

Digital transformation in the tourism sector of Ponorogo Regency, Indonesia

Moch Rifqi Mei Redha^{*)}, Ulung Pribadi, Herpita Wahyuni

Department of Governmental Studies, Universitas Muhammadiyah Yogyakarta

Brawijaya Street, Kasihan, Bantul, Yogyakarta Special Region, Indonesia

Email: mochrifqi1505@gmail.com, Phone: +62 274 387656

How to Cite This Article: Redha, M.R.M., et al.. (2025). Digital transformation in the tourism sector of Ponorogo Regency, Indonesia. *Jurnal Studi Komunikasi*, 9(1). doi: 10.25139/jsk.v9i1.9645
Received: 18-01-2025, Revision: 16-02-2025, Acceptance: 25-02-2025, Published: 26-03-2025

Abstract The Ponorogo Regency has various tourism destinations that comprises natural, artificial, and cultural sites. Digitalisation in this sector is needed to keep up with the times. This study investigated the factors that influence digital transformation in the tourism sector of Ponorogo Regency and identified variables that influence this transformation positively or negatively. This study used a quantitative methodology by distributing questionnaires online via Google Forms to 99 respondents in Ponorogo. The data processing used SEM-PLS software for data analysis and hypothesis testing. The study's findings show that digital transformation in tourism is positively and significantly influenced by leadership, employee engagement, and the external environment through technological advancement. However, organisational culture, structure, communication methods, and resources do not positively or significantly impact the digital transformation of the tourism industry. These findings suggest that local governments should prioritise investments in leadership development, employee training, and delivering the latest technological innovations to implement digital transformation strategies effectively.

Keywords: digital transformation, e-tourism, social media, quantitative content analysis

INTRODUCTION

This study aims to investigate the factors that influence the success of the digital transformation in tourism in Ponorogo Regency, Indonesia. The Ponorogo Regency has various natural, artificial, and cultural tourist destinations. Most recently, the Reog Ponorogo culture has been designated as a UNESCO intangible heritage, and Ponorogo Regency is building a Reog Ponorogo monument, a national strategic project (Cakrawala, 2025). Therefore, digital transformation is needed in tourism because the development of information technology can affect tourism promotion, the number of visitors, and the existence of tourist destinations. In this case, digital transformation goes beyond integrating technology into an organisation (Crusoe et al., 2024). Digital technology can effectively create user value by distributing labour, money, and land (Busulwa et al., 2024). Additionally, technology allows for optimising factor allocation and making fast adjustments depending on feedback outcomes (Arenal et al., 2024). This makes it a challenge for local governments to be able to adjust to changes in the information technology sector.

^{*)} Corresponding Author

Digitalisation's rapid and extensive development has profoundly impacted many facets of society, including tourism. It is anticipated that this tendency will continue to gain traction and provide a fresh, all-encompassing experience that depends more and more on online resources (Rinchen et al., 2024). Due to the growing amount of online information, visitors' perceptions of the experience have changed from a well-planned and structured tourist product to a more dynamic and personalised one (Triwiyanto et al., 2024). Li et al. (2024) explained that tourism is one of the world's largest marketplaces and sectors, growing quickly. Due to the internet's explosive growth, the tourism industry has begun to gain traction online by using websites to improve customer engagement and communication technology development and tourism. Based on the literature above, many explain the application of digitalisation in the tourism sector but have not explained what factors support its success.

On the other hand, the growth and prosperity of the tourism sector are highly dependent on the exchange of information and information technology infrastructure. This illustrates the need for customers and service providers tasked with meeting the needs of tourists to provide accurate and timely information (Prakosa et al., 2023). Rizky et al. (2019) pointed out that the use of internet technology and electronic means in the travel and tourism business is one of the most essential parts of this concept because it allows tourism service providers to provide better access to clients. Thus, e-government tourism services can improve government tourism services for citizens and foreign tourists, increase access to information, and improve service quality (Werthner, 2022). It is a challenge for local governments to present an optimal website for promotional or transaction media between entrepreneurs and visitors.

This study looks at the variables affecting Ponorogo Regency e-tourism implementation's success. In the first semester of 2024, Ponorogo Regency's Regional Original Income (PAD) benefited greatly from tourism. Of the IDR 5.7 billion target for 2024, the tourist sector has contributed IDR 2.7 billion, or 48% of the total (Palupi & Sitaviana, 2022). By introducing Ponorogo Regent Regulation Number 56 of 2019 concerning the implementation of electronic-based government systems in the Ponorogo Regency Government environment, a follow-up to Presidential Regulation Number 95 of 2018 concerning electronic-based government systems (SPBE). Ponorogo Regency demonstrated its commitment to modernising the government sector and accelerating the process of digital transformation (Regent Regulation, 2019).

The Ponorogo Regency Government is still working to modernise the tourism industry digitally (Dewi et al., 2022). However, there are still several barriers to its implementation, including a lack of government human resources, technological infrastructure, and community preparedness, which make it difficult for the government to utilise the Ponorogo Regency government's tourism digitisation initiative fully (Nurfaidah et al., 2024). The deployment of e-tourism faces several challenges worldwide, including user data protection and a lack of website management tools for small businesses (Alghanayem et al., 2023). The organisational change theory from Guntur et al. (2018) It was applied in this study, and its variables are utilised to gauge the elements that contribute to the success of the government's digital transformation.

Through the utilisation of the Instagram social media platform 'Pariwisata Ponorogo' as a case study for tourism promotion, this study attempts to identify the utilisation of social media in tourism promotion based on the perspective of factors that influence the digital transformation process with a focus on the tourism sector in Ponorogo Regency. By understanding the factors that affect the success of digital transformation in the tourism industry, this study helps local governments develop social media or websites for future tourism promotion. Thus, based on the explanation given, the problem formulation in this study is about analysing what factors influence the success of digital transformation in the tourism sector in Ponorogo Regency, Indonesia.

METHODOLOGY

A quantitative approach was used in this study (Latief et al., 2024). This study used a survey data collection method (Yaacob et al., 2021). The survey was conducted to collect primary data directly from respondents using a structured questionnaire (Syahid et al., 2024). The survey was conducted by taking simple random samples from the Ponorogo community, which had accessed tourism information on the Ponorogo Regency Government's social media by distributing questionnaires via Google Forms. Each statement was assessed on a Likert scale 1-5. The survey was conducted on 99 Ponorogo community respondents, and the results were obtained based on the quotient results using the Slovin formula.

$$n = \frac{N}{1 + N(e)^2}$$

Figure 1. The Slovin Formula
 Source: Adaptation by Afuan et al. (2024)

Information:
 N: Population size
 n: Sample size
 e: Percentage margin of error 10%

Based on the Slovin formula above, the results of the quotient from the 'Ponorogo Tourism' social media population of 17,800 with a margin of error of 10% were obtained from as many as 99 respondents. The following is information about the respondents in this study on Table 1.

Table 1. Respondent profile

Characteristic	Ponorogo City	
	Freq	%
Age		
<20 years	22	22.2
20-30 years	74	74.7
31-40 years	1	1
41-50 years	n/a	n/a
51-60 years	2	2
>60 years	n/a	n/a
Gender		
Male	40	40.4
Female	59	59.6
Level of Education		
Elementary/Junior High School	n/a	n/a
Senior High School	26	26.3
Bachelor	69	69.7
Master	2	2
Doctor	2	2
Extensive Knowledge of The Internet		
1-2 years	2	2
3-4 years	7	7.1
5-6 years	12	12.1
> 6 years	78	78.8

Source: Data processed by researchers, 2024

This study began on 8 December 2024 and ended on 14 December 2024. Based on Table 1, this study involved 99 respondents with ages under 20 years, which is equivalent to 22.2%; aged 20-30 years, equivalent to 74.7%; aged 30-40 years, equivalent to 1%; and aged 50-60 years, equivalent to 2%. Most respondents were female, as much as 59.6%, and the rest were male, as much as 40.4%. The respondents' education level varied; 26.3% had a high school education, 69.7% had a bachelor's degree, 2% had a master's degree, and the remaining 2% had a doctorate degree. Furthermore, the number of years of experience using the internet of

respondents, with the most significant percentage of 78.8% for more than 6 years, then 12.1% for 5-6 years, 7.1% for 3-4 years, and 2% for 1-2 years.

Digital transformation is the dependent variable in this study. Leadership, organisational culture, organisational structure, communication procedures, employee engagement, resources, and external environment are the seven independent variables included in this study (Guntur et al., 2018). This study used the Structural Equation Modelling (SEM)-Partial Least Square (PLS) type 4 (Smart PLS 4) approach to calculate and assess data based on respondent comments through Validity, reliability, and hypothesis testing tests are evaluated (Silaparasetti et al., 2017). SEM-PLS analysis is carried out in two steps. The first step is to assess the measurement model or outer model. This step focuses on construct validity and ensures that the measured items accurately represent the intended latent construct (Sujono et al., 2024). Two aspects are evaluated: a) Indicator Loading: the ideal loading should exceed 0.708. b) Construct Reliability: composite reliability should be between 0.70 and 0.95, with Cronbach's alpha as an acceptable alternative. c) Convergent Validity: AVE must be at least 0.50. d) Discriminant Validity: AVE must be at least 0.50 (Memon & Rahman, 2014).

This study used the Fornell and Larcker criteria. Because of this criterion, the square root of the average variance generated by a structure must be greater than the square root of the correlation between the structure and other structures (Fornell & Larcker, 2018). Structural relationships are examined in the second step, internal model evaluation. This includes a) Collinearity: VIF values above 5 indicate collinearity problems. b) Path Coefficient: bootstrapping determines the significance of the path relationship. c) Determination Coefficient: the R2 value indicates the predictive power of the model, with 0.75, 0.50, and 0.25 considered significant, moderate, and weak.

The bootstrapping sample technique and Smart PLS 4 were used for hypothesis testing. The hypothesis is accepted if the p-value is less than 0.05 and the t-test value is more than 1.96 (Ghozali, 2016). Explain that with a confidence level of 95% or a significance level of 5% ($\alpha = 0.05$), regression results testing is usually used as a basis for decision-making. The criteria for the t-statistic test, according to Ghozali (2016) If the significance value of the t-test > 0.05 , then H_0 is accepted, and H_a is rejected. This means there is no influence between the independent and dependent variables. If the significance value of the t-test < 0.05 , then H_0 is rejected, and H_a is accepted. This means there is an influence between the independent and dependent variables. In this study, the hypothesis tested is as follows on Figure 2.

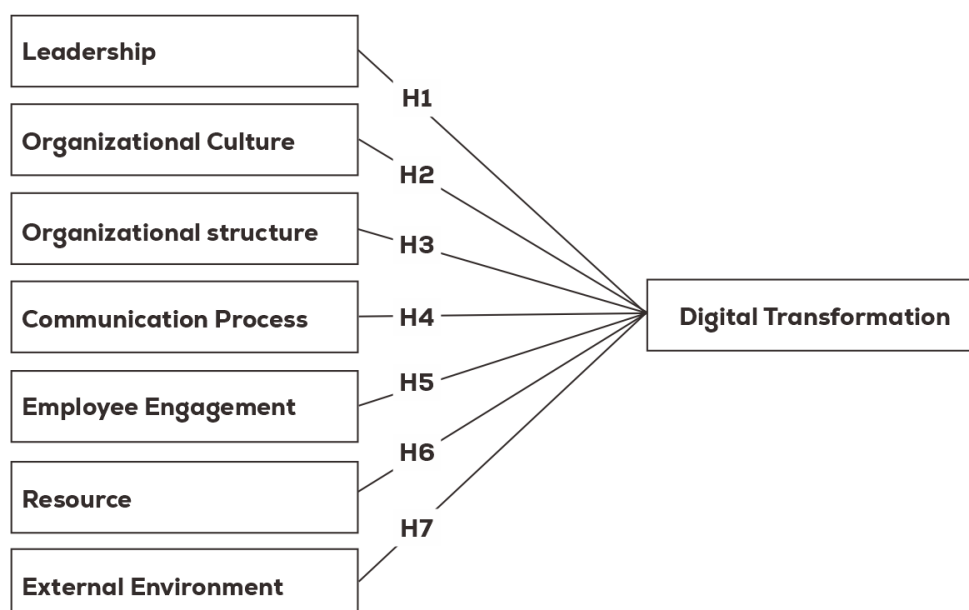


Figure 2. Research model framework

Source: Data processed by researchers; adapted from (Guntur et al., 2018)

In testing the research hypothesis, seven variables are involved as follows:

H1: Leadership influences digital transformation positively and significantly

H2: Organizational culture influences digital transformation positively and significantly.

- H3: Organizational structure influences digital transformation positively and significantly.
 H4: The communication process influences digital transformation positively and significantly.
 H5: Employee engagement positively and substantially influences digital transformation.
 H6: Resources influence digital transformation positively and significantly.
 H7: The external environment influences digital transformation positively and significantly.

Table 2. Attributes and indicators of digital transformation of tourism

No	Variables	Definition	Indicator	Source
1	Digital Transformation	A thorough procedure wherein businesses use digital technology to drastically alter their business models, operations, and value-creation strategies.	1. Availability of digital platforms 2. Ease of use of platforms 3. Speed of digital services	(Guntur Muh & Andi Cudai Nur, 2018)
2	Leadership	Persuading and guiding people or groups to accomplish particular objectives.	1. Vision and policy direction 2. Community involvement in decisions 3. Ability to deal with change	
3	Organisational culture	The process of motivating and guiding people or groups to accomplish objectives.	1. Service Orientation 2. Shared Values in the Team 3. Collaborative Approach between Agencies	
4	Organisational structure	A framework describes how roles, authority, and responsibilities are distributed, coordinated, and directed inside an organisation.	1. Clarity of Tasks and Roles 2. Effectiveness of Inter-Unit Communication 3. Communication Channels	
5	Communication Process	A sequence of actions includes exchanging, receiving, and comprehending information between people or groups.	1. Clarity of Information 2. Openness in Communication 3. Response to Input/Complaints	
6	Employee Engagement	Employees' dedication, drive, and contentment with their jobs and the company they work for.	1. Work Motivation 2. Participation in Decision Making 3. Commitment to Organizational Goals	
7	Resource	Everything is utilised to satisfy demands and accomplish objectives in the context of people, companies, or society.	1. Human Resources (HR) 2. Physical Resources (Infrastructure) 3. Access to technology and tools	
8	External Environment	Although the company has little control over this environment, planning and strategy depend on it.	1. Market analysis and industry trends 2. Government regulations and policies 3. Financial resources	

Source: Data created by author, 2024

Leadership, organisational culture, organisational structure, communication process, employee engagement, resources, and external environment are the research variables and indicators associated with digital transformation that are displayed in Table 2. Digital transformation is a comprehensive and all-encompassing program that impacts the organisation, including offering services to target audiences and using modern technologies and applications to boost performance and commercial capabilities. It goes beyond simply implementing technology within an organisation (Sun et al., 2024). Confirming that the banking industry's digital transformation is an ongoing process that affects both the internal and external

environment and entails updating current internal processes and methodologies (Liu & Qi, 2024). Numerous factors might lead to digital transformation, including reducing operating expenses, reaching out to remote regions without physical branches, or setting oneself apart from rivals (Xu et al., 2024).

RESULTS AND DISCUSSION

The first test is the validity test result, which shows that all indicators can represent the research variables. Figure 3 shows the results of this study's validity test. Figure 3 shows the outer loading values of various indicators on the Maturity One Employment Data variable. The outer loading indicates the indicator's ability to measure the variable (Iqbal et al., 2021). The following are the outer loading values found: Digital Communication (DT): DT.1 (0.883), DT.2 (0.898), and DT.3 (0.904). Leadership (LS): LS.1 (0.890), LS.2 (0.887), and LS.3 (0.877). External Environment (XE): XE.1 (0.784), XE.2 (0.828), and XE.3 (0.857). Communication Process (CP): CP.1 (0.849), CP.2 (0.891), and CP.3 (0.799). Resource (RS): RS.1 (0.866), RS.2 (0.736), and RS.3 (0.676). Organisational Structure (OS): OS.1 (0.884), OS.2 (0.872), and OS.3 (0.851). Organisational Culture (OC): OC.1 (0.845), OC.2 (0.848), and OC.3 (0.870). Employee Engagement (EE): EE.1 (0.764), EE.2 (0.838), and EE.3 (0.783).

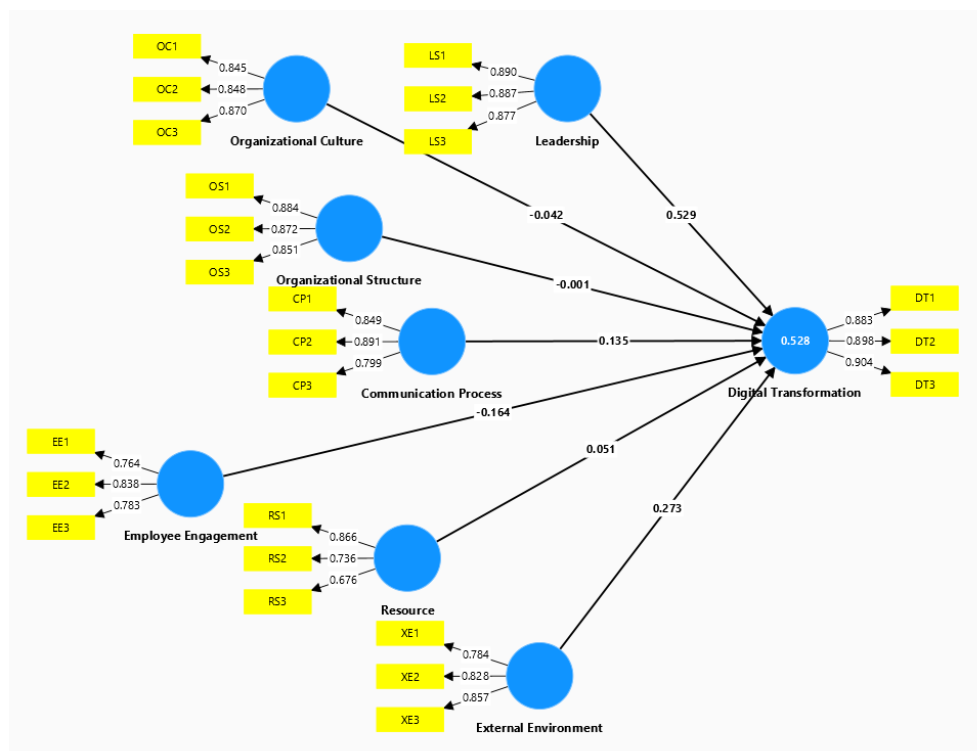


Figure 3. Validity test

Source: Data processed by researchers with Smart-PLS, 2024

Mark All of the indicators' external loads are greater than 0.5, which shows they are reliable for measuring each variable. A high validity rating indicates that the indicators consistently and accurately display each variable's quality. This suggests that the variables' elements are being implemented with good quality. With an external load value of 0.5, the indicators employed in the study have sufficient validity, according to the recommendations given by Now & Now (2016). The guidelines state that the indicator has a high level of validity.

Chin (1998), Cronbach's alpha value of 0.60 is still acceptable, but the composite reliability value needs to be greater than 0.70. If the composite reliability value is more significant than 0.70, the construct is said to have a high reliability value. The precision and accuracy of the measurement have an impact on reliability. Reliability testing is done to determine whether the data gathered from the research instrument exhibits sufficient internal consistency. Reliability testing was conducted in this investigation by examining the Cronbach Alpha value. If a research

instrument's Cronbach's Alpha value is more than 0.60, it is considered dependable (Ghozali, 2016). Table 3 displays the reliability test's findings.

Table 3. Reliability test

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Communication Process	0.805	0.824	0.884	0.718
Digital Transformation	0.876	0.877	0.923	0.801
Employee Engagement	0.710	0.715	0.838	0.633
External Environment	0.768	0.795	0.863	0.678
Leadership	0.861	0.862	0.915	0.783
Organizational Culture	0.816	0.819	0.890	0.730
Organizational Structure	0.840	0.862	0.903	0.756
Resources	0.658	0.746	0.805	0.582

Source: Data processed with Smart-PLS, 2024

The reliability test in this study is displayed in Table 3, which examines the Cronbach Alpha value of the variable block that gauges the construct. Ghozali (2016), a construct is deemed credible if its Cronbach Alpha value is higher than 0.600 and if the value in Table 3 surpasses all of them. The reliability test then examines the variable block's composite reliability value, which measures the construct. Composite reliability needs to be greater than 0.700, according to Chin (1998). It is, therefore, unreliable if it is less than 0.700, whereas all of the Composite reliability values in Table 3 are greater than 0.700. Therefore, according to the data, all of the constructions in Table 3 above are reliable.

Predictive adequacy relevance test

The independent variable (X) in the regression model's impact on or explanation of the dependent variable (Y) is then evaluated using the R-square test. Table 4 presents the R-squared test findings. The closer the R-squared number ranges from 0 to 1, is to 1, the better the independent variable can explain the dependent variable. While the R-square in this study was 0.528, or 52.8%, the adjusted R-square value was 0.492, or 49.2%. Hair & Joseph (2011), there are three grouping classes in the R square value: strong, moderate, and weak. a R square value of 0.75 falls into the strong category, a value of 0.50 falls into the moderate category, and a value of 0.25 falls into the weak category. Based on the R-square category mentioned above, the value of 0.528 is included in the 'moderate' category, which shows that the independent variable (X) is moderately influenced by 52.8% by the dependent variable (Y) (Ghozali, 2016; Sarstedt, M., & Chair, 2021).

Table 4. R-square results

	R-square	R-square adjusted
Digital Transformation (Y)	0.528	0.492

Source: Smart-PLS analysis results, 2024

The hypothesis test, created using the sample bootstrapping technique, is the final test in this investigation. The study hypothesis can be accepted if the p-value is less than 0.05 and the statistical t-test value is more than 1.96. The study hypothesis is rejected if the p-value is less than 0.05 and the t-test value is less than 1.96 (Ghozali, 2016). Table 5 shows the results of hypothesis testing. A type 1 mistake (False Positive) test was employed in this investigation. This happens when you reject a null hypothesis that turns out to be correct. For instance, there is a 5% possibility of error if $\alpha = 0.05$ is selected. When the test's p-value is very little ($p < 0.05$), the null hypothesis can be rejected with sufficient strength. This does not imply that the findings are unquestionably accurate, however. Type I errors are still possible, and sometimes statistically significant results can be just a matter of chance (Hair & Joseph, 2011).

Table 5. Hypothesis testing

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Results
Communication Process-> Digital Transformation	0.135	0.133	0.114	1.183	0.237	Rejected
Employee Engagement-> Digital Transformation	-0.164	-0.139	0.077	2.133	0.033	Supported
External Environment-> Digital Transformation	0.273	0.272	0.118	2.309	0.021	Supported
Leadership-> Digital Transformation	0.529	0.491	0.163	3.244	0.001	Supported
Organisational Culture-> Digital Transformation	-0.042	-0.002	0.138	0.305	0.760	Rejected
Organisational Structure-> Digital Transformation	-0.001	-0.001	0.166	0.007	0.995	Rejected
Resources-> Digital Transformation	0.051	0.053	0.128	0.399	0.690	Rejected

Source: Smart-PLS analysis results, 2024

Based on the examination of the investigated hypotheses concerning leadership, organisational culture, organisational structure, digital transformation, employee engagement, external environment, communication processes, and resources. Communication Process, Digital Transformation, Employee Engagement, External Environment, Leadership, Organisational Culture, Organisational Structure, and Resources are all supported by this finding. The data positively correlates with a significant t-statistic value ($|O/STDEV|$) of 2,133 for Employee Engagement, 2,309 for External Environment, and 3,244 for Leadership. A substantial p-value is also present (0.033 for leadership, 0.021 for command style, and 0.001 for employee engagement). Since the independent variable's standardised regression coefficient is more minor than the P value of 0.05, it may be concluded that they significantly impact the dependent variables (Ghozali, 2016).

Table 5 shows that the employee engagement variable has a relatively strong influence on the digital transformation variable with p-values of 0.033. Furthermore, the external environment variable has a relatively strong influence on the digital transformation variable with p values of 0.021, and the leadership variable has a relatively strong influence on the digital transformation variable with p values of 0.001. Thus, it is conveyed that the three variables (employee engagement, external environment, and leadership) are based on the p-value of the hypothesis test results significant to the dependent variable (digital transformation). Based on these results, employee engagement in increasing digital transformation readiness is critical. However, the government should also consider other factors, such as infrastructure and training, which may be more critical in driving digital change. Additionally, the push from operating in a challenging environment such as a highly competitive market or emerging technology may feel additional pressure to undergo digital transformation to thrive. Poor change management or a lack of strategic vision are common problems digital transformation encounters. As a result, strong leadership is crucial for advancing digital transformation projects.

Nevertheless, the hypothesis confirms that the communication process has a positive and substantial impact on the data related to digital transformation. The low t-statistic value (1.183) and high p-value (0.237) of the communication process, the low t-statistic value (0.305) and high p-value (0.760) of organisational culture, the low t-statistic value (0.007) and high p-value (0.995) of organisational structure, and the low t-statistic (0.399) and high p-value (0.690) of resources are the reasons to reject the data. This indicates that organisational culture, structure, communication process, and resources do not significantly and positively affect digital transformation. This is possible because various reasons, including measurement issues, confounding variables, or insufficient statistical power, can cause a lack of significance. Then, this investigation shows that elements such as leadership, external environment, and employee engagement significantly affect digital transformation.

Theoretical Discussion and Implication

This research examined seven variables: leadership, organisational culture, organisational structure, communication processes, employee involvement, resources, and external environment that influence the success of digital transformation in the tourism industry (Guntur et al., 2018). The success of the digital transformation of tourism in Ponorogo Regency is dependent on the outcomes of data processing using smart-pls and the analysis of hypothesis testing about leadership, organisational culture, organisational structure, communication process, employee involvement, resources, and the external environment. To support the success of the digital transformation of tourism, the study's findings corroborate the following hypotheses: leadership, organisational culture, organisational structure, communication process, employee involvement, resources, and external environment.

The findings of the leadership hypothesis test (H1), which has a significant p-value of 0.001 and a t-statistic value ($|O/STDEV|$) of 3.144, indicate that the leadership hypothesis has a positive and significant impact on the success of digital transformation in the tourism industry. This study shows that successful leadership is essential to the digital transformation process. Digital leaders can accelerate organisational change (Lee et al., 2024). Policies and guidelines on the required digital transformation can be provided through transformational leadership. Meanwhile, Liu et al. (2024), in today's rapidly evolving digital landscape, leaders must be able to manage change and adapt to new technologies. However, existing leadership characteristics (e.g., transformational or collaborative leadership styles) may be sufficient to drive change, so further increases in these variables do not significantly impact digital transformation.

The employee engagement hypothesis has a positive and significant impact on the success of digital transformation in tourism, according to the employee engagement hypothesis test (H5) results, which had a statistical value ($|O/STDEV|$) of 2.133 and a significant p-value of 0.033. This research demonstrates how vital employee involvement is to the success of digital transformation. According to Winasis et al. (2021), Businesses undertaking changes must ensure that levels are maintained because staff involvement impacts service quality. Employee participation will ensure that the changes will provide the company's best results and boost productivity and profitability. According to Qiao et al. (2024) Employee output refers to how employees fulfil their work obligations and responsibilities, while performance refers to quantifiable behaviour or outcomes. While role leadership is crucial for employee success, other factors from the company, the employee, or external sources can also impact employee performance.

The results of the following hypothesis test demonstrate that the external environment (H7) hypothesis considerably and favourably affects the success of digital transformation in the travel and tourism industry, with a statistical value ($|O/STDEV|$) of 2,309 and a significant p-value of 0.021. This outcome shows how crucial the outside world is to the success of digital transformation. According to Bulgakov Makarenko (2022), The external environment employed for digital transformation in the procurement process must be better monitored to increase the process's contribution. Because Wang & Chen (2022), Digital transformation significantly changes process control and increases the need to monitor the external environment.

The results for the Organisational Culture (H2), Organisational Structure (H3), Communication Process (H4), and Resource (H6) hypotheses were rejected due to the high p-value and t-statistic value. Communication Process had a low t-statistic value (1.183) and a high p-value (0.237). In contrast, Organisational Culture scored 0.305 and had a high p-value (0.760), Organisational Structure scored 0.007 and had a high p-value (0.995), and Resources scored 0.399 and had a high p-value (0.690). These findings demonstrate that a successful digital transition does not require company culture, communication procedures, resources, or structure.

Organisational culture is rejected, perhaps because it would be difficult for businesses without an innovative culture to leverage technology to increase productivity or provide better services (Wang & Chen, 2022). In this case, it is known that Ponorogo is a city that relies more on local attractions and domestic visitors. Artificial tourism, such as the Reog monument, cultural tourism, such as the Ponorogo Reog, and natural tourism, such as Telaga Ngebel, are tourism icons in Ponorogo (Dewi et al., 2022). Digital transformation in digital marketing, destination management, and tourist engagement is very relevant (Arenal et al., 2024). However, the organisational culture in this tourism sector may be more focused on cultural management and

traditional marketing, which can limit technology adoption. Other challenges, such as limited digital infrastructure and uneven networks, can explain why an organisational culture that supports change may not be enough to drive digital transformation significantly.

This study provides substantial contributions to the elements that influence the success of digital transformation in Ponorogo Regency or other district or city levels. It examines the technological and managerial elements that influence the level of success of digital transformation in the travel and tourism industry. This study offers a theoretical framework for practitioners and policymakers to improve data integration and coordination among government agencies and create a more responsive ecosystem to potential policies or initiatives.

This report offers valuable direction and advice for local governments on preparing and executing content while creating digital transformation policies in the tourism industry. It provides case studies, best practices, and implementation models. Governments can also use this study to speed up decision-making, lessen the adverse effects of change, and increase operational efficiency.

The implications of this study can help develop the idea of digital transformation in the tourism industry, especially in terms of regions. The study's findings can help improve our understanding of the components that influence the success of digital transformation and how it impacts the competitiveness of tourist destinations. This study can also serve as a basis for creating a more comprehensive model or framework for managing digital transformation in the tourism industry. This study can help local governments, the tourism industry, and other stakeholders create successful digital transformation strategies and programs.

The study results can be used to determine investment priorities, choose the right digital platforms, and improve the ability of human resources to use digital technology. This study can also potentially drive progress in developing digital-based tourism products and services, such as mobile applications, virtual tours, and online booking systems. It has the potential to increase public awareness of the importance of sustainable tourism and encourage environmentally friendly and responsible tourism habits.

CONCLUSION

This study was conducted based on the results of implementing digital transformation in the tourism sector in Ponorogo Regency by examining the variables that influence the digital transformation of the tourism industry in Ponorogo Regency and highlighting the contextual factors that influence the relationship. The results of processing this research data from cases in the digital transformation of the tourism sector in Ponorogo Regency show that leadership factors, employee involvement, and the external environment greatly influence the transformation process. This is based on the assumption that the three variables will obtain values below the p-value test limit of 0.05. Then, the digital transformation of the tourism industry in Ponorogo Regency is not significantly influenced by organisational culture, structure, communication strategy, or resources because the values exceed the p-value test threshold of 0.05. Additional factors, such as the lack of adequate and uneven infrastructure in Ponorogo or the absence of correlation between the variables studied, can also contribute to non-specific results.

The limitations of this study include the inability to measure and identify complex variables (such as organisational culture and leadership), limited samples that may not be representative, difficulties in connecting interacting variables, and external influences that are difficult to measure in the Ponorogo Regency. Future research should consider more comprehensive and in-depth data collection and test more complex relationships between variables using more advanced analysis techniques, such as structural models or longitudinal approaches, to understand better the success factors of digital transformation in the tourism industry.

REFERENCES

- Afuan, M., Ali, H., & Zefriyenni. (2024). Determination of Performance Through Job Satisfaction: Competence, Motivation and Organizational Commitment at the Central Statistics Agency in West Sumatra. *Qubahan Academic Journal*, 4(3), 662-677. <https://doi.org/10.48161/qaj.v4n3a810>
- Alghanayem, H., Lamberti, G., & López-Sintas, J. (2023). A dark side of retargeting? How advertisements that follow users affect post-purchase consumer behavior: Evidence from the tourism industry in Saudi Arabia. *Innovative Marketing*, 19(4), 234-246. [https://doi.org/10.21511/im.19\(4\).2023.19](https://doi.org/10.21511/im.19(4).2023.19)

- Arenal, A., Armuna, C., Ramos, S., Feijoo, C., & Aguado, J. M. (2024). Digital transformation, blockchain, and the music industry: A review from the perspective of performers' collective management organizations. *Telecommunications Policy*, 48(8), 102817. <https://doi.org/10.1016/j.telpol.2024.102817>
- Bulgakov, S., & Makarenko, E. (2022). The Development of an Integrated External Environment Monitoring Framework Aimed at the Internal Control of the Procurement Process of Fat and Oil Companies. *Journal of Risk and Financial Management*, 15(2). <https://doi.org/10.3390/jrfm15020050>
- Busulwa, R., Pickering, M., & Pathiranage, N. W. (2024). Readiness of hospitality and tourism curricula for digital transformation. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 35(June), 100519. <https://doi.org/10.1016/j.jhlste.2024.100519>
- Cakrawala. (2025). Monumen Reog Ponorogo Dapat Suntikan Dana Dari Pemerintah Pusat. Retrieved from <https://cakrawala7.com/monumen-reog-ponorogo-dapat-suntikan-dana-dari-pemerintah-pusat/>
- Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. *Modern Methods for Business Research*, 295, 336.
- Crusoe, J., Magnusson, J., & Eklund, J. (2024). Digital transformation decoupling: The impact of willful ignorance on public sector digital transformation. *Government Information Quarterly*, 41(3), 101958. <https://doi.org/10.1016/j.giq.2024.101958>
- Dewi, D. S. K., Harsono, J., Desriyanti, D., Yulianti, D. B., & Azhar, I. Y. (2022). The Development of Website-based Ngebel Tourism from an E-Government Perspective. *Otoritas: Jurnal Ilmu Pemerintahan*, 12(1), 30-40. <https://doi.org/10.26618/ojip.v12i1.6127>
- Fornell, C., & Larcker, D. F. (2018). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Ghozali, I. (2016). *Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23 (8th ed.)*. Badan Penerbit universitas dipo.
- Guntur Muh, A., & Andi Cudai Nur. (2018). Pengembangan dan Perubahan Organisasi, 12-18. Retrieved from https://eprints.unm.ac.id/22577/5/Buku_Pengembangan_dan_Perubahan_Organisasi.pdf
- Hair, J., & Joseph, F. (2011). *Multivariate Data Analysis. Fifth Edition*. New Jersey: PrenticeHall, Inc.
- Iqbal, S., Martins, J. M., Mata, M. N., Naz, S., Akhtar, S., & Abreu, A. (2021). Linking entrepreneurial orientation with innovation performance in SMEs; the role of organizational commitment and transformational leadership using smart pls-sem. *Sustainability (Switzerland)*, 13(8), 1-18. <https://doi.org/10.3390/su13084361>
- Latief, F., Mus, A. R., Amang, B., Hasan, S., & Mahmud, A. (2024). Applying Technology Acceptance Model Theory on Distributing Electronic Money the Role of Intention Power. *Journal of Ecohumanism*, 3(4), 541-552. <https://doi.org/10.62754/joe.v3i4.3583>
- Li, H., Liu, J., Liu, Y., Yang, G., Zhang, L., & Yang, X. (2024). Can Digital Transformation Drive Green Innovation in China's Construction Industry under a Dual-Carbon Vision? *Sustainability (Switzerland)*, 16(18). <https://doi.org/10.3390/su16188042>
- Liu, T., & Qi, J. (2024). The Mechanism of Enterprise Digital Transformation on Resilience from the Perspective of Financial Sustainability. *Sustainability*, 16(17), 7409. <https://doi.org/10.3390/su16177409>
- Mandra Prakosa, R., & Intan Ravanza Rindiana. (2023). Analisis Implementasi E-Government Pemerintah Provinsi Bali dalam Pengelolaan Pariwisata Berbasis Digital. *Journal of Governance Innovation*, 5(2), 290-307. <https://doi.org/10.36636/jogiv.v5i2.2917>
- Memon, A. H., & Rahman, I. A. (2014). SEM-PLS analysis of inhibiting factors of cost performance for large construction projects in Malaysia: Perspective of clients and consultants. *The Scientific World Journal*, 2014. <https://doi.org/10.1155/2014/165158>
- Nurfaidah, G. D. S., Nasution, R. D., Hilman, Y. A., & ... (2024). Upaya Dinas Pariwisata dalam Meningkatkan Resiliensi Pengrajin Reyog di Kabupaten Ponorogo. *Jurnal Nasional ...*, 14(April), 65-79. Retrieved from https://journal.ugm.ac.id/tourism_pariwisata/article/view/65-79%0Ahttps://journal.ugm.ac.id/tourism_pariwisata/article/viewFile/65-79/39591
- Palupi, D. A., & Sitaviana, S. (2022). Optimalisasi Pariwisata Telaga Ngebel Ponorogo melalui Ekonomi Kreatif Pasca Pandemi. *Jurnal Pemberdayaan Masyarakat Indonesia*, 4(1), 53-65. <https://doi.org/10.21632/jpmi.4.1.53-65>
- Peraturan Bupati. (2019). Road Map Reformasi Birokrasi Pemerintah Kabupaen Ponorogo Tahun 2019-2021.
- Qiao, G., Li, Y., & Hong, A. (2024). The Strategic Role of Digital Transformation: Leveraging Digital Leadership to Enhance Employee Performance and Organizational Commitment in the Digital Era. *Systems*, 12(11). <https://doi.org/10.3390/systems12110457>
- Rinchen, S., Banihashemi, S., & Alkilani, S. (2024). Driving digital transformation in construction: Strategic insights into building information modeling adoption in developing countries. *Project Leadership and Society*, 5(January), 100138. <https://doi.org/10.1016/j.plas.2024.100138>
- Rizky, F., Frinaldi, A., & Putri, N. E. (2019). Penerapan E-Government Dalam Promosi Pariwisata Melalui Website Oleh Dinas Kebudayaan Dan Pariwisata Kota Padang. *Ranah Research: Journal of ...*, 507-514. Retrieved from <https://jurnal.ranahresearch.com/index.php/R2J/article/view/85>
- Sarstedt, M., R., & Chair, J. (2021). Partial least squares structural equation modeling. https://doi.org/10.1007/978-3-319-05542-8_15-2
- Sekaran, U., & Bougie, R. J. (2016). *Research methods for business: A skill building approach (7th ed.)*. John Wiley & Sons inc.
- Silaparasetti, V., Srinivasarao, G. V. R., & Khan, F. R. (2017). Structural Equation Modeling Analysis Using Smart Pls To Assess the Occupational Health and Safety (Ohs) Factors on Workers'Behavior. *Humanities & Social Sciences Reviews*, 5(2), 88-97. <https://doi.org/10.18510/hssr.2017.524>
- Sujono, R. I., Wibowo, A., Maula, D. I., Khodijah, A. S., Allia, N. N., Trisnawati, Q. D., & Sari, R. P. (2024). Maintaining sustainable use of the Indonesian telecommunications provider. *Jurnal Studi Komunikasi (Indonesian Journal of Communications Studies)*, 8(1), 042-052. <https://doi.org/10.25139/jsk.v8i1.6246>
- Sun, Z., Hu, D., & Lou, X. (2024). The Impact of Digital Transformation on the Sustainable Growth of Specialized, Refined, Differentiated, and Innovative Enterprises: Based on the Perspective of Dynamic Capability Theory. *Sustainability*, 16(17), 7823. <https://doi.org/10.3390/su16177823>

- Syahid Noor, T. B. D. F., Hamsal, M., Abdinagoro, S. B., & Raharjana, D. T. (2024). Community Value Co-Creation as a Catalyst for Village Tourism Sustainability: A New Paradigm. *Journal of Ecohumanism*, 3(8), 18-33. <https://doi.org/10.62754/joe.v3i8.4708>
- Triwiyanto, T., Kusumaningrum, D. E., Sobri, A. Y., & Maitreephun, W. (2024). Accountability management system of superior elementary school for digital transformation. *Journal of Education and Learning*, 18(4), 1514-1526. <https://doi.org/10.11591/edulearn.v18i4.21692>
- Wang, D., & Chen, S. (2022). Digital Transformation and Enterprise Resilience: Evidence from China. *Sustainability (Switzerland)*, 14(21). <https://doi.org/10.3390/su142114218>
- Werthner, H. (2022). A digital humanism view on e-tourism. *Information Technology and Tourism*, 24(3), 347-360. <https://doi.org/10.1007/s40558-022-00237-6>
- Winasis, S., Djumarno, Riyanto, S., & Ariyanto, E. (2021). The effect of transformational leadership climate on employee engagement during digital transformation in Indonesian banking industry. *International Journal of Data and Network Science*, 5(2), 91-96. <https://doi.org/10.5267/j.ijdns.2021.3.001>
- Xu, L., Zhou, Y., & Chen, L. (2024). Digital Transformation and Breakthrough Innovation in Chinese Manufacturing Firms: Based on Ability-Motivation-Opportunity (AMO) Framework of Human Capital. *SAGE Open*, 14(3), 1-18. <https://doi.org/10.1177/21582440241264348>
- Yaacob, N. A., Ab Latif, Z., Abdul Mutalib, A., & Ismail, Z. (2021). Farmers' Intention in Applying Food Waste as Fertilizer: Reliability and Validity Using Smart-PLS. *Asian Journal of Vocational Education and Humanities*, 2(2), 27-34. <https://doi.org/10.53797/ajvah.v2i2.5.2021>