Analysis of the Implications of Top Management Support on Digital Transformation at UIN SMH Banten

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Abstract:- The success of digital transformation at UIN SMH Banten greatly depends on the support from top management. Top management support is a key factor that determines the success of digital transformation implementation. This support includes the provision of adequate resources, making strategic decisions, and fostering an organizational culture that supports innovation and change. One concrete step taken by top management is the implementation of office automation for staff and lecturers. This automation includes the use of task management software, digital filing systems, and online collaboration tools designed to enhance productivity and work efficiency. The method used is quantitative research with a correlational approach. The population of this study consists of 495 lecturers, staff, and students at UIN SMH Banten, with a sample of 83 respondents. The data was analyzed using Partial Least Squares-Structural Equation Model (PLS-SEM) with the SmartPLS 4.1.0.3 software. Top Management Commitment, Stakeholder Engagement, and Vision & Mission were found to affect Digital Transformation, and all of them influence Strategic Decision-Making. Strategic Decision-Making was also found to affect Digital Transformation and is able to mediate the effects of Top Management Commitment, Stakeholder Engagement, and Vision & Mission. To enhance Digital Transformation, Top Management Commitment, Stakeholder Engagement, Vision & Mission, and Strategic Decision-Making.

Keywords:- *Digital Transformation; Top Management Commitment; Stakeholder Engagement; Vision & Mission; Strategic Decision-Making.*

I. INTRODUCTION

In today's digital era, digital transformation has become essential for educational institutions to remain relevant and competitive. Higher education institutions, as pillars of education, research, and community service, must also adapt to advances in information technology. UIN Sultan Maulana Hasanuddin (SMH) Banten is one of the Islamic higher education institutions that has adopted digital-based applications. Digital transformation in higher education encompasses various aspects, from administration and learning to research, all aimed at enhancing the efficiency and quality of educational services.[1]

In digital transformation, several key elements are required, including the adoption of advanced digital technologies, the development of a clear digital strategy,[2] support from Top Management Commitment, Stakeholder Engagement, and Vision & Mission, as well as Strategic Decision-Making. Additionally, it is crucial to collect, analyze, and utilize data for better decision-making, and to protect data and systems from digital threats through cybersecurity. Tools and strategies to enhance collaboration and communication, both within and outside the organization, are also essential. Equally important are the development of digital skills for staff and lecturers, improving customer experience through technology, and, most importantly, Top Management Commitment.[3]

Top Management Commitment requires a clear and focused vision and mission, which includes thorough strategic planning and alignment of organizational goals with the initiatives undertaken. A vision is a statement of future aspirations, while a mission is a statement of what needs to be done.[4] This ensures that every member of the organization understands the direction to be achieved and the reasons behind the decisions made by top management. A clear vision and mission will help motivate employees, encourage active participation, and ensure that all efforts are aligned with the organization's long-term goals, while also enabling management to measure progress and address any obstacles that may arise during the implementation of these initiatives.

Vision and mission require Strategic Decision-Making to implement effective procedures, ensuring that the established goals can be successfully achieved. Strategic decision-making is the process of mapping out direction based on long-term objectives and vision, and a meticulous and planned approach plays a crucial role in determining the concrete steps that need to be taken, allocating resources, and adjusting policies and processes required to support the implementation of the organization's vision and mission.[5] By integrating in-depth analysis, risk evaluation, and long-term considerations, these strategic decisions ensure that all

operational activities and initiatives align with the determined direction, thereby enhancing the chances of achieving the desired outcomes.

In Strategic Decision-Making, support from Stakeholder Engagement is crucial for strengthening the organization's ability to achieve its goals,[6] as stakeholder involvement ensures that various relevant perspectives and interests are thoroughly considered. By involving stakeholders in the decision-making process, the organization can gain deeper insights, enhance support and commitment to the adopted strategy, and identify and address potential obstacles or challenges that may arise. This engagement helps create a better understanding of common goals and allows for more effective strategy adjustments, thereby increasing the likelihood of successful implementation and achieving the desired outcomes.

Top management support is a key factor determining the success of digital transformation implementation. This support can include the provision of adequate resources, making appropriate strategic decisions, and fostering an organizational culture that supports innovation and change.[7] Without strong support from top management, digital transformation initiatives are at risk of facing various obstacles, such as resistance to change, resource limitations, and lack of coordination among work units.

In the study Ko et al. (2022) that digital innovation is predominantly influenced by business factors and management commitment, with strategy playing a relatively minor role. Additionally, in the context of digital transformation, the involvement of the IT department and the services it offers appears to have limited significance. Similarly Zhang, Xu, and Ma (2023) The research identified that the strategy for digital transformation completely mediates the link between IT infrastructure and the overall digital transformation. Additionally, top management plays a crucial moderating role, significantly influencing both the connection between IT infrastructure and the digital transformation strategy and the relationship between the digital transformation strategy and its actual implementation. This research examines how top management moderates the connection between IT and organizational performance, and how the digital transformation strategy mediates the link between investments in IT infrastructure and the outcomes of digital transformation. These findings make a significant contribution to the understanding of IT business value, digital transformation, and strategic management, and help update managers' perceptions of IT value while providing theoretical guidance on how to achieve digital transformation performance from IT infrastructure investments. In the study [10] digital transformation is described as a change in business processes based on data analytics. Contrary to previous beliefs that external resources were the primary source of this data, it is actually the internal processes of the

company. In addition to technology, a key factor in the success of digital companies is human capital. Human capital acts as a primary source in shaping data-driven business models. Conventional IT models are no longer sufficient to meet the increasing digital demands in business. Big data analytics have moved beyond the IT department and are no longer the sole prerogative of the Chief Information Officer (CIO). The main objective of the Chief Digital Officer (CDO) is corporate restructuring, establishing a vision, and creating a comprehensive activity plan for transforming business processes, products, and services into digital formats. Digital technology and artificial intelligence are not solutions to all problems in the market and within specific companies. Digitalization is not a replacement for real business processes but rather an addition to them.

This study aims to analyze the implications of top management support on digital transformation within UIN SMH Banten. The primary focus of this research is to understand the extent to which support from top management influences the success of digital transformation implementation and to identify the factors that support and hinder this process. The findings are expected to provide strategic recommendations for UIN SMH Banten in its efforts to accelerate sustainable and highly competitive digital transformation

The results of these studies indicate that digital innovation is more influenced by business factors and management commitment than by the role of the IT department. Furthermore, digital transformation strategy acts as an intermediary between IT infrastructure and the process of digital transformation, while top management significantly moderates this relationship. These findings highlight the importance of a digital transformation strategy in maximizing the value of IT investments. Meanwhile, digital transformation is a change in business processes driven by internal data analytics and human resources, and conventional IT models are no longer sufficient. The Chief Digital Officer (CDO) plays a crucial role in corporate restructuring to support digital transformation, with digital technology and artificial intelligence serving as additions, not replacements, to existing business processes. Therefore, the objective of this research is to examine how Top Management Support affects Digital Transformation at UIN SMH Banten Campus, located in Serang City, Banten Province, with a total of 495 staff and lecturers. Based on the research gaps previously outlined, this study aims to identify, analyze, and provide solutions to the identified research challenges.

II. LITERATURE REVIEW

A. Digital Transformation

Digital transformation is a strategic initiative aimed at integrating digital technology across all areas of an organization.[11] This step involves evaluating and modernizing various critical aspects, such as processes, products, operations, and the organization's technology stack. Digital transformation also represents a change in business processes based on data analytics.[12] y thoroughly adopting digital technologies, organizations can enhance efficiency, productivity, and the quality of services provided. Additionally, digital transformation allows organizations to continuously and rapidly innovate, becoming more responsive to customer needs and desires.[13]. Moreover, digital transformation involves leveraging digital technologies to redesign traditional processes to be more efficient and effective.[14]

Digital transformation can encompass many technologies and will continue to evolve over time. This concept also leverages technology to improve these processes.[15]. Additionally, digital transformation is the use of technology to change existing business processes or create new businesses.[16]. Consequently, organizations can remain competitive in a rapidly evolving and changing market, and create significant added value for customers and other stakeholders.

B. Top Management Commitment

Top Management Commitment refers to the level of support, involvement, and dedication demonstrated by an organization's top leadership toward a specific initiative or project.[17] This commitment includes the allocation of necessary resources, providing strategic direction, making proactive decisions, and ensuring that all members of the organization understand and support the goals and vision to be achieved.[18] Top Management Commitment serves as evidence of the direct involvement of leaders from the highest levels of the company.[19] Commitment from top management is crucial for the success of the initiative, as it can encourage participation, address resistance to change, and ensure that the project proceeds according to plan.

C. Vision & Mission

ision & Mission are two fundamental elements in an organization's strategic planning that provide direction and purpose.[20] Vision is an aspirational statement that describes an ideal picture of the future the organization aims to achieve, offering inspiration and setting ambitious long-term goals.[21] Meanwhile, mission is a statement that explains the reason for the organization's existence and the main objectives it aims to achieve in the short to medium term, by identifying key targets, upheld values, and the methods used to achieve them.[22] Together, vision and mission provide clear strategic and operational guidance, ensuring that all actions and decisions within the organization align with long-term goals and current needs.

D. Stakeholder Engagement

Stakeholder Engagement is the active and ongoing process of involving various parties who have an interest in or are impacted by an organization, project, or initiative.[23] This process includes communication, consultation, and collaboration with stakeholders to understand their needs, expectations, and concerns, and to ensure that organizational decisions and actions consider and accommodate various perspectives.[24] The goal of Stakeholder Engagement is to build positive relationships, enhance transparency, and gain the support needed to achieve common objectives, as well as to identify and address potential risks or conflicts that could affect the success of a project or initiative.[25]

E. Strategic Decision-Making

Strategic Decision-Making is the process of making decisions that involves in-depth analysis and long-term planning to determine the strategic steps an organization will take.[26] It is the decision-making process used to address challenges and changes in the environment and is typically long-term in nature.[27] This process includes assessing various options, considering risks, and evaluating the potential impacts of the decisions made, with the goal of achieving the organization's vision, mission, and long-term objectives.[28] Strategic Decision-Making requires the integration of relevant information, market knowledge, and analytical skills to make decisions that will affect the overall direction and success of the organization.[29]

F. Hypothesis Development.

Figure 1 illustrates the theoretical foundations of this study, and the best way to understand these foundations is in conjunction with previous literature. As part of this investigation, a hypothesis has been developed. The first hypothesis suggests that Top Management Commitment has a positive effect on enhancing Digital Transformation at UIN SMH Banten Campus; the second hypothesis indicates that Stakeholder Engagement has a positive effect on Digital Transformation; and the third hypothesis proposes that Vision & Mission have a positive effect on Digital Transformation.
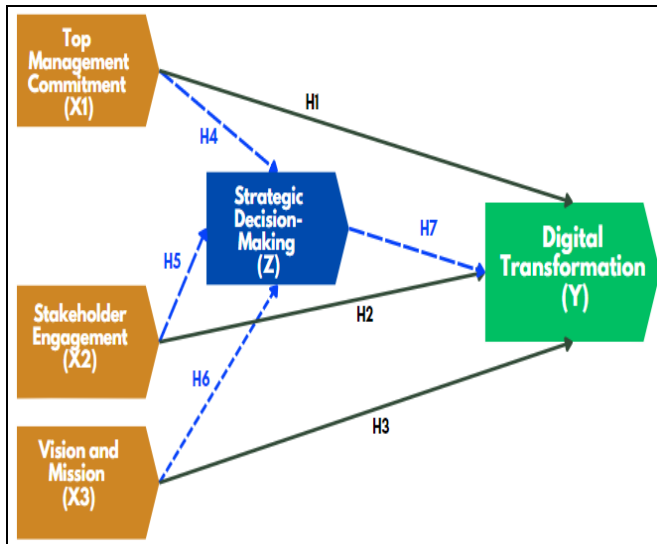
Fig 1: Conceptual Framework

- H1: Top Management Commitment positively and significantly affects Digital Transformation.
- H2: Stakeholder Engagement positively and significantly affects Digital Transformation.
- H3: Vision and Mission positively and significantly affect Digital Transformation.
- H4: Top Management Commitment positively and significantly mediates Strategic Decision-Making.
- H5: Stakeholder Engagement positively and significantly mediates Strategic Decision-Making.
- H6: Vision and Mission positively and significantly mediate Strategic Decision-Making.
- H7: Strategic Decision-Making positively and significantly affects Digital Transformation.

III. METHOD

A. Research Design

This research design is a quantitative study that examines data from a correlational perspective to understand the relationships between variables. For in-depth analysis, the study utilizes the Partial Least Squares-Structural Equation Modeling (PLS-SEM) tool available in SmartPLS version 4.1.0.3. By using this tool, the collected numerical data will be processed and analyzed in detail, allowing the researcher to identify patterns, relationships, and interactions that may not be visible with other analytical methods. During the analysis process, the researcher will focus on investigating various relevant factors for the study, including: Top Management Commitment (X^1), Stakeholder Engagement (X^2), Vision & Mission (X^3), Strategic Decision-Making (Z), and Digital Transformation (Y).

B. Population and Sample

In the scope of this study, the population at UIN SMH Banten includes a total of 495 faculty and staff, comprising 284 civil servant lecturers, 110 civil servant staff, 36 non-civil servant lecturers, and 65 non-civil servant staff. UIN SMH Banten is chosen as the research object due to its heterogeneity and disparities, which make it interesting to explore through this study. The sampling technique used is proportional random sampling, which determines the sample size based on the population size of each research area. To determine the sample size for the research,[30] developed a method using the following Slovin's formula:

$$n = \frac{N}{1 + Ne^2}$$

Fig 2: Slovin's Formula Calculator [27]

Based on the calculation using an online Slovin's calculator, the result is 83.19, which is rounded to 83 respondents from UIN SMH Banten Campus.

C. Operational Definition

Table 1: Operational Definition

No	Variable	Code	Indicators
1	Top Management Commitment (X1)	X11	Leadership and Support
2		X12	Involvement in Implementation
3		X13	Decision Making
4		X14	Recognition
5	Stakeholder Engagement (X2)	X21	Participation and Involvement
6		X22	Consultation and Collaboration
7		X23	Expectation Management
8		X24	Measurement and Evaluation
9	Vision and Mission (X3)	X31	Clarity
10		X32	Relevance
11		X33	Integration
12		X34	Flexibility
13	Strategic Decision-Making(Z):	Z1	Data Collection and Analysis
14		Z2	Alternative Strategies
15		Z3	Risk Evaluation and Risk Management
16		Z4	Implementation and Execution
17	Digital Transformation (Y)	Y1	Culture and Mindset
18		Y2	Product and Service Innovation
19		Y3	Human Resource Skills
20		Y4	Digital Ecosystem Development

D. Data Collection Techniques

The data used in this research comes from various sources, including a combination of primary and secondary sources. Primary sources include interviews and surveys, which provide direct information from respondents related to the research topic.[31] On the other hand, secondary sources include existing literature such as books, journals, and online databases specifically related to the studied area. The literature review process is an important part of data collection, involving reading and analyzing relevant literature, including scientific papers, lecture notes, agendas, and library archives.

Observation is a data collection method involving direct research and monitoring of the phenomena being studied.[32] This method allows researchers to obtain direct and contextual information about the subject or situation under study. On the other hand, questionnaires are a method that involves delivering a series of questions to a group of individuals and collecting their written responses.[33] Both strategies are alternately applied throughout the field research to gather comprehensive data. In this study, the questionnaires use a Likert scale, where respondents are asked to provide responses within a range from "strongly disagree" to "strongly agree" on a scale of 1-5. This approach enables researchers to quantitatively measure respondents' attitudes and opinions and gain deeper insights into the researched topic.

E. Data Analysis Techniques

Descriptive statistics, which is a branch of statistics, is used to provide a detailed overview of each variable studied in this research.[34] After the data collection process is complete, the data is organized into tables to facilitate analysis using descriptive measures. These descriptive measures include information such as absolute numbers, like total counts or frequencies, as well as percentages, which show the relative proportions of each category or group within the data. In this way, descriptive statistics allow researchers to present data systematically and clearly, making it easier to interpret relevant information in an understandable manner.

The SmartPLS version 4.1.0.3 program is used to perform inferential analysis by applying a variable-based structural equation modeling method. This method, known as Partial Least Squares-Structural Equation Model (PLS-SEM), allows researchers to test and model complex relationships between the variables involved in the study. Partial Least Squares (PLS) is an approach for analyzing structural equations that enables simultaneous testing of structural models and measurement data by utilizing variance in the data.[35] By using SmartPLS, researchers can evaluate structural models and identify patterns of relationships between variables more accurately. This program provides the necessary tools for in-depth analysis, including evaluating the strength and direction of relationships between variables and measuring direct and indirect effects in the model. Thus, SmartPLS 4.1.0.3 is a highly useful tool for assessing the

validity and reliability of complex research models, offering deep insights into the data and hypotheses being tested.[36]

In the Partial Least Squares method, researchers conduct an in-depth evaluation of the measurement procedures, known as the outer model, to ensure that the measurement tools used can provide valid and reliable information. Additionally, researchers analyze the structural model, or the inner model, to identify whether there are significant correlations between the measured constructs. This process involves testing the significance of parameters calculated after performing a goodness-of-fit analysis of the model.[37] Statistical hypotheses, which are statements formulated with specific symbols, play a crucial role in this evaluation. In writing, the null hypothesis (H_0) and the alternative hypothesis (H_a) can be presented in an equivalent and clear form.[38] If the analysis results indicate that the null hypothesis (H_0) cannot be accepted, then the alternative hypothesis (H_a) should also be considered not accepted. This process ensures that the analysis results can provide accurate and accountable conclusions regarding the relationships between variables in the model.

IV. RESULTS AND DISCUSSION

A. Outer Model Analysis

➤ *Validity Test*

To assess the validity of the questionnaire used in this study, the researchers applied convergent validity and Average Variance Extracted (AVE) methods. Convergent validity is a technique used to evaluate reflective indicator measurement models by calculating the correlation between item scores and component scores through the PLS approach.[39] In this context, if the correlation between individual reflective measurements and the measured construct exceeds 0.7, the level of validity is considered high. This indicates that the indicators have a strong relationship with the measured construct. However, as noted by Muzaffar (2016), at the early stages of scale development, loading values between 0.5 and 0.6 are considered adequate. This means that, at the initial phase, scales with loading values within this range can still be accepted as a reasonably good representation of the measured construct, before reaching a more mature development stage.

Table 2: Validity Test Results

No	Variable	Code	Outer Loading	EVE	Information
1	Top Management Commitment (X^1)	X11	0,781	0,699	Valid
		X12	0,853		Valid
		X14	0,871		Valid
2	Stakeholder Engagement (X^2)	X21	0,862	0,731	Valid
		X22	0,886		Valid
		X23	0,866		Valid
		X24	0,823		Valid
3	Vision and Mission (X^3)	X31	0,794	0,699	Valid
		X32	0,827		Valid
		X34	0,884		Valid
4	Strategic Decision-Making(Z):	Z1	0,875	0,704	Valid
		Z2	0,852		Valid
		Z3	0,814		Valid
		Z4	0,870		Valid
5	Digital Transformation (Y)	Y1	0,891	0,728	Valid
		Y3	0,837		Valid
		Y4	0,785		Valid

➤ *Reliability Test*

In this study, two methods were used to test measurement reliability: Cronbach's Alpha test and Composite Reliability test.[41] The Cronbach's Alpha test assesses the minimum reliability level of a variable, with values exceeding 0.7 considered to indicate adequate reliability.[42] In other words, this test provides an initial indication of the internal consistency of the measurement tool used. Meanwhile, the Composite Reliability test measures the actual reliability value of the research instrument. In this test, scores greater than 0.7 indicate that the instrument has a high level of reliability, showing that the obtained measurement results are consistent and trustworthy. By combining these two methods, this study ensures that the measurements conducted are not only theoretically adequate but also robust in practice.

Table 3: Reliability Test Results

	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)
X1	0.785	0.799	0.874
X2	0.882	0.885	0.919
X3	0.787	0.818	0.874
Y	0.789	0.801	0.877
Z	0.875	0.880	0.914

The results of the testing reveal that all instruments used in this study show a good level of reliability. This is evidenced by Cronbach's Alpha and Composite Reliability values, each exceeding 0.7. In other words, all measurement tools applied in this study have demonstrated adequate internal consistency and reliability, ensuring that the results obtained from using these instruments are consistent.

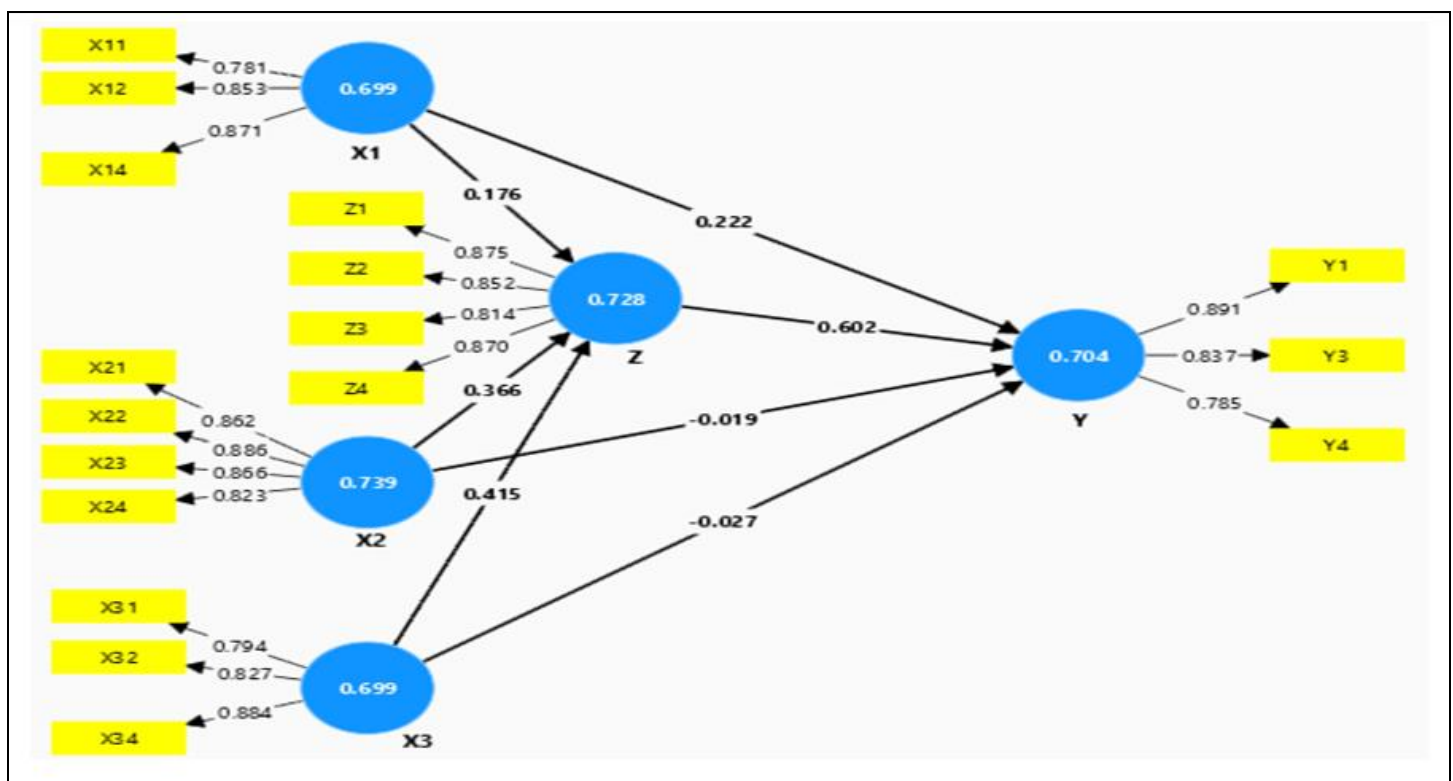*B. Convergent Validity Test after Modification*

Fig 3: Convergent Validity Test after Modification

After eliminating indicators that did not meet the loading factor criteria, the results of the PLS-SEM model calculations are shown in the following figure.[43] The figure reveals that all indicators for each variable now have loading factor values exceeding 0.6, indicating that the quality of measurement of these instruments is very good.[44] The achievement of high loading factor values for each indicator suggests that the measurements have met the required standards for convergent validity. Therefore, based on these results, the study can proceed to the next stage, which is conducting the Discriminant Validity test, to ensure that the instruments used can effectively differentiate between different constructs.

➤ *Uji R-Square*

In this study, the R-Square coefficient of determination test is applied to assess the extent to which exogenous variables influence endogenous variables.[45] To analyze the data, SmartPLS software is used, which enables accurate and detailed calculations. The results of this analysis, including the obtained R-Square values, are presented in the following table. The table provides an overview of how exogenous variables can explain the variation in endogenous variables, which is crucial for understanding the relationships among variables in this research model.

Table 4: R-Square Test Results

	R-square	R-square adjusted
Y	0.559	0.540
Z	0.747	0.739

The research findings reveal that the Strategic Decision-Making process is influenced by several key factors: Top Management Commitment, Stakeholder Engagement, and Vision & Mission. The combination of these three factors explains 55.9% of the variation in Strategic Decision-Making. This indicates that these factors play a significant role in shaping how strategic decisions are made within the organization. However, there remains 44.1% of variability influenced by other factors not covered in this study. The R-Square value for Strategic Decision-Making is 0.559, indicating that this model is fairly effective in explaining most of the related variability. Additionally, the study also shows that Digital Transformation is influenced by Top Management Commitment, Stakeholder Engagement, and Perceived Vision & Mission, which together explain 74.7% of the variation in Digital Transformation. Thus, these factors have a significant impact on the digital transformation process within the organization. Meanwhile, the remaining 25.3% of the variation in Digital Transformation is influenced by factors not addressed in this study. The R-Square value for Digital Transformation is 0.747, suggesting that this research model is quite strong in depicting the factors affecting the digital transformation process.

➤ *Uji R-Square*

The hypothesis testing evaluation includes an analysis of the t-statistic and probability values. At a 5% significance level, the t-value is compared with the critical t-value from the t-table.[46] If the t-statistic exceeds the critical t-value, the hypothesis will be rejected. Conversely, if the p-value is below 0.05, the hypothesis is considered accepted based on the existing probability.

Table 5: Hypothesis Test Results

	Original sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T statistics (O/STDEV)	P values
X1-> Y	0.329	0.332	0.155	2.113	0.035
X1-> Z	0.176	0.177	0.117	1.515	0.131
X2-> Y	0.202	0.205	0.166	1.218	0.223
X2-> Z	0.366	0.363	0.117	3.135	0.002
X3-> Y	0.223	0.222	0.120	1.854	0.064
X3->Z	0.415	0.421	0.065	6.371	0.000
Z-> Y	0.602	0.598	0.159	3.788	0.000

V. DISCUSSION

A. Top Management Commitment (X^1) on Digital Transformation (Y)

The hypothesis test results regarding the relationship between Top Management Commitment (X1) and Digital Transformation (Y) reveal that the p-value is 0.035, which is less than the significance level of 0.05. Additionally, the t-statistic value of 2.113 exceeds the critical value of 1.660, and the beta score of 0.329 indicates a positive effect. These findings demonstrate that Top Management Commitment (X^1) has a significant and positive impact on Digital Transformation (Y). Top Management Commitment refers to the level of support and involvement from top management in digital transformation initiatives, which plays a crucial role in the success of the transformation process. When top management shows high commitment, they can allocate the necessary resources and attention to support digital transformation initiatives, thereby enhancing the effectiveness and outcomes of the transformation process. This finding aligns with existing literature, which indicates that top management support is a key factor in the success of digital transformation. Consistent with the research by Lutfi et al. (2022) which suggests that top management support, organizational readiness, and government support influence the adoption of databases, while competitive pressure and compatibility appear to have significant effects. This finding is expected to contribute to company management and the strategic use of data analytics.

B. Top Management Commitment (X^1) on Strategic Decision-Making (Z)

The hypothesis test results regarding the relationship between Top Management Commitment (X^1) and Strategic Decision-Making (Z) reveal that the p-value is 0.131, which is greater than the significance level of 0.05. Additionally, the t-statistic value of 1.511 does not exceed the critical value of 1.660, and the beta score of 0.176 indicates no positive effect. These findings demonstrate that Top Management Commitment (X1) does not have a significant and positive impact on Strategic Decision-Making (Z). Top Management Commitment refers to the support and involvement of leadership in the strategic decision-making process, which is expected to influence the effectiveness of adopted strategies. However, in this case, there is no strong evidence that support from top management significantly contributes to strategic decision-making. This result is consistent with some studies suggesting that other factors may have a greater or more

direct influence on strategic decisions. This contrasts with research by Javed (2015), which indicates a moderate positive relationship between top management commitment and quality management success. This suggests that the level of top management commitment within an organization positively impacts success in quality management. Regression analysis shows that most success in quality management can be attributed to top management commitment. Therefore, top management should be clearly and actively involved in quality efforts by joining teams, providing guidance, and organizing seminars. They need to lead by example, communicate, and reinforce quality statements.

C. Stakeholder Engagement (X^2) on Digital Transformation (Y)

The hypothesis test results regarding the relationship between Stakeholder Engagement (X^2) and Digital Transformation (Y) reveal that the p-value is 0.233, which is greater than the significance level of 0.05. Additionally, the t-statistic value of 1.218 does not exceed the critical value of 1.660, and the beta score of 0.202 indicates no positive effect. These findings demonstrate that Stakeholder Engagement (X^2) does not have a significant and positive impact on Digital Transformation (Y). Stakeholder engagement refers to the extent to which relevant parties are involved in the digital transformation process. However, this study's results show that this engagement does not significantly impact the success of the digital transformation process. These findings suggest that other factors may play a more substantial role in influencing digital transformation outcomes, or that stakeholder engagement is not sufficiently influential in the context of this study. Contrary to the research by Robu and Lazar (2020), digital transformation has become a necessity in a volatile, uncertain, complex, and ambiguous (VUCA) world. Successful digital transformation requires a solid foundation in terms of people, processes, technology, and content, as well as deep stakeholder engagement, particularly in the early stages. The development and implementation of collaborative platforms demand stakeholder commitment and involvement, as well as the building of relationships and trust. The prototype platform implemented in selected business areas has demonstrated the potential to support broad system transformation. Successful implementation involves reviewing best practices, designing innovation steps, establishing business steward roles, and integrating knowledge management approaches. Business value is reflected in improved time efficiency and enhanced work culture through effective collaboration.

D. Stakeholder Engagement (X^2) on Strategic Decision-Making(Z)

The hypothesis test results concerning the relationship between Stakeholder Engagement (X^2) and Strategic Decision-Making (Z) reveal that the p-value is 0.002, which is smaller than the significance level of 0.05. Additionally, the t-statistic value of 3.135 exceeds the critical value of 1.660, and the beta score of 0.366 indicates a positive effect. These findings demonstrate that Stakeholder Engagement (X^2) has a significant and positive impact on Strategic Decision-Making (Z). Stakeholder engagement refers to the extent to which various parties are actively involved in the decision-making process, which can enrich perspectives and improve the quality of decisions made. When stakeholders are actively engaged, they can provide valuable information and feedback that assist in formulating more effective strategies. This finding aligns with previous research, which shows that stakeholder engagement plays a crucial role in enhancing the effectiveness of strategic decision-making. In accordance with the research by Papavasiliou and Gorod (2022) stakeholders represent a critical challenge in this process. Stakeholders often have differing viewpoints, which can be a potential opportunity to leverage their collective intelligence to develop new ideas and solutions. However, successfully integrating diverse perspectives and maintaining emergent behavior is a demanding task, as no existing methodology currently supports such integration. Stakeholders propose a System of Systems (SoS) approach for stakeholder management in digital transformation, where each stakeholder is recognized as an individual, autonomous, decentralized, and heterogeneous system with its own set of attributes, while simultaneously being part of a larger collective whole.

E. Vision and Mission (X^3) on Digital Transformation (Y)

The hypothesis test results regarding the relationship between Vision and Mission (X^3) reveal that the p-value is 0.064, which is greater than the significance level of 0.05. Additionally, the t-statistic value of 1.854 does not exceed the critical value of 1.660, and the beta score of 0.223 indicates no significant positive effect. These findings demonstrate that Vision and Mission (X^3) do not have a significant and positive impact on Digital Transformation (Y). Vision and Mission are important elements that reflect the strategic direction and goals of an organization. Although they are often considered key pillars in strategic planning and long-term development, this study's results show that there is insufficient strong evidence to support that Vision and Mission significantly influence the digital transformation process. This may suggest that other factors, such as stakeholder engagement, top management commitment, or technological infrastructure, play a more dominant role in determining the success of digital transformation. Alternatively, the role of Vision and Mission in this context may not be as strong as expected or may not be sufficient to significantly contribute to achieving digital transformation goals. Therefore, it is important to further evaluate other factors that may influence digital transformation and to better understand how Vision and Mission can be more effectively integrated into digital strategies.

F. Vision and Mission (X³) on Strategic Decision-Making(Z)

The hypothesis test results regarding the relationship between Vision and Mission (X³) reveal that the p-value is 0.000, which is less than the significance level of 0.05. Additionally, the t-statistic value of 6.371 exceeds the critical value of 1.660, and the beta score of 0.415 indicates a positive effect. These findings demonstrate that Vision and Mission (X3) have a significant and positive impact on Strategic Decision-Making (Z). Vision and Mission refer to the long-term goals and direction of an organization that help guide strategic decisions. When Vision and Mission are clear and strong, they can provide clear guidance for decision-making and facilitate more effective strategic planning. This finding is consistent with previous research, which shows that well-articulated Vision and Mission statements can significantly enhance the effectiveness of strategic decision-making. It also aligns with Altıok (2011). who argues that an actionable vision is useful in creating a stronger organizational culture to face crises, uniting employees to achieve their goals, motivating them, and thus shaping the necessary changes in mindset for a vibrant future. A collaboratively formed vision also transforms stakeholders into strategic partners, guiding decision-making, and providing resilience, thereby creating a competitive advantage for the company.

G. Strategic Decision-Making (Z) on Digital Transformation (Y)

The hypothesis test results regarding the relationship between Strategic Decision-Making (Z) reveal that the p-value is 0.000, which is less than the significance level of 0.05. Additionally, the t-statistic value of 3.788 exceeds the critical value of 1.660, and the beta score of 0.602 indicates a positive effect. These findings demonstrate that Strategic Decision-Making (Z) has a significant and positive impact on Digital Transformation (Y). Strategic decision-making refers to the process of determining the direction and key policies within an organization that affect how digital transformation is implemented and managed. When strategic decision-making is carried out effectively, it can facilitate the execution of digital transformation initiatives more successfully, leading to improved outcomes. These findings are consistent with existing literature, which indicates that well-planned and effective strategic decisions significantly contribute to the success of the digital transformation process. It aligns with research from Shirokova et al. (2021) which observes that digital transformation is now being studied across various fields and has a strong impact on business. This study analyzes the concept of digital transformation and its importance for companies today, focusing on the development of modern digital solutions. Software products for analyzing big data are used for decision-making about the future of the company, and the results of this research provide recommendations for the positive development of the company.

VI. CONCLUSION

The hypothesis test results indicate that Top Management Commitment has a significant and positive impact on Digital Transformation, highlighting the importance of support and involvement from top management in the transformation process. This underscores that active engagement from top management can accelerate implementation and enhance the effectiveness of digital transformation initiatives. Conversely, although it was anticipated, top management commitment does not show a significant impact on Strategic Decision-Making, suggesting that other factors may play a more influential role in affecting strategic decisions.

The study also found that stakeholder engagement has a significant impact on Strategic Decision-Making, indicating that active participation from relevant parties can enhance decision quality. However, stakeholder engagement does not have a significant impact on Digital Transformation, suggesting that other factors may play a more substantial role in the transformation process. Additionally, Vision and Mission have been shown to significantly influence Strategic Decision-Making, supporting the importance of vision and mission statements in guiding strategic decisions. However, Vision and Mission do not show a significant impact on Digital Transformation, indicating that other factors may have a greater impact in the context of digital transformation.

The main implications for managerial practice and organizational strategy are as follows: Active support and involvement from top management are crucial for the success of digital transformation. Therefore, organizations need to ensure that top leaders provide strong support and address any obstacles that may arise during the transformation process. Although it has not been shown to have a significant impact on strategic decision-making, focusing on managerial support remains crucial. Active stakeholder engagement enriches strategic decision-making, so organizations should broaden the participation of relevant parties to enhance decision quality. However, since stakeholder engagement does not significantly impact digital transformation, attention should be redirected to other factors that have a greater influence on the transformation process. Clear and strong vision and mission statements help guide strategic decision-making, so organizations should ensure their vision and mission statements are clear and inspiring. While Vision and Mission do not show a significant impact on digital transformation, organizations need to consider other factors such as technological infrastructure or managerial support to improve the overall success of digital transformation.

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