

The Impact of Managerial Competence, Digital Project Innovation, and Entrepreneurial Ecosystems on Project Performance and Business Resilience in Property Companies

I Made Dirgayasa¹ and Gede Sri Darma²

Abstract

The aim of this research is to determine the influence of managerial competence, digital project innovation, and the entrepreneurial ecosystem on project performance and business resilience at company properties. This research is included in quantitative research. The population in this research is all property companies in Indonesia. On the results of the analysis, it was found that Managerial Competence had no effect on Project Performance; There is a positive and significant influence by Digital Project Innovation on Project Performance; There is a positive and significant influence by the Entrepreneurship Ecosystem on Project Performance; There is a positive and significant influence by Managerial Competence on Business Resilience; Digital Project Innovation has no effect on Business Resilience; The Entrepreneurship Ecosystem has no effect on Business Resilience; There is a positive and significant influence of Project Performance on Business Resilience; There is no mediating effect of Project Performance on Managerial Competence on Business Resilience; There is a mediating effect of Project Performance on Digital Project Innovation on Business Resilience; There is a mediating influence of Project Performance in the Entrepreneurial Ecosystem on Business Resilience.

Keywords: Managerial Competence, Digital Project Innovation, Entrepreneurship Ecosystem, Project Performance, Business Resilience.

INTRODUCTION

Research on the influence of managerial competence, digital project innovation, and entrepreneurial ecosystems on property companies' project performance and business resilience is crucial for several reasons. First, in the competitive and dynamic property industry, strong managerial competence is required to effectively and efficiently manage projects, ensuring optimal quality, time, and budget. Second, innovation in digital projects is critical to increasing productivity and company competitiveness, especially with the rapid technological development and growing need for digital solutions. Third, a supportive entrepreneurial ecosystem can provide the resources, networks, and support needed to face market challenges and changes (Elia et al., 2021). Property companies can develop better strategies to survive and grow in uncertain market conditions by understanding how these three factors contribute to project performance and business resilience. This research can also provide insights for stakeholders in optimizing resources and adopting relevant innovations to enhance competitiveness and business sustainability (Khurana et al., 2022).

There are problems concerning the performance of property companies in Indonesia. Property companies in Indonesia have shown alarming signs in recent months. One of the main problems is the significant decline in property sales. This is caused by various factors, including increased competition from other developers, economic uncertainty causing potential buyers to hesitate in investing, and a need for more innovation in their marketing strategies. Moreover, there have been complaints from several customers regarding the construction quality and unsatisfactory after-sales service (Duan et al., 2023). All of this has led to a tarnished reputation for these property companies and a loss of trust in the market. If addressed immediately, these companies can avoid further declines in performance and the potential loss of significant market share in Indonesia.

Several key factors influence project performance and business resilience, including managerial competence, digital project innovation, and entrepreneurial ecosystems. Managerial competence, which includes responsive decision-making ability, effective communication skills, and strong leadership, directly impacts project performance (Endres et al., 2022). Competent managers can plan and manage projects well, ensure efficient

¹ Universitas Pendidikan Nasional, Denpasar, Email: imadedirgayasa@gmail.com, (Corresponding Author)

² Universitas Pendidikan Nasional, Denpasar

use of resources, and quickly identify and address risks. These skills also help build a productive and motivated team, contributing to better achievement of project goals (Garrido-Moreno et al., 2024). Digital project innovation also plays a vital role in influencing project performance and business resilience. Innovations in information technology, including AI, data analytics, or cloud-based solutions, can enhance operational efficiency, accelerate project completion times, and improve the quality of outcomes. The latest technology can also help businesses adapt to market changes and create more adaptive solutions for a dynamic business environment.

Additionally, entrepreneurial ecosystems are crucial in shaping a supportive environment for business growth and resilience against external disruptions (Ryan et al., 2021). Businesses have greater access to resources, capital, networks, and collaboration opportunities in a dynamic entrepreneurial ecosystem. These factors help improve project performance by providing a solid foundation for businesses to innovate, quickly adapt to changes, and better address challenges. Thus, the interaction between managerial competence, digital project innovation, and entrepreneurial ecosystems is essential in influencing project performance and overall business resilience (Cao & Shi, 2021).

This research proposes to bridge the knowledge gap in the context of property companies in Indonesia by focusing on the interaction between managerial competence, digital project innovation, and entrepreneurial ecosystems in influencing project performance and business resilience. By integrating management, innovation, and economic theories, this research will identify how strong managerial competence, sustainable digital project innovation, and support from local entrepreneurial ecosystems can enhance property companies' project performance and business resilience in facing dynamic environmental challenges. The research method will involve surveys of senior managers and key stakeholders in the property industry in Indonesia, followed by rigorous statistical analysis to test the relationships between these variables. Academics and professionals in the field of property management can look forward to fresh perspectives from this study's results, while property firms can use the information to strengthen their project performance and company resilience moving forward.

This research is urgent considering the complexity and dynamics of the property industry in Indonesia and the need for more effective strategies in improving project performance and business resilience of property companies. With increasing competition and rapid changes in the business environment, a deep understanding of how managerial competence, digital project innovation, and entrepreneurial ecosystems impact project performance and business resilience becomes crucial. This research will give an all-encompassing and evidence-based understanding of the key factors influencing project success and business resilience of property companies in Indonesia. We anticipate that this study's results will provide strategic guidance for property managers in facing complex challenges and improving their project success and business resilience in the future.

LITERATURE REVIEW

Managerial Competence

Managerial competence refers to the ability or qualifications possessed by a manager to effectively and efficiently manage resources and achieve organizational goals. It encompasses various skills, knowledge, and attitudes required to lead and manage a team or organization successfully (Karsikas et al., 2022).

According to (Nikitina & Lapiņa, 2019) some indicators of managerial competence include:

Decision-making ability

Communication abilities

Leadership skills

Skills for managing conflicts

Time management skills

Team management skills

Adaptability

Digital Projects Innovation

Digital projects innovation is the process or effort to create and implement innovative digital solutions to enhance efficiency, productivity, and added value within an organization or project. It involves the utilization of data analytics, the Internet of Things (IoT), and artificial intelligence (AI), and other related technologies to create new solutions or enhance existing ones (Yordanova, 2020).

According to (Holmström, 2018) some indicators of digital projects innovation include:

Implementation of new technologies

Creativity and innovation

Collaboration across disciplines

User adoption

Increased efficiency and productivity

Sustainability and scalability

Entrepreneurial Ecosystems

Entrepreneurial ecosystems refer to the environment or ecosystem that supports the growth and development of entrepreneurs and new businesses. It encompasses various factors such as government policies, infrastructure, venture capital, market access, as well as the presence of educational and research institutions. Entrepreneurial ecosystems create a conducive environment for innovation, taking risks, and boosting the economy (Suwandi, 2022).

According to (Theodoraki et al., 2022) indicators of entrepreneurial ecosystems include:

Availability of capital and investment

Access to resources and infrastructure

Supportive government policies

Presence of educational and research institutions

Active entrepreneurial community

Market adequacy and access to customers

Entrepreneurial culture that encourages innovation

Project Performance

Project performance refers to the outcomes or accomplishments of a project in achieving its set objectives. It includes evaluating various aspects of the project such as the quality of outcomes, completion time, resource utilization, and stakeholder satisfaction. More broadly, project performance also encompasses the efficiency and effectiveness in executing the project from start to finish (Van Tam et al., 2023).

According to (Unegbu et al., 2022) some indicators of project performance include:

Compliance with schedules

Resource management

Stakeholder satisfaction

Risk management

Innovation and learning

Compliance with contract requirements

Businesses Resilience

Business resilience is a company's capacity to endure and swiftly bounce back from disruptions or challenges it faces, whether natural disasters, economic crises, market changes, or changes in the business environment. Businesses with high levels of resilience can adapt, adjust, and even grow in the face of significant external pressures or changes (Sanusi et al., 2023)

According to (Kamaha Njiwa et al., 2023) some indicators of business resilience include:

Organizational flexibility

Product and service diversification

Financial health

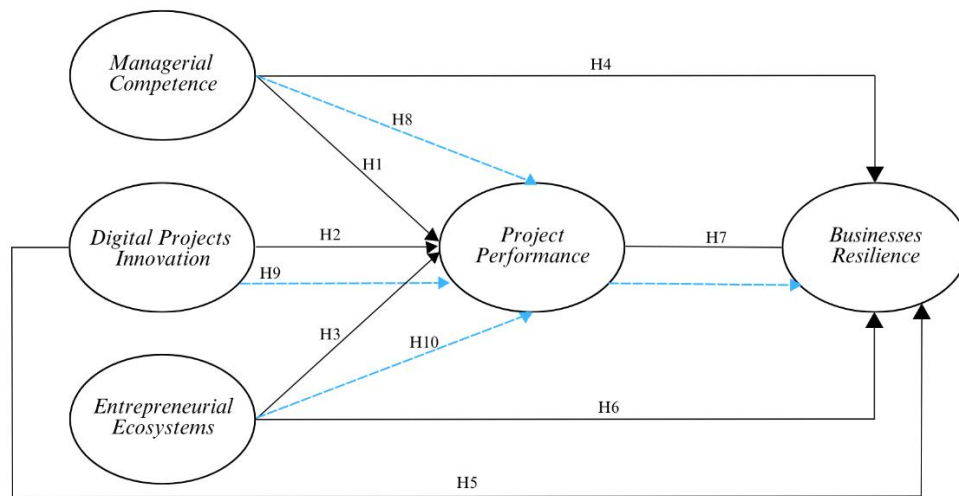
Collaboration with external parties

Robust technology and infrastructure

Effective risk management

Sustainable employee development

Theoretical Framework



[Figure 1: Theoretical Framework]

Hypotheses

H1: Managerial competence significantly influences project performance.

H2: Digital projects innovation significantly influences project performance.

H3: Entrepreneurial ecosystems significantly influence project performance.

H4: Managerial competence significantly influences business resilience.

H5: Digital projects innovation significantly influences business resilience.

H6: Entrepreneurial ecosystems significantly influence business resilience.

H7: Project performance significantly influences business resilience.

H8: The impact of Entrepreneurial Ecosystems on Project Performance and Businesses Resilience.

H9: The impact of Digital Projects Innovation on Project Performance and Businesses Resilience.

H10: The impact of Managerial Competence on Project Performance and Businesses Resilience.

METHODS

As far as research methods are concerned, this study is quantitative. The research location is the distribution area of property developers in Indonesia. The sampling technique used was non-probability sampling with a purposive sampling method. The number of samples in this research was 165 property developers. The data collection technique in this research uses a questionnaire sent via Google Forms. It utilizes a variance-based Structural Equation Modeling (SEM) methodology, also called “Component-based structural equation modeling (CB-SEM)”. Hair et al. (2016) state that the purpose of PLS-SEM is to construct a theory that is oriented towards prediction. To find out if latent variables are related to each other, PLS is used. The fact that it works with any size sample and doesn't insist on data following a specific scale makes it a potent analytical tool (Hair et al., 2016).

Validity and Reliability Test

To guarantee precise and trustworthy measurements, validity and reliability tests are conducted. Testing for validity and reliability is demonstrated by the following:

Convergence validity is a measure investigated in regard to item/component score correlation to generate score. This is demonstrated by the standard loading factor, which reflects the strength on the relationship between all of the examined and its construct. In the event that the individual reflex measurement exhibits correlation, a value of > 0.7 is deemed high.

Second, discriminant validity refers to a measurement paradigm that uses cross-loading measures and constructs to evaluate a reflection index. In the event that the eliminated AVE value is more than 0.5, then the tool is considered valid in discriminant validity, which compares the AVE.

Third, a structure's composite dependability can be expressed where the coefficients of latent variables are concerned. If a result greater than 0.70 is obtained in this measurement, the construction is considered highly trustworthy.

Fourth, the reliability test Cronbach's Alpha is intended to reinforce Results of the composite reliability test. In order for a variable to be considered reliable, its Cronbach's alpha value must be greater than 0.7.

Instrument Testing

Instrument Test	Test used
Validity test	Convergent Validity
	AVE
Reliability test	Cronbach Alpha
	<u>Compostie Reliability</u>

R Square Test

By calculating the R-squared value of the dependent construct, we may examine the influence of certain independent factors on the dependent latent variable, which reveals the magnitude of the influence.

Inner Model Analysis

Structural modeling, Causal inference, also referred to as deep model analysis, is a methodology employed to forecast causal links among variables in a model. In Smart PLS testing, hypotheses are evaluated through deep model analysis. When testing hypotheses, t-statistic results and probability values are shown. An alpha level of 5% and a t-statistic threshold of 1.96 Statistical values are utilized to test the hypothesis. The beta score, on the other hand, indicates the direction of the influence between variables. The evaluation of the hypothesis for either acceptance or rejection is determined by the following factors:

“ $H_a = t\text{-statistic} > 1.96$ with $p\text{-values} < 0.05$ ”

“H0= t-statistic < 1.96 with p-values > 0.05”

Table 1 - Latent Variable Correlations

	Businesses Resilience	Digital Projects Innovation	Entrepreneurial Ecosystems	Managerial Competence	Project Performance
Businesses Resilience					
Digital Projects Innovation	0,506				
Entrepreneurial Ecosystems	0,539	0,485			
Managerial Competence	0,573	0,602	0,479		
Project Performance	0,619	0,642	0,750	0,486	

Source: SmartPLS (2024)

The table clearly shows that all variable constructs have good discriminant values, since the HTMT ratio for every component is below 0.9, (HTMT<0.9).

An alternative approach to evaluate "discriminant validity" involves analyzing the "square root of average variance extracted" (AVE) measure. According to (Ghozali, 2018), the recommended value is above 0.5. The AVE values from the research are presented in the following table:

Table 4. Average Variant Extracted (AVE)

Variable	Average Variance Extracted (AVE)
<i>Businesses Resilience</i>	0,818
<i>Digital Projects Innovation</i>	0,618
<i>Entrepreneurial Ecosystems</i>	0,648
<i>Managerial Competence</i>	0,733
<i>Project Performance</i>	0,602

Source: SmartPLS (2024)

According to the table above, All research variables have achieved an Average Variance Extracted (AVE) value that exceeds 0.5 (AVE > 0.5).. Specifically, the AVE values are as follows: 0.648 for Entrepreneurial Ecosystems, 0.733 for Managerial Competence, 0.618 for Business Resilience, 0.618 for Digital Projects Innovation, and 0.602 for Project Performance. By calculating each variable's AVE value, it is evident that all variables with an AVE value greater than 0.5 meet the criteria for discriminant validity, indicating excellent discriminant validity for each variable.

Composite Reliability

The following step was examining the composite dependability of the construct indicator blocks. As per (Ghozali, 2018). A build is deemed dependable if its composite reliability value exceeds 0.70. The outer model findings provide the composite reliability measurements for each construct, which are as follows:

Table 5. Composite Reliability

Variable	Composite Reliability
<i>Businesses Resilience</i>	0,969
<i>Digital Projects Innovation</i>	0,907
<i>Entrepreneurial Ecosystems</i>	0,928
<i>Managerial Competence</i>	0,950
<i>Project Performance</i>	0,901

Source: SmartPLS (2024)

The table displays the overall dependability results for various variables. Specifically, Variable Business Resilience has a composite reliability value of 0.969, Variable Digital Projects Innovation has a composite reliability value of 0.907, Variable Entrepreneurial Ecosystems with a total dependability score of 0.928, Variable Managerial Competence has a composite reliability value of 0.950, and Variable Project Performance has an overall dependability score of 0.901. The results indicate that the composite reliability value for all variables is greater than 0.7, indicating a high level of reliability for the research variable.

Cronbach's Alpha

Cronbach's alpha can provide weights to the composite reliability test mentioned above. If the Cronbach's alpha value for a certain variable exceeds 0.7, we can say that the variable is reliable (Ghozali, 2018). Cronbach alpha for each variable is presented below.

Table 6. Cronbach's Alpha

Variable	Cronbach's Alpha
<i>Businesses Resilience</i>	0,962
<i>Digital Projects Innovation</i>	0,876
<i>Entrepreneurial Ecosystems</i>	0,908
<i>Managerial Competence</i>	0,939
<i>Project Performance</i>	0,868

Source: SmartPLS (2024)

The data presented in table 4 demonstrates that the Cronbach alpha value for each research variable is greater than 0.7, providing evidence of its reliability. Therefore, it can be inferred that the dependability of all research variables is high, as indicated by a Cronbach alpha value over 0.80.

Structural Model Evaluation (Inner Model)

Path Coefficient Test

The route coefficient (path coefficient) expresses the relative importance of associations between constructs. The t test, calculated using the bootstrapping approach (a resampling method), can be utilized to assess the substantial of the route coefficient, as long as its sign is consistent with the hypothesized theory. The results of the t test between the inner and outer models are as follows:

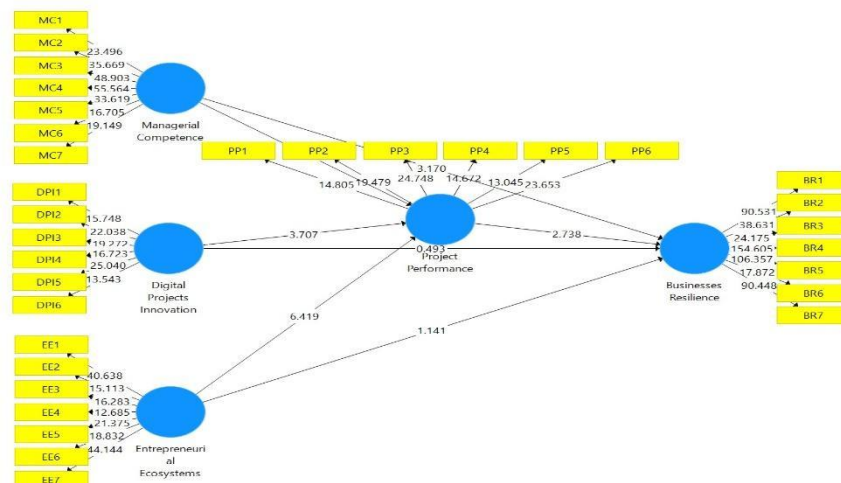


Figure 3. Inner Model

Source: SmartPLS (2024)

The t test used is from a bootstrap sample. Next, we will compare the t table values with The graphic above displays the results of the t-test.

Table 7. Hypothesis Test Results

	Original Sample (O)	T Statistics	P Values
<i>Managerial Competence -> Project Performance</i>	0,038	0,396	0,692
<i>Digital Projects Innovation -> Project Performance</i>	0,317	3,707	0,000
<i>Entrepreneurial Ecosystems -> Project Performance</i>	0,519	6,419	0,000
<i>Managerial Competence -> Businesses Resilience</i>	0,324	3,170	0,002
<i>Digital Projects Innovation -> Businesses Resilience</i>	0,056	0,493	0,622
<i>Entrepreneurial Ecosystems -> Businesses Resilience</i>	0,127	1,141	0,254
<i>Project Performance -> Businesses Resilience</i>	0,321	2,738	0,006
<i>Managerial Competence -> Project Performance -> Businesses Resilience</i>	0,012	0,361	0,718
<i>Digital Projects Innovation -> Project Performance -> Businesses Resilience</i>	0,102	1,986	0,048
<i>Entrepreneurial Ecosystems -> Project Performance -> Businesses Resilience</i>	0,166	2,514	0,012

Source: SmartPLS (2024)

The results of research hypothesis testing can be explained as follows:

Hypothesis H1

The hypothesis testing results, with a T-statistics value of 0.396 and a P-value of 0.692, indicate show that managerial competence influences project performance. As the P-value is higher than the normal alpha of 5% ($0.692 > 0.05$) and the T-statistic value is lower than the essential T-table value ($0.396 < 1.954$), it may be inferred that Managerial Competence does not have a substantial impact on Project Performance. Therefore, it can be concluded that Managerial Competence does not affect Project Performance. In other words, improving Managerial Competence does not enhance Project Performance.

Hypothesis H2

The hypothesis testing results, with a T-statistics value of 3.707 and a P-value of 0.000, demonstrate that digital project innovation significantly impacts project performance. There is a considerable influence of digital projects innovation on project performance, as the T-statistic value is higher than the key T-table value ($3.707 > 1.954$) and the P-value is lower than the usual alpha of 5% ($0.000 < 0.05$). Digital Projects Innovation has a favourable effect on Project Performance, as seen by the positive coefficient path value. As a result, we can say that digital project innovation has a favourable and substantial effect on project performance. Basically, the first hypothesis (H2) is accepted because it states that boosting digital project innovation boosts project performance.

Hypothesis H3

The findings of the hypothesis testing show that entrepreneurial ecosystems have a significant impact on project performance (T-statistics = 6.419, P = 0.000). Entrepreneurial ecosystems have the project performance is significantly affected, as indicated by the T-statistic value ($6.419 > 1.954$), which exceeds the critical T-table

value, and the P-value ($0.000 < 0.05$), which is lower than the standard alpha level of 5%. A positive coefficient path value suggests that entrepreneurial ecosystems have a beneficial effect on project performance. It follows that entrepreneurial ecosystems have a favourable and statistically significant effect on project outcomes. Put simply, fostering an environment that encourages entrepreneurship leads to better project outcomes.

Hypothesis H4

Results from the results of hypothesis testing indicate a statistically significant finding. Relationship between managerial competence and company resilience (T-statistics = 3.170, $P = 0.002$). With a T-statistic value of $3.170 > 1.954$ and a P-value of $0.002 < 0.05$, which is less than the normal alpha of 5%, it can be inferred that Managerial Competence has a substantial impact on Business Resilience. A positive coefficient path value indicates that the level of management competence has a favorable impact on the ability of a company to withstand and recover from challenges. Managerial skill has a positive impact and considerable effect on company resilience, as a result. To rephrase, bolstering managerial competency increases company resilience.

Hypothesis H5

The hypothesis testing results indicate the T-statistics value for the influence of Digital Projects Innovation on Business Resilience is 0.493, with a corresponding P-value of 0.622. The T-statistic value is smaller than the essential T-table value ($0.493 < 1.954$), while the P-value is larger than the usual alpha level of 5% ($0.622 > 0.05$), indicating no significant influence of Digital Projects Innovation on Business Resilience. Therefore, it can be concluded that Digital Projects Innovation does not affect Business Resilience. In other words, improving Digital Projects Innovation does not enhance Business Resilience.

Hypothesis H6

The hypothesis testing results indicate that the T-statistics value for the influence of Entrepreneurial Ecosystems on Business Resilience is 1.141, with a corresponding P-value of 0.254. The T-statistic value is smaller than the essential T-table value ($1.141 < 1.954$), while the P-value is larger than the normal alpha level of 5% ($0.254 > 0.05$), indicating no significant influence of Entrepreneurial Ecosystems on Business Resilience. Therefore, it can be concluded that Entrepreneurial Ecosystems do not affect Business Resilience. In other words, improving Entrepreneurial Ecosystems does not enhance Business Resilience.

Hypothesis H7

Results from the hypothesis testing demonstrates the presence of a statistically significant relationship between project performance and business resilience (T-statistics = 2.738, $P = 0.006$). Project Performance has a strong impact on Business Resilience, as the T-statistic value ($2.738 > 1.954$) is higher than the key T-table value (1.954), and the P-value ($0.006 < 0.05$) is lower than the usual alpha of 5%. Project Performance has a favourable effect on Business Resilience, as seen by the positive coefficient path value. As a result, we can say that Project Performance has a favourable and substantial effect on Business Resilience. To rephrase, improving Project Performance enhances Business Resilience, thus accepting the first hypothesis (H7).

Hypothesis H8

The findings of the hypothesis testing demonstrate that there is a statistically significant impact of Project Performance on Business Resilience. This is evidenced by a T-statistics value of 2.738 and a P-value of 0.006. The calculated T-statistic value (2.738) above the critical T-table value (1.954), indicating statistical significance. Additionally, the P-value (0.006) is smaller than the commonly used significance level of 5% (0.05), showing a strong impact of Project Performance on Business Resilience. The presence of a positive coefficient path value implies that Project Performance has a favourable impact on Business Resilience. Thus, it may be inferred that Project Performance has a favourable and substantial impact on Business Resilience. To put it differently, Therefore, it can be concluded that Project Performance cannot mediate Managerial Competence to enhance Business Resilience. In other words, good Project Performance cannot support Managerial Competence in enhancing Business Resilience, thus rejecting the first hypothesis (H8).

Hypothesis H9

The hypothesis testing results indicate that the T-statistics value for the influence of Digital Projects Innovation on Project Performance and Business Resilience is 1.986, with a corresponding P-value of 0.048. The T-statistic value exceeds the key T-table value ($1.986 > 1.954$), and the P-value is lower than the usual alpha of 5% ($0.048 < 0.05$), suggesting that Project Performance mediates the association between Digital Projects Innovation and Business Resilience. The positive coefficient path value indicates a positive influence exerted by Project Performance on Digital Projects Innovation and Business Resilience. Therefore, it can be concluded that Project Performance can mediate Digital Projects Innovation to enhance Business Resilience. In other words, good Project Performance can support Digital Projects Innovation in enhancing Business Resilience, thus accepting the first hypothesis (H9).

Hypothesis H10

The hypothesis results indicate a T-statistic of 2.514 and a P-value of 0.012 testing reveal that entrepreneurial ecosystems have an influence on project performance and business resilience. Project Performance on Entrepreneurial Ecosystems has a mediating effect on Business Resilience, as indicated by the T statistic value being higher than the T table value ($2.514 > 1.954$) and the P value being less than the 5% alpha standard ($0.012 < 0.05$). The path coefficient value is positive indicating that the influence provided by Project Performance mediation in Entrepreneurial Ecosystems on Business Resilience is positive. So, it can be concluded that Project Performance can mediate Entrepreneurial Ecosystems on Business Resilience. In other words, good Project Performance can support Entrepreneurial Ecosystems to increase Business Resilience or the first hypothesis (H10) is accepted.

DISCUSSION

The Influence of Managerial Competence on Project Performance

A T-statistic of 0.396 and a P-value of 0.692 suggest that inferred that Managerial Competence does not significantly affect Project Performance. Both the T-statistic value ($0.396 < 1.954$) and the P-value ($0.692 > 0.05$) are lower than the crucial T-table value and the standard alpha of 5%, respectively. Therefore, it can be concluded that improving Managerial Competence does not enhance Project Performance. However, research by (Ahmed et al., 2021), (Boadu & Ghansah, 2023), (Piwowar-Sulej, 2021), (Hadi & Chaudhary, 2021) indicates that Managerial Competence impacts Project Performance favorably and significantly.

The Influence of Digital Projects Innovation on Project Performance

Digital project innovation has a substantial impact on project performance, as shown by a T-statistic of 3.707 and a P-value of 0.000. The crucial value of the T-statistic is 3.707, which is larger than 1.954, and the p-value is less than 0.000, which is less than the normal alpha of 5%. Therefore, it can be inferred that improving Digital Projects Innovation enhances Project Performance. Research by (Martinez Sanz & Ortiz-Marcos, 2020), (Zhu et al., 2022), (Khin & Ho, 2019), (Dudezert et al., 2023) also supports innovation in digital projects has a favorable and substantial effect on project performance.

The Influence of Entrepreneurial Ecosystems on Project Performance

With a T statistics value of 6.419 and a P-value of 0.000, it can be concluded that Entrepreneurial Ecosystems significantly affect Project Performance. A result of $6.419 > 1.954$ for the T-statistic, and a value of $0.000 < 0.05$ for the P-value, both of which are less than the normal alpha of 5%. Therefore, it can be inferred that improving Entrepreneurial Ecosystems enhances Project Performance. Research by (Stam & van de Ven, 2021), (Gonçalves et al., 2020), (Spigel & Harrison, 2018) (Audretsch et al., 2019) also supports the favorable and notable impact of Entrepreneurial Ecosystems on Project Performance.

The Influence of Managerial Competence on Business Resilience

With a T statistics value of 3.170 and a P-value of 0.002, it can be concluded that Managerial Competence significantly affects Business Resilience. There is a discrepancy between the essential T-table value ($3.170 > 1.954$) and the P-value ($0.002 < 0.05$), but the T statistic value is higher. Therefore, it can be inferred that improving Managerial Competence enhances Business Resilience. Research by (Alvarenga et al., 2020), (Doern

et al., 2019), (Koronis & Ponis, 2018) and (Kumar et al., 2023) also supports the positive and significant influence of Managerial Competence on Business Resilience.

The Influence of Digital Projects Innovation on Business Resilience

With a T statistics value of 0.493 and a P-value of 0.622, it can be concluded that Digital Projects Innovation does not significantly affect Business Resilience. Both the T-statistic value ($0.493 < 1.954$) and the P-value ($0.622 > 0.05$) are lower than the threshold T-table value of 5%. Therefore, it can be inferred that improving Digital Projects Innovation does not enhance Business Resilience. However, research by (Acs et al., 2017), (Gonçalves et al., 2020), (Niemimaa et al., 2019) and (Chan et al., 2019) indicates that Digital Projects Innovation has a positive and significant effect on Business Resilience.

The Influence of Entrepreneurial Ecosystems on Business Resilience

With a T statistics value of 1.141 and a P-value of 0.254, it can be concluded that Entrepreneurial Ecosystems do not significantly affect Business Resilience. The essential T-table value ($1.141 < 1.954$) is smaller than the T statistic value, and the P-value ($0.254 > 0.05$) is greater than the normal alpha of 5%. Therefore, it can be inferred that improving Entrepreneurial Ecosystems does not enhance Business Resilience. However, research by (Acs et al., 2017) (Gonçalves et al., 2020), (Niemimaa et al., 2019) and (Chan et al., 2019) indicates that Entrepreneurial Ecosystems have a favourable and notable impact on Business Resilience.

The Influence of Project Performance on Business Resilience

With a T statistics value of 2.738 and a P-value of 0.006, it can be concluded that Project Performance significantly affects Business Resilience. The T statistic value is greater than the critical T-table value ($2.738 > 1.954$), and the P-value is less than the standard alpha of 5% ($0.006 < 0.05$). Therefore, it can be inferred that improving Project Performance enhances Business Resilience. Research by (Korhonen et al., 2023), (Pettit et al., 2019)(Pettit et al., 2019), (Martinez Sanz & Ortiz-Marcos, 2020) also supports the positive and significant influence of Project Performance on Business Resilience..

The Influence of Managerial Competence on Project Performance and Business Resilience

With a T statistic value of 0.361 and a P-value of 0.718, it can be concluded that there is no mediating effect of Project Performance on Managerial Competence concerning Business Resilience. Thus, it can be inferred that Project Performance cannot mediate the influence of Managerial Competence on Business Resilience. In other words, even though Project Performance is good, it cannot support Managerial Competence in enhancing Business Resilience. Research by (Alvarenga et al., 2020), (Doern et al., 2019), (Koronis & Ponis, 2018)(Kumar et al., 2023)(Martinez Sanz & Ortiz-Marcos, 2020), (Zhu et al., 2022), (Khin & Ho, 2019), (Dudezert et al., 2023) and Wisdom Ebirim et al. (2024) indicates that Project Performance cannot mediate the influence of Managerial Competence on Business Resilience..

The Influence of Digital Projects Innovation on Project Performance and Business Resilience

With a T statistics value of 1.986 and a P-value of 0.048, it can be concluded that there is a mediating effect of Project Performance on Digital Projects Innovation concerning Business Resilience. Therefore, it can be inferred that Project Performance can mediate the influence of Digital Projects Innovation on Business Resilience positively. In other words, good Project Performance can support Digital Projects Innovation in enhancing Business Resilience. Research by Sadiq (2020), (Boadu & Ghansah, 2023), (Piwowar-Sulej, 2021) (Hadi & Chaudhary, 2021), (Korhonen et al., 2023), (Pettit et al., 2019), (Martinez Sanz & Ortiz-Marcos, 2020) and Annarelli & Nonino (2016) supports the mediating effect of Project Performance on the influence of Digital Projects Innovation on Business Resilience.

The Influence of Entrepreneurial Ecosystems on Project Performance and Business Resilience

With a T statistics value of 2.514 and a P-value of 0.012, it can be concluded that there is a mediating effect of Project Performance on Entrepreneurial Ecosystems concerning Business Resilience. Therefore, it can be

inferred that Project Performance can mediate the influence of Entrepreneurial Ecosystems on Business Resilience positively. In other words, good Project Performance can support Entrepreneurial Ecosystems in enhancing Business Resilience. Research by (Acs et al., 2017) (Gonçalves et al., 2020) (Niemimaa et al., 2019) (Chan et al., 2019), (Stam & van de Ven, 2021), (Spigel & Harrison, 2018) and Audretsch et al. (2019) supports the mediating effect of Project Performance on the influence of Entrepreneurial Ecosystems on Business Resilience.

CONCLUSION

According to the analysis, it is concluded that Managerial Competence does not affect Project Performance; there exists a noteworthy and meaningful influence of Digital Projects Innovation on Project Performance; there is a strong and meaningful impact of Entrepreneurial Ecosystems on Project Performance; there exists a notable and meaningful positive correlation. influence of Managerial Competence on Business Resilience; Digital Projects Innovation does not affect Business Resilience; Entrepreneurial Ecosystems do not affect Business Resilience; There is a strong and meaningful impact of Project Performance on Business Resilience; Project Performance cannot mediate the influence of Managerial Competence on Business Resilience; there is a mediating effect of Project Performance on Digital Projects Innovation concerning Business Resilience; there is a mediating effect of Project Performance on Entrepreneurial Ecosystems concerning Business Resilience. The results of this research can provide practical contributions for property developers in growing their property business at project performance and business resilience.

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