evidence that higher education sustainability within the economics and business sector increasingly depends on institutional adaptability, technological integration, curriculum modernization, and the capacity to respond proactively to artificial intelligence-driven socioeconomic transformation.

**Figure 5.** Forecasting Projection and Confidence Interval of Student Enrollment in Accounting and Management Programs (2026–2030)

Source: Forecasting Analysis Using EViews 12 (2026)

The forecasting projection demonstrates that student enrollment within both study programs is expected to continue declining if substantial institutional transformation is not implemented strategically. The projection indicates increasing sustainability risks for conventional economics and business higher education programs within the artificial intelligence era.

The findings also indicate the urgent necessity of curriculum transformation within economics and business higher education. Conventional curricula emphasizing traditional managerial and administrative competencies may no longer adequately reflect labor market demands within the artificial intelligence era. Therefore, universities must redesign academic systems by integrating artificial intelligence, business analytics, financial technology, digital entrepreneurship, machine learning applications, and innovation-oriented competencies into educational structures.

Institutional adaptation also becomes increasingly important within highly disruptive educational environments. Higher education institutions must strengthen strategic flexibility, technological responsiveness, and innovation capability to maintain institutional competitiveness. Institutional collaboration with industries, startup ecosystems, and digital economic sectors becomes essential for ensuring graduate relevance within evolving labor market structures.

Ultimately, this study demonstrates that higher education sustainability within the digital economy era will no longer depend primarily on historical legitimacy or institutional size, but increasingly on institutional adaptability, technological integration capability, curriculum responsiveness, and strategic innovation capacity in responding to artificial intelligence disruption and changing educational preferences among future generations.

These findings imply that higher education policymakers and institutional leaders must reconsider the sustainability of conventional economics and business education models within rapidly evolving artificial intel-

ligence ecosystems. Strategic curriculum redesign, digital transformation investment, and interdisciplinary educational innovation may become essential determinants of long-term institutional survival

CONCLUSION

This study demonstrates that the rapid expansion of artificial intelligence, digital transformation, and technology-driven economic systems has substantially reshaped the sustainability landscape of economics and business higher education in Indonesia. Through longitudinal analysis of the Accounting and Management study programs at STIE Mulia Pratama during the 1998–2025 period, the findings confirm the existence of persistent structural enrollment decline rather than temporary institutional fluctuation. Both study programs experienced three major phases consisting of growth, fluctuation, and long-term contraction, with the most severe decline occurring after 2014 and accelerating significantly after 2019.

The regression analysis confirms statistically significant negative enrollment trends within both programs. The Accounting program experienced an estimated annual decline of approximately 3.356 students, while the Management program demonstrated a steeper decline of approximately 5.057 students per year. These findings indicate that conventional economics and business education increasingly faces structural vulnerability associated with technological disruption, automation systems, employability shifts, digital industrial transformation, and changing educational preferences among younger generations. The forecasting analysis further demonstrates that enrollment contraction is projected to continue during the 2026–2030 period if substantial institutional transformation is not strategically implemented.

This study also confirms that educational decision-making among Generation Z students is increasingly influenced by technological relevance, digital adaptability,

interdisciplinary competence, entrepreneurial orientation, and long-term labor market sustainability. Consequently, conventional study programs emphasizing traditional managerial and administrative competencies are becoming less attractive compared to technology-oriented educational pathways associated with artificial intelligence, cybersecurity, data science, financial technology, and digital entrepreneurship. These findings reinforce the argument that higher education sustainability within the artificial intelligence era no longer depends primarily on historical legitimacy or institutional reputation, but increasingly on institutional adaptability, curriculum responsiveness, technological integration capability, and innovation-oriented educational transformation.

Theoretically, this study contributes to the higher education literature by positioning declining enrollment as a manifestation of broader structural transformation within the digital economy era rather than merely a short-term institutional problem. The integration of longitudinal institutional evidence, regression analysis, forecasting projection, and artificial intelligence disruption perspectives provides a broader analytical framework for understanding sustainability challenges in contemporary higher education systems. Empirically, this research provides rare longitudinal evidence from Indonesia concerning how technological disruption systematically reshapes enrollment dynamics within conventional economics and business higher education.

Practically, the findings imply that higher education institutions must immediately redesign academic systems through curriculum modernization, interdisciplinary learning integration, artificial intelligence literacy development, digital entrepreneurship strengthening, and industry-oriented competency transformation. Institutional collaboration with digital industries, startup ecosystems, financial technology sectors, and innovation-driven labor markets becomes increasingly essential for maintaining graduate relevance and institutional competitiveness. Without sub-

stantial transformation, conventional economics and business study programs may experience accelerating institutional vulnerability and declining long-term sustainability within increasingly disruptive artificial intelligence ecosystems.

Finally, this study is limited to a single institutional case and primarily focuses on longitudinal enrollment trends within two study programs. Future studies are encouraged to expand comparative multi-institutional analysis, incorporate broader socioeconomic variables, and explore student perception dynamics regarding artificial intelligence and digital labor market transformation in order to strengthen the generalizability and analytical depth of higher education sustainability research within the digital economy era.

Future studies are encouraged to expand comparative multi-institutional analysis particularly within emerging artificial intelligence-driven educational ecosystems in developing countries.

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