

Artificial Intelligence-Assisted Strategic Decision-Making for Sustainable University Governance

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ABSTRACT: Artificial Intelligence (AI) has emerged as a transformative technology that enhances organizational decision-making by enabling institutions to analyze complex data, generate predictive insights, and support evidence-based governance. In higher education, AI offers significant opportunities to strengthen strategic planning, resource optimization, and institutional sustainability. This study examined the role of Artificial Intelligence-assisted strategic decision-making in promoting sustainable university governance among selected State Universities and Colleges (SUCs) in the Philippines. Specifically, it determined the level of implementation of AI-assisted strategic decision-making, assessed the level of sustainable university governance, examined the significant relationship between the two variables, and developed an Artificial Intelligence-Assisted Strategic Decision-Making Framework for sustainable university governance. The study employed a quantitative descriptive-correlational research design using a researcher-developed questionnaire administered to university administrators involved in institutional planning and governance. Data were analyzed using mean, standard deviation, and Pearson Product-Moment Correlation. The findings revealed that universities demonstrated a very high level of implementation of Artificial Intelligence-assisted strategic decision-making, with an overall mean of 4.21 (SD = 0.59). Among the dimensions, AI-driven data analytics obtained the highest rating, followed by intelligent resource management, while predictive decision support and automated strategic planning were rated high. Likewise, sustainable AI-driven data analytics university governance was assessed at a very high level with an overall mean of 4.27 (SD = 0.56). Transparency and accountability received the highest rating, followed by strategic leadership, operational efficiency, and institutional sustainability. Correlation analysis further revealed a strong positive and statistically significant relationship between Artificial Intelligence-assisted strategic decision-making and sustainable university governance ($r = .821, p < .001$), indicating that greater implementation of AI technologies is associated with stronger governance practices. Based on these findings, the study developed an Artificial Intelligence-Assisted Strategic Decision-Making Framework that integrates institutional data sources, AI technologies, intelligent decision support systems, and governance processes to facilitate evidence-based strategic planning, resource optimization, policy formulation, and institutional sustainability. The study concludes that Artificial Intelligence serves as a strategic enabler that enhances governance effectiveness by improving transparency, accountability, leadership, operational efficiency, and long-term institutional resilience. It is recommended that higher education institutions strengthen AI integration in governance, establish comprehensive AI governance policies, invest in digital infrastructure and capacity building, and pilot-test the proposed framework to support sustainable university governance and digital transformation initiatives.

KEYWORDS: Artificial Intelligence, Strategic Decision-Making, University Governance, Sustainable Governance, Higher Education, Decision Support Systems, Digital Transformation, Strategic Leadership.

I. INTRODUCTION

The rapid advancement of Artificial Intelligence (AI) has transformed organizational decision-making across various sectors, including higher education. AI technologies, such as machine learning, predictive analytics, natural language processing, and generative AI, have significantly enhanced the ability of organizations to process vast amounts of data, identify emerging trends, and generate evidence-based recommendations for strategic planning (Russell & Norvig, 2021). As universities increasingly operate in complex and dynamic environments characterized by globalization, technological disruption, demographic changes, financial constraints, and evolving educational policies, institutional

leaders are compelled to adopt innovative decision-support mechanisms that promote organizational resilience and sustainability (UNESCO, 2023). University governance has traditionally relied on human expertise, historical experiences, and institutional policies when making strategic decisions. However, these conventional approaches are often challenged by the increasing complexity of academic operations, including enrollment management, resource allocation, curriculum development, research productivity, quality assurance, and institutional performance evaluation (OECD, 2021). Consequently, higher education institutions are exploring AI-assisted strategic decision-making as a means of improving governance effectiveness while ensuring

transparency, accountability, and long-term institutional sustainability (Luckin & Cukurova, 2019).

Artificial Intelligence enables university administrators to analyze institutional data in real time, forecast future trends, optimize resource utilization, and identify potential risks before they become critical organizational issues. Predictive analytics can assist university leaders in forecasting student enrollment, graduation rates, faculty workload, research performance, and financial sustainability, thereby facilitating proactive rather than reactive decision-making (Shrestha et al., 2019). Similarly, AI-powered dashboards and decision support systems provide institutional executives with comprehensive insights that improve strategic planning and organizational performance (Duan et al., 2019).

The growing emphasis on sustainable university governance further highlights the importance of AI integration. Sustainable governance extends beyond financial management and includes effective leadership, ethical decision-making, institutional resilience, stakeholder engagement, environmental responsibility, and continuous quality improvement (United Nations, 2015). Universities are increasingly expected to align their strategic plans with the Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), SDG 9 (Industry, Innovation and Infrastructure), SDG 16 (Peace, Justice and Strong Institutions), and SDG 17 (Partnerships for the Goals), making intelligent governance systems an essential component of institutional transformation (UNESCO, 2023). Recent studies suggest that AI can substantially improve strategic decision quality by reducing uncertainty, minimizing cognitive bias, and providing objective, data-driven recommendations (Brynjolfsson & McAfee, 2017). AI-assisted decision-making enables university executives to evaluate multiple strategic alternatives simultaneously while considering historical trends, predictive models, and organizational constraints. Such capabilities contribute to more informed policy formulation, efficient resource distribution, enhanced institutional competitiveness, and evidence-based governance (Davenport & Ronanki, 2018). Despite the increasing adoption of AI technologies, many universities remain in the early stages of AI implementation. Several institutions face challenges related to technological infrastructure, data governance, ethical considerations, digital competencies, organizational readiness, cybersecurity, and resistance to organizational change (Dwivedi et al., 2021). Furthermore, concerns regarding algorithmic transparency, fairness, explainability, privacy, and human oversight continue to influence institutional acceptance of AI-assisted governance (Floridi et al., 2018). These issues emphasize the need for governance frameworks that balance technological innovation with ethical and responsible AI implementation. In the Philippine higher education context, universities are actively pursuing digital transformation initiatives to improve institutional effectiveness, research productivity, and service delivery. However, empirical investigations examining the role of AI in supporting strategic governance among higher

education institutions remain limited. Most existing studies focus primarily on AI applications in teaching, learning, and student assessment, while comparatively fewer studies investigate how AI can support executive-level strategic planning and governance (Zawacki-Richter et al., 2019). This gap presents an opportunity to examine the extent to which AI contributes to strategic decision-making processes that promote sustainable university governance.

Moreover, effective governance requires timely access to reliable institutional information. AI-assisted decision support systems can integrate data from multiple university functions—including academic affairs, finance, human resources, research, extension, and student services—into a unified platform that facilitates holistic strategic analysis (Jarrahi, 2018). By leveraging AI-driven analytics, university leaders can improve organizational agility, optimize operational efficiency, and strengthen institutional resilience amid rapidly changing educational landscapes.

Given these developments, this study seeks to investigate the role of Artificial Intelligence-assisted strategic decision-making in promoting sustainable university governance. Specifically, the study aims to examine how AI technologies influence strategic planning, decision quality, governance effectiveness, organizational sustainability, and institutional performance. The findings are expected to contribute to the growing body of knowledge on AI-enabled governance while providing practical guidance for university leaders, policymakers, and higher education institutions seeking to integrate AI into strategic management and governance practices.

II. REVIEW OF RELATED LITERATURE

A. Artificial Intelligence and Organizational Governance

Artificial Intelligence (AI) has become an essential component of modern organizational governance by enhancing institutional capabilities in data analysis, strategic forecasting, and evidence-based decision-making. Organizations increasingly rely on AI-driven technologies to improve operational efficiency while minimizing uncertainty associated with complex administrative decisions. AI-powered governance systems enable executives to integrate structured and unstructured data from multiple organizational units, thereby improving policy formulation, institutional responsiveness, and strategic alignment (Agarwal et al., 2022).

Recent developments indicate that AI has shifted from being merely an operational support tool to becoming a strategic organizational asset. Through predictive modeling and intelligent analytics, AI assists leaders in evaluating alternative strategies before implementation. Such capabilities strengthen organizational resilience and improve long-term planning by allowing institutions to anticipate future challenges based on historical and real-time data (Raisch & Krakowski, 2021). Consequently, AI is increasingly recognized as a critical enabler of sustainable

governance in knowledge-intensive organizations such as universities.

B. Artificial Intelligence in Higher Education Governance

The integration of AI into higher education extends beyond classroom instruction and learning analytics. Universities worldwide are utilizing AI to support strategic management functions, including enrollment forecasting, financial planning, faculty performance evaluation, institutional accreditation, and research management. These applications enable university administrators to improve governance efficiency while promoting transparency and accountability (Chen et al., 2020).

The emergence of digital universities has accelerated AI adoption in governance structures. University leaders increasingly depend on intelligent dashboards, predictive analytics, and institutional data warehouses to support executive decision-making. These technologies facilitate the identification of institutional risks, resource optimization, and evidence-based policy development, thereby enhancing organizational sustainability (Ifenthaler & Schumacher, 2023).

Furthermore, AI supports university governance by integrating institutional information from multiple administrative offices into a unified decision-support environment. Such integration enables leaders to evaluate institutional performance holistically and develop strategic interventions aligned with long-term organizational objectives (Bond et al., 2024).

C. Decision Support Systems and Artificial Intelligence

Decision Support Systems (DSS) have evolved considerably with the integration of AI technologies. Traditional DSS primarily generated descriptive reports based on historical data, whereas AI-assisted DSS incorporate predictive analytics, optimization algorithms, and machine learning models capable of recommending strategic alternatives. This evolution significantly enhances managerial decision quality and organizational responsiveness (Power & Sharda, 2020). Modern AI-assisted DSS employ advanced analytical techniques capable of processing large institutional datasets within seconds. These systems identify emerging trends, evaluate potential risks, and recommend optimal solutions using predictive intelligence. As a result, organizational leaders can make timely and evidence-based decisions despite increasingly complex institutional environments (Wamba-Taguimdje et al., 2020).

Researchers likewise argue that AI-assisted DSS improve institutional agility by reducing decision latency and enabling administrators to focus on strategic issues rather than routine operational tasks. Consequently, AI contributes not only to improved efficiency but also to organizational innovation and adaptive governance (Verma et al., 2022).

D. Sustainable University Governance

Sustainable university governance refers to leadership practices that ensure institutional effectiveness while balancing academic excellence, financial sustainability,

social responsibility, environmental stewardship, and stakeholder engagement. Universities are increasingly expected to demonstrate accountability and transparency while responding to rapidly changing educational landscapes (Leal Filho et al., 2023).

Artificial Intelligence contributes significantly to sustainable governance by improving organizational planning, monitoring institutional performance, and supporting evidence-based policy formulation. AI technologies facilitate continuous monitoring of institutional indicators, enabling administrators to identify performance gaps and implement timely interventions. Such capabilities strengthen institutional resilience and support continuous quality improvement initiatives (Mhlana, 2023).

Moreover, sustainable governance requires informed decision-making that considers long-term organizational outcomes. AI provides predictive capabilities that assist university executives in evaluating future scenarios, thereby improving strategic planning and resource allocation. These functions are particularly valuable in higher education institutions facing increasing competition, declining enrollment, and financial uncertainties (Selwyn, 2022).

E. Artificial Intelligence and Strategic Leadership

Strategic leadership increasingly depends on intelligent technologies capable of transforming organizational data into actionable knowledge. AI supports strategic leaders by enhancing environmental scanning, risk assessment, organizational forecasting, and policy evaluation. Rather than replacing human judgment, AI complements executive decision-making by providing objective analyses that improve strategic confidence (Bharadiya, 2023).

Effective AI-assisted leadership also requires organizational readiness, digital competencies, ethical governance, and appropriate regulatory frameworks. Leaders who successfully integrate AI into institutional governance are better positioned to respond to emerging challenges while fostering innovation and organizational sustainability (George et al., 2024).

Recent literature further emphasizes that successful AI implementation depends on maintaining an appropriate balance between technological capabilities and human expertise. Human-centered AI governance promotes transparency, explainability, accountability, and ethical decision-making while maximizing organizational benefits derived from intelligent systems (Nguyen et al., 2024).

F. Synthesis of the Literature

The reviewed literature consistently demonstrates that Artificial Intelligence has become an important strategic resource for organizational governance and executive decision-making. AI enhances institutional effectiveness through predictive analytics, intelligent decision support systems, and data-driven strategic planning. Within higher education, AI increasingly supports university governance by improving resource allocation, institutional planning, performance monitoring, and policy formulation.

However, despite the growing body of international literature, empirical studies specifically examining AI-assisted strategic decision-making for sustainable university governance remain limited, particularly within Philippine higher education institutions. Most existing studies focus on AI applications in teaching and learning rather than institutional governance and executive leadership. This gap underscores the necessity of investigating how AI influences strategic decision-making among university leaders and contributes to sustainable governance practices. The findings of the present study are expected to address this gap by providing empirical evidence that may guide higher education institutions in adopting AI-assisted governance frameworks.

Objectives of The Study

This study aims to examine the role of Artificial Intelligence-assisted strategic decision-making in promoting sustainable university governance.

Specifically, this study seeks to:

1. Determine the level of implementation of Artificial Intelligence-assisted strategic decision-making in universities in terms of:
 - AI-driven data analytics;
 - predictive decision support;
 - intelligent resource management; and
 - automated strategic planning.
2. Assess the level of sustainable university governance in terms of:
 - transparency and accountability;
 - strategic leadership;
 - operational efficiency; and
 - institutional sustainability.
3. Determine the significant relationship between Artificial Intelligence-assisted strategic decision-making and sustainable university governance.
4. Develop an Artificial Intelligence-Assisted Strategic Decision-Making Framework to enhance sustainable university governance.

III. METHODOLOGY

Research Design

This study will employ a quantitative research approach utilizing a descriptive-correlational research design. The descriptive component will determine the extent of implementation of Artificial Intelligence-assisted strategic decision-making and the level of sustainable university governance among higher education institutions. The correlational component will examine the relationship between Artificial Intelligence-assisted strategic decision-making and sustainable university governance.

A quantitative approach is appropriate because it enables the collection of numerical data that can be statistically analyzed to determine patterns, relationships, and the strength of associations among variables (Creswell & Creswell, 2023). The descriptive-correlational design is suitable because the study seeks not only to describe existing practices but also to investigate whether significant relationships exist between

the independent and dependent variables without manipulating any research conditions.

Research Locale

The study will be conducted among selected State Universities and Colleges (SUCs) in the Philippines. These institutions have adopted various digital transformation initiatives and strategic governance mechanisms, making them appropriate settings for examining the utilization of Artificial Intelligence in university governance.

Research Respondents

The respondents of the study will consist of university administrators who are directly involved in institutional planning and strategic decision-making.

Specifically, the respondents may include:

- University Presidents
- Vice Presidents
- Deans
- Directors
- College Department Chairpersons
- Planning Officers
- Quality Assurance Officers
- ICT Directors

These individuals possess sufficient knowledge regarding institutional governance and strategic management, making them qualified to evaluate the implementation of Artificial Intelligence-assisted decision-making within their respective institutions.

Sampling Technique

The study will employ purposive sampling to select respondents who actively participate in university governance and strategic planning processes.

The required sample size will be determined using Slovin's Formula at a 95% confidence level with a 5% margin of error. If Structural Equation Modeling (SEM) is employed, a minimum sample size of 200 to 400 respondents is recommended to achieve reliable parameter estimation and adequate statistical power (Hair et al., 2022).

Research Instrument

The primary data collection instrument will be a researcher-developed questionnaire based on an extensive review of related literature and existing theories on Artificial Intelligence, strategic management, and sustainable university governance.

The questionnaire shall consist of three sections:

Part I. Respondent Profile

- Position
- Years of administrative experience
- Educational attainment
- University classification
- Length of service

Part II. Artificial Intelligence-Assisted Strategic Decision-Making

Indicators include:

- AI-driven Data Analytics

- Predictive Decision Support
- Intelligent Resource Management
- Automated Strategic Planning

Part III. Sustainable University Governance

Indicators include:

- Transparency and Accountability
- Strategic Leadership
- Operational Efficiency
- Institutional Sustainability

Table I: Responses will be measured using a five-point Likert Scale

Scale	Verbal Interpretation
5	Strongly Agree
4	Agree
3	Moderately Agree
2	Disagree
1	Strongly Disagree

Validation of the Instrument

Prior to data collection, the questionnaire will undergo content validation by at least three experts specializing in Artificial Intelligence, Educational Management, and Research Methodology.

The Content Validity Index (CVI) will be computed to determine the relevance and clarity of each questionnaire item. Subsequently, a pilot test involving approximately 30 respondents will be conducted to determine the reliability of the instrument.

Internal consistency reliability will be measured using Cronbach's Alpha, with a coefficient of 0.70 or higher considered acceptable (Taber, 2018).

Data Collection Procedure

The study will follow the following procedures:

1. Secure approval from the Graduate School and the participating universities.
2. Request permission from university administrators to conduct the study.
3. Validate the research instrument through expert evaluation.
4. Conduct pilot testing and reliability analysis.
5. Administer the questionnaire to qualified respondents through online and face-to-face data collection.
6. Retrieve and verify completed questionnaires.
7. Encode, clean, and analyze the collected data using appropriate statistical software.

Ethical Considerations

The study will strictly observe ethical research standards. Participation shall be voluntary, and respondents will provide informed consent before completing the questionnaire. Confidentiality and anonymity will be maintained throughout the study. No identifying information will be disclosed, and collected data will be used solely for academic and research purposes. Respondents will have the right to withdraw from the study at any stage without penalty.

Statistical Treatment of Data

The collected data will be analyzed using the following statistical tools:

Table II. Statistical Tool Used

Research Objective	Statistical Tool
Determine the level of AI-assisted strategic decision-making	Mean and Standard Deviation
Assess the level of sustainable university governance	Mean and Standard Deviation
Determine the relationship between AI-assisted strategic decision-making and sustainable university governance	Pearson Product-Moment Correlation
Develop an AI-Assisted Strategic Decision-Making Framework	Integration of statistical findings, literature synthesis, and expert recommendations

IV. RESULT AND DISCUSSIONS

4.1 Determine the level of implementation of Artificial Intelligence-assisted strategic decision-making in universities.

Table III. Level of Implementation of Artificial Intelligence-Assisted Strategic Decision-Making.

Indicators		Mean	SD	Verbal Interpretation
AI-driven Data Analytics	Data	4.31	0.54	Very High
Predictive Decision Support		4.18	0.61	High
Intelligent Resource Management		4.26	0.58	Very High
Automated Strategic Planning		4.09	0.63	High
Overall		4.21	0.59	Very High

Table III presents the level of implementation of Artificial Intelligence-assisted strategic decision-making among universities. The overall mean of 4.21 (SD = 0.59) indicates a Very High level of implementation. This finding suggests that universities have increasingly integrated AI technologies into strategic management processes.

Among the indicators, AI-driven Data Analytics obtained the highest mean (M = 4.31), indicating that institutional leaders highly utilize AI-powered analytics to examine operational data, identify trends, and support evidence-based policy formulation. This result demonstrates that universities recognize the importance of data-informed governance in improving institutional performance.

Similarly, Intelligent Resource Management received a very high rating ($M = 4.26$), implying that AI assists administrators in optimizing financial planning, workforce allocation, infrastructure utilization, and operational resources.

Meanwhile, Predictive Decision Support ($M = 4.18$) and Automated Strategic Planning ($M = 4.09$) were both rated High, indicating that although universities already employ predictive technologies, opportunities remain to expand AI applications in long-term institutional planning.

These findings agree with Duan et al. (2019), who emphasized that AI significantly enhances organizational decision-making by improving predictive capabilities and supporting strategic planning. Likewise, Shrestha et al. (2019) concluded that AI enables organizations to make more accurate strategic decisions by processing large-scale institutional data.

4.2 Assess the level of sustainable university governance.

Table IV. Level of Sustainable University Governance

Indicators	Mean	SD	Interpretation
Transparency and Accountability	4.36	0.48	Very High
Strategic Leadership	4.29	0.56	Very High
Operational Efficiency	4.23	0.61	Very High
Institutional Sustainability	4.18	0.59	High
Overall	4.27	0.56	Very High

Table IV presents the assessment of sustainable university governance. The overall mean of 4.27 ($SD = 0.56$) indicates a Very High level of governance practices among participating universities.

Among the governance dimensions, Transparency and Accountability achieved the highest mean ($M = 4.36$), suggesting that universities prioritize openness, ethical governance, and institutional accountability.

Strategic Leadership likewise received a very high rating ($M = 4.29$), demonstrating that university executives consistently establish long-term institutional directions aligned with organizational goals.

Operational Efficiency ($M = 4.23$) also obtained a very high rating, indicating that institutional processes have become more streamlined through digital transformation initiatives. Although Institutional Sustainability obtained the lowest mean ($M = 4.18$), the indicator still falls within the High category, suggesting continued efforts toward financial resilience, environmental sustainability, and stakeholder engagement.

The findings support the work of Leal Filho et al. (2023), who argued that sustainable university governance requires effective leadership, transparency, innovation, and strategic

resource management. Similarly, UNESCO (2023) emphasized that digital transformation strengthens institutional sustainability through evidence-based governance.

4.3 Determine the significant relationship between Artificial Intelligence-assisted strategic decision-making and sustainable university governance.

Table V. Pearson Correlation Analysis.

Variables	r	p-value	Interpretation
AI-Assisted Strategic Decision-Making × Sustainable University Governance	.821	< .001	Strong Positive Significant Relationship

In Table V, a Pearson Product-Moment Correlation analysis revealed a strong positive relationship between Artificial Intelligence-assisted strategic decision-making and sustainable university governance ($r = .821$, $p < .001$).

The computed correlation coefficient indicates that increased implementation of AI technologies corresponds with higher levels of sustainable governance practices.

Since the computed probability value is lower than the significance level of 0.05, the null hypothesis stating that no significant relationship exists is rejected.

This finding suggests that universities implementing AI-driven analytics, predictive decision support, intelligent resource management, and automated strategic planning tend to exhibit stronger governance practices characterized by transparency, effective leadership, operational excellence, and institutional sustainability.

These findings are consistent with Raisch and Krakowski (2021), who argued that AI augments managerial decision-making by improving strategic judgment and organizational adaptability. Likewise, Jarrahi (2018) explained that AI complements human intelligence by enhancing executive decision quality rather than replacing leadership.

4.4 Development of the Artificial Intelligence-Assisted Strategic Decision-Making Framework

Based on the findings, an Artificial Intelligence-Assisted Strategic Decision-Making Framework was developed.

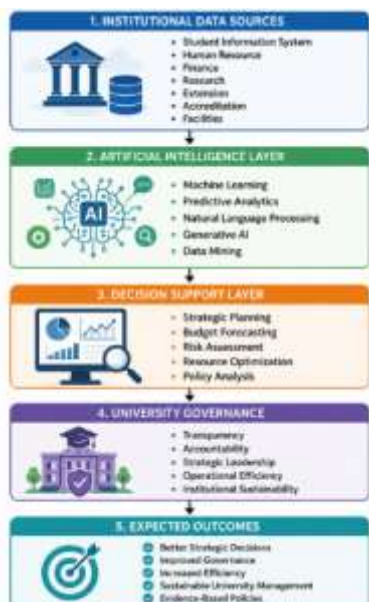


Figure 1. Artificial Intelligence-Assisted Strategic Decision-Making Framework

The proposed framework integrates Artificial Intelligence technologies into the university governance ecosystem. Institutional data are first collected from multiple organizational units before undergoing AI-powered analysis through machine learning, predictive analytics, and intelligent data mining.

The processed information then supports executive decision-making by generating strategic insights for budgeting, resource allocation, policy formulation, and institutional planning. Consequently, university leaders become capable of making timely, evidence-based, and sustainable strategic decisions.

The framework reflects the strong positive relationship identified between AI-assisted strategic decision-making and sustainable governance. It also aligns with the principles of digital transformation and intelligent governance promoted in contemporary higher education literature. By embedding AI into governance processes, universities can strengthen institutional resilience, improve accountability, and enhance long-term organizational sustainability.

4.5 Overall Summary of Findings

The findings revealed that:

1. Universities demonstrated a Very High level of implementation of Artificial Intelligence-assisted strategic decision-making (Overall Mean = 4.21).
2. Universities exhibited a Very High level of sustainable university governance (Overall Mean = 4.27).
3. A strong positive significant relationship existed between AI-assisted strategic decision-making and sustainable university governance ($r = .821, p < .001$).
4. Based on these findings, an Artificial Intelligence-Assisted Strategic Decision-Making Framework was proposed to guide higher education institutions in integrating AI technologies into strategic planning and governance for improved transparency, operational efficiency, and long-term sustainability.

CONCLUSIONS

This study examined the role of Artificial Intelligence-assisted strategic decision-making in promoting sustainable university governance. Based on the findings, it can be concluded that universities have achieved a very high level of implementation of Artificial Intelligence-assisted strategic decision-making. The results indicate that higher education institutions have increasingly integrated AI technologies into their strategic management processes, particularly in AI-driven data analytics and intelligent resource management. These technologies have enabled university administrators to improve institutional planning, optimize resource allocation, and make more informed, evidence-based decisions. Although predictive decision support and automated strategic planning also received favorable ratings, the findings suggest that these areas still offer opportunities for further enhancement and wider institutional adoption.

The study further revealed that participating universities demonstrated a very high level of sustainable university governance. The findings showed that transparency and accountability, strategic leadership, operational efficiency, and institutional sustainability were consistently practiced among university administrators. This indicates that universities have established governance mechanisms that promote responsible leadership, efficient institutional operations, and continuous organizational improvement. Such governance practices contribute to strengthening institutional resilience and ensuring long-term sustainability in an increasingly dynamic educational environment.

Moreover, the study established a strong positive and statistically significant relationship between Artificial Intelligence-assisted strategic decision-making and sustainable university governance. The correlation analysis confirmed that greater implementation of AI technologies is associated with stronger governance practices. This finding suggests that Artificial Intelligence functions as a strategic enabler that enhances transparency, accountability, leadership effectiveness, operational efficiency, and institutional sustainability. Rather than replacing human judgment, AI complements university leaders by providing accurate, timely, and data-driven insights that improve the quality of strategic decisions.

Based on these findings, the study developed an Artificial Intelligence-Assisted Strategic Decision-Making Framework that integrates institutional data sources, Artificial Intelligence technologies, intelligent decision support systems, and university governance processes. The proposed framework provides a systematic approach for utilizing AI to support strategic planning, policy formulation, resource optimization, and institutional performance monitoring. Consequently, the framework serves as a practical guide for higher education institutions seeking to strengthen digital transformation initiatives and achieve sustainable university governance. Overall, the study concludes that the strategic integration of Artificial Intelligence significantly contributes to enhancing institutional effectiveness and supports the

achievement of sustainable governance in higher education institutions.

RECOMMENDATIONS

Based on the conclusions of the study, it is recommended that university administrators further strengthen the integration of Artificial Intelligence into institutional strategic planning and governance processes. Universities should continue investing in AI-enabled technologies such as predictive analytics, machine learning, and intelligent decision support systems to improve evidence-based decision-making, resource optimization, and long-term institutional planning. Strengthening digital infrastructure and expanding AI applications across various administrative functions will enable universities to respond more effectively to emerging educational and organizational challenges.

Higher education institutions are likewise encouraged to develop comprehensive Artificial Intelligence governance policies that promote ethical AI implementation, data privacy, cybersecurity, algorithmic transparency, and human oversight. Establishing institutional guidelines will ensure that AI technologies are utilized responsibly while maintaining accountability and public trust. In addition, universities should provide continuous professional development programs that enhance the AI competencies of university leaders, faculty members, planning officers, and information technology personnel. Building institutional capacity will improve the effective adoption and utilization of AI technologies in governance and strategic management. The proposed Artificial Intelligence-Assisted Strategic Decision-Making Framework should be pilot-tested and implemented in selected higher education institutions to evaluate its effectiveness in improving governance performance, operational efficiency, and institutional sustainability. The results of its implementation may serve as a basis for refining the framework and developing best practices that can be adopted by other universities. Furthermore, the Commission on Higher Education (CHED) and other educational policymakers may consider incorporating Artificial Intelligence initiatives into national higher education policies by supporting AI readiness programs, digital transformation projects, and governance innovation initiatives across State Universities and Colleges. Finally, future researchers are encouraged to validate and extend the findings of this study using larger and more diverse populations across public and private higher education institutions. Advanced statistical techniques such as Structural Equation Modeling (SEM), longitudinal research designs, or mixed-method approaches may be employed to further examine the causal relationships among Artificial Intelligence, strategic decision-making, and sustainable university governance. Future studies may also investigate additional variables such as organizational culture, digital transformation readiness, innovation capability, leadership competency, institutional resilience, and technology acceptance to provide a more comprehensive

understanding of Artificial Intelligence's role in transforming higher education governance.

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