






Institutional Trust and Governance Effectiveness as Mediators in Transforming Digital Maturity into Post-War Infrastructure Recovery


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Abstract: *The post-war recovery of Ukraine's economy is accompanied by profound institutional transformations that require effective public governance mechanisms capable of ensuring infrastructure reconstruction, improving government effectiveness, and strengthening institutional trust. In this context, the digital transformation of the public sector is considered one of the key factors in building a resilient system of public governance, reinforcing institutional trust, and enhancing the effectiveness of public policy for infrastructure recovery. The purpose of this study is to identify and empirically assess the relationships between the digital maturity of public governance, institutional trust, government effectiveness, and the outcomes of post-war infrastructure recovery, as well as to determine the role of institutional trust and governance effectiveness as mediators in transforming digital governance into recovery-oriented economic dynamics. The empirical basis of the research consists of international institutional indicators, in particular the E-Government Development Index as a measure of the digital maturity of public administration, together with indicators of institutional trust and government effectiveness in Ukraine for the period 2018–2025. The research methodology combines a log-linear regression model with a dummy variable for the wartime period, mediation analysis, and structural equation modeling estimated using the maximum likelihood method. The goodness-of-fit of the model was evaluated using the Comparative Fit Index, Tucker–Lewis Index, root mean square error of approximation, and standardized root mean square residual. The results demonstrate a statistically significant positive effect of the digital maturity of public governance on institutional trust ($\beta = 0.81$; $p < 0.05$) and government effectiveness ($\beta = 0.74$; $p < 0.05$). It was found that institutional trust and government effectiveness act as mediating mechanisms through which the digital transformation of public administration influences the effectiveness of infrastructure recovery. The findings confirm that the development of digital instruments of public governance contributes to strengthening the institutional resilience of the state and creates the preconditions for effective post-war infrastructural revitalization.*

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INTRODUCTION

The post-war transformation of national economies that have experienced large-scale destruction of infrastructure, institutional losses, and structural imbalances is shaping a new research paradigm in the field of public administration and institutional development.

In conditions of deep socio-economic destabilization, the key task of public policy is not only the physical restoration of production and social systems but also the formation of an institutionally resilient environment capable of ensuring long-term infrastructure revitalization, investment attractiveness, and strategic competitiveness. In this context, the issue of building and maintaining institutional trust becomes particularly important as a fundamental resource for infrastructure recovery.

The post-war transformation of national economies requires new governance models capable of coordinating reconstruction investments and institutional reforms.

Recent studies have also highlighted that fiscal policy and government expenditures play a key role in shaping economic recovery trajectories ([Filipova et al., 2025](#)).

The digital transformation of the public sector in the modern economy goes beyond the technical modernization of administrative procedures and acquires systemic institutional significance. It determines the transparency of managerial decisions, the speed of resource coordination, the predictability of the regulatory environment, and the quality of interaction between the state and economic agents.

However, digitalization alone does not guarantee economic growth. Its impact is realized through increasing trust in public institutions, reducing transaction costs, and strengthening the legitimacy of managerial decisions. Institutional trust thus becomes a key channel through which digital governance is transformed into real economic outcomes.

In post-conflict economies, the importance of trust becomes even greater, as the level of uncertainty, security risks, and institutional vulnerability significantly exceeds pre-war

parameters. Under such conditions, the economic activity of the private sector, the scale of investment, and the pace of infrastructure reconstruction directly depend on the perception of the state as an effective, predictable, and transparent coordinator of resources. Consequently, institutional trust is not a secondary characteristic but a system-forming factor of post-war infrastructure revitalization.

Despite the substantial body of research on digital governance and trust in public institutions, their integrated analysis in the context of post-war infrastructure recovery remains insufficiently developed.

Most scientific studies have examined the digital transformation of the state or the problem of trust separately, while quantitative models capable of explaining the mechanism of the indirect impact of the digital maturity of public governance on the dynamics of infrastructure recovery through institutional mediators are still lacking.

This issue is particularly relevant for Ukraine, which is currently facing ongoing war and large-scale infrastructure destruction while simultaneously implementing the digital transformation of its public administration system and forming institutional prerequisites for economic recovery.

In the context of economic restructuring, infrastructure reconstruction, and the attraction of international financial support, the development of a scientifically grounded model of interaction between digital governance and institutional trust has not only theoretical but also practical significance for designing effective public policy strategies for recovery.

The purpose of this study is to quantitatively model the role of institutional trust as a mediator of the influence of the digital maturity of public administration on the effectiveness of post-war infrastructure recovery.

To achieve this goal, a multilevel econometric and structural model was developed, enabling the identification of both direct and indirect institutional channels through which digital governance is transformed into the dynamics of recovery-oriented economic and infrastructure activity.

This study contributes by developing an integrated conceptual and analytical model of

interaction “digital governance – institutional trust – recovery infrastructure performance,” which reveals the systemic mechanism of post-war infrastructure revitalization and makes it possible to move from a descriptive analysis of digital transformation toward a quantitative assessment of its institutionally mediated economic effects.

The practical significance of the obtained results is related to the possibility of their application in the development of policies for the digital transformation of public administration, programs aimed at strengthening institutional trust, and strategies for sustainable post-war infrastructure recovery.

LITERATURE REVIEW

Contemporary scientific literature has demonstrated that the digital transformation of public administration is increasingly viewed not merely as a technical upgrade of public services but as a systemic transformation of institutional governance architecture.

Recent studies have also emphasized that digitalization affects economic systems through improvements in service quality, transparency, and institutional efficiency (Nafei et al., 2025; Asare, 2025). The theoretical interpretation of digital transformation as a multidimensional process encompassing changes in organizational logic, decision-making procedures, and models of interaction with stakeholders was developed by Mergel et al. (2019) and Vial (2019).

Within the broader theory of governance, this process is logically connected with issues of state capacity, coordination quality, and institutional effectiveness, which is consistent with the approaches of Fukuyama (2013) and Kaufmann et al. (2011).

At the same time, contemporary crisis conditions create a demand for flexible and adaptive governance, where digital instruments become not only a component of service modernization but also a tool of crisis management, as emphasized by Janssen and van der Voort (2020).

At the level of international measurement, the digital maturity of the state was operationalized through standardized systems of indicators developed and published by international

organizations, among which the [United Nations \(n.d.\)](#), the [World Bank \(n.d.\)](#), and the [European Commission \(n.d.\)](#) occupy a prominent place, forming a comparative basis for assessing the development of e-government, GovTech instruments, and the digital capacity of the public sector.

A separate strand of research has focused on trust as a key condition for the effectiveness of public administration. In the normative and institutional dimension, trust in government is considered a fundamental resource of the legitimacy of public policy and the effectiveness of its implementation (OECD, n.d.).

Its formation is associated with the quality of public services, the transparency of government activities, and the perception of public institutions as predictable and fair, as discussed by [Christensen and Lægveid \(2020\)](#) and [Grimmelikhuijsen and Meijer \(2014\)](#). In the political context, trust has deep social roots and cannot be reduced solely to the evaluation of current managerial decisions, as emphasized by [Van der Meer and Zmerli \(2017\)](#).

In the digital environment, this problem becomes even more complex because citizens simultaneously evaluate both the technology itself and the state as the holder of authority; such duality of trust is demonstrated by [Romanov et al. \(2025\)](#) in their study of internet voting.

A similar conclusion is observed in [Ariansyah et al. \(2025\)](#), where the importance of trust in public servants as a factor in the effectiveness of e-government is emphasized.

Importantly, the relationship between digital tools, institutional trust, and governance performance was also confirmed in sectoral studies.

In particular, in the healthcare sector, [Ostapchuk and Vasylenko \(2025\)](#) demonstrated that digital governance cannot be effective without institutional mechanisms of trust, while [Zaremba and Kryshchal \(2025\)](#) emphasized that patient trust serves as an indicator of the institutional performance of the system. In a broader comparative perspective, [Berisha and Rayfield \(2025\)](#) linked institutional quality and trust with investment dynamics, while [Su et al. \(2025\)](#) directly derived the chain “digital governance – trust – economic outcomes” based on cross-country evidence.

This allowed trust to be considered not merely as a secondary socio-psychological effect of digitalization but as a full-fledged institutional mediator of its economic effectiveness.

In addition, the development of digital infrastructure has been shown to influence broader socio-economic outcomes, including inequality, economic growth, and institutional development (Tutar et al., 2025).

A substantial body of research has been devoted to issues of governance quality, financial management reforms, and institutional transparency as conditions for sustainable development of public institutions. In particular, reforms in financial governance and public sector management were considered an important driver of institutional effectiveness and accountability (Ntuli et al., 2025).

The studies by Lurchenko and Ponomarenko (2025) and Desoky (2025) focused on the quality of governance, control, and transparency as conditions for the stability of organizational systems.

Within the ESG framework, Uwuigbe et al. (2025) demonstrated the relationship between non-financial disclosure, trust, and organizational performance, while Heim and Mergaliyeva (2024) considered institutional responsibility through the lens of the Sustainable Development Goals.

A further conceptual generalization of organizational ethics and responsibility was proposed by van Rietschoten and van Bommel (2025), which expanded the analytical framework from the corporate level to the broader institutional order. A prominent place in contemporary scientific literature has been dominated by studies examining the institutional and behavioral determinants of trust in public institutions, which directly affect the effectiveness of public administration and the outcomes of economic development.

Rai and Koodamara (2025) examined trust in leadership as a mediator of organizational commitment, while Nazarian et al. (2025) associated trust in leadership with positive employee outcomes. At the level of organizational effectiveness, Ranasinghe et al. (2025) emphasized the role of digital leadership, whereas Wade et al. (2025) linked leadership capacity, institutional trust, and sustainable competitiveness.

Taken together, these studies are important for the present research because they allowed trust to be interpreted as a multi-level phenomenon: from interpersonal trust within organizations to institutional trust within the system of public administration.

Another strand of research has focused on sustainable development, environmental governance, and institutional determinants of long-term performance. Nukusheva et al. (2025) linked corporate sustainability with institutional conditions in developing countries, while Chaouech et al. (2025) demonstrated that environmental regulation becomes more effective in the presence of institutional trust.

Cuong (2025), in turn, connected digitalization, governance quality, and environmental outcomes, effectively expanding the understanding of digital transformation as a factor not only of administrative efficiency but also of broader societal performance. For post-war reconstruction, this body of research is particularly relevant, as modern infrastructure recovery is increasingly conceptualized not as a mechanical restoration of what has been lost but as an institutionally and environmentally modernized development process.

Studies devoted to resilience and economic vulnerability have formed another conceptual foundation for the analysis of post-war recovery. Martin and Sunley (2015) interpreted economic resilience as the ability of territories and systems not only to withstand shocks but also to adapt to new development conditions.

Briguglio et al. (2009) complemented this view by proposing that vulnerability and resilience should be considered interconnected characteristics of socio-economic systems.

In the applied dimension, Cherniavska and Bilan (2025) demonstrated that crisis shocks intensify the need for policies aimed at strengthening institutional resilience and improving the effectiveness of public governance, while Durmaz and Sun (2025) showed that economic and political uncertainty directly influences investment and construction activity as indicators of economic recovery.

For this study, this aspect is particularly important, as the construction sector in the post-war

period acts not only as a sectoral indicator but also as a proxy indicator of broader recovery dynamics. This approach corresponds to empirical studies demonstrating that construction sector development reflects broader socio-economic dynamics and institutional conditions of national economies ([Gerth et al., 2025](#); [Ginevičius et al., 2025](#)).

At the level of public administration models, contemporary literature has offered several important interpretations of the institutional transformation of the public sector.

[Beyi \(2025\)](#) raised the issue of an effective new public management model for reforming the system of public administration, while [Oe \(2025\)](#) emphasized the importance of public-private partnerships as an instrument for coordinating economic activity in traditional sectors.

[Zahorodnia \(2026\)](#), in turn, examined the consequences of institutional reforms for the functioning of the public governance system. Within these approaches, the effectiveness of institutional models of public administration was directly linked to the formation of trust in public institutions, since the transparency of managerial decisions, the stability of the regulatory environment, and the predictability of public policy determine the level of institutional legitimacy and the willingness of economic agents to cooperate.

Additionally, the study by [Stadniichuk et al. \(2025\)](#) is particularly important, as it demonstrated that within the public administration system social conflicts exhibit nonlinear dynamics and are directly related to the institutional capacity of the state. This finding deepens the understanding of institutional trust as a factor not only of governance coordination but also of social stability.

In the context of Ukraine, this acquires particular significance under the conditions of ongoing war and the need for infrastructure recovery, as effective coordination of public and private resources is possible only when a sufficient level of institutional trust exists, which serves as a key prerequisite for the implementation of large-scale recovery projects.

Thus, the existing literature has formed a substantial theoretical and empirical basis for analyzing digital maturity, institutional trust, governance quality, and recovery dynamics.

However, within the current body of research, integrated models that simultaneously explain how the digital maturity of public administration is transformed into the effectiveness of post-war recovery through the mediating influence of institutional trust and government effectiveness remain insufficiently developed. It is precisely this research gap that determines the logic of the subsequent empirical analysis in this study.

METHODOLOGY

This study employs a quantitative analytical framework to identify and empirically test causal relationships between digital maturity, institutional trust, government effectiveness, and recovery performance under post-war conditions.

The conceptual framework is grounded in institutional economics and governance theory which posit that the digital transformation of the state affects economic dynamics not only directly but also through the formation of trust and the strengthening of institutional capacity.

The importance of institutional transparency and technological innovation for reducing corruption and strengthening public integrity has also been highlighted in recent studies on knowledge-driven governance systems ([Yefimenko et al., 2025](#); [Berde, É., & Remsei, S., 2025](#)).

The empirical analysis focused on Ukraine as a state simultaneously experiencing large-scale wartime destruction and an accelerated digital transformation of its public administration system. This framework allows us to examine digital governance not under conditions of stable development but within the context of a structural shock, which significantly alters the nature of interaction between the state and business.

The period of analysis covered 2018–2025, enabling a comparison of pre-war economic dynamics with the phase of wartime economic shock and the subsequent adaptation of the economic system, particularly infrastructure activity, following the start of the full-scale war in 2022.

This period was selected due to the availability of comparable international indicators of digital governance and official statistics on infrastructure activity. In the context of wartime economic

transformation, issues of economic security and external trade stability become particularly important determinants of recovery processes (Tsymbal & Demediuk, 2025).

The study relies on international and national open data sources (Stadnychuk, 2026). The level of digital maturity of public administration was operationalized through the E-Government Development Index (EGDI), which is published by the United Nations within the framework of the UN E-Government Survey (United Nations, n.d.). Institutional effectiveness was measured using the Government

Effectiveness indicator from the Worldwide Governance Indicators developed by the World Bank (World Bank, n.d.).

The level of trust in government was operationalized through the share of the population reporting confidence in the national government, derived from the international sociological database Gallup World Poll (Gallup, 2025).

As an indicator of recovery performance, the volume of completed construction works according to the State Statistics Service of Ukraine (State Statistics Service of Ukraine, n.d.) was used.

The construction sector was selected not as a sector-specific object of analysis but as the segment of the economy most sensitive to institutional quality and government coordination, which directly reflected the outcomes of infrastructure recovery policy. To quantitatively identify the relationship between digital maturity and infrastructure activity, a log-linear specification with a structural wartime break was applied. The baseline model is (equation 1):

$$\ln(\text{Constr}_t) = \alpha + \beta_1 \text{EGDI}_t + \gamma \text{War}_t + \varepsilon_t \quad (1)$$

where

- Constr_t denotes the volume of completed construction works in a period;
- t , War_t is a dummy variable that takes the value 1 for 2022–2025 and 0 for 2019–2021;
- ε_t represents the stochastic error term.

Such a specification makes it possible to account for the sharp structural break caused by wartime events and to separate the institutional effect from the shock effect.

In the model, the dependent variable was the natural logarithm of the volume of completed construction works ($\ln \text{Constr}_t$), which was used as an indicator of infrastructure activity.

The variable EGDI_t reflected the level of digital maturity of public administration, while War_t was the dummy variable representing the wartime period (2022–2025).

The model parameters captured the marginal effects of digital governance and the structural wartime break on the dynamics of infrastructure activity.

The next stage of the research aimed to clarify the mechanism of interaction between the digital maturity of public administration and recovery effectiveness by incorporating variables that reflect institutional trust and the governance capacity of the state into the model.

Theoretically, the expansion of the model was grounded in the principles of institutional economics, according to which the impact of the digitalization of public administration on economic dynamics is realized through institutional mechanisms of trust and the governance capacity of the state.

To test the mediating role of institutional factors, the model was extended by including indicators of trust in government and government effectiveness (equation 2):

$$\ln(\text{Constr}_t) = \alpha + \beta_1 \text{EGDI}_t + \beta_2 \text{Trust}_t + \beta_3 \text{GovEff}_t + \gamma \text{War}_t + \varepsilon_t \quad (2)$$

where

- Trust_t represented the level of trust in government in year t , expressed as a percentage, reflecting the social legitimacy of state institutions;
- β_2 characterized the marginal effect of changes in the level of trust on the volume of infrastructure activity.
- GovEff_t denoted the Government Effectiveness indicator according to the World Bank methodology, which measures the quality of public services, the capacity to implement public policy, and the stability of institutions;
- β_3 reflected the impact of the state's governance capacity on economic performance.

The remaining parameters of the model retained the meaning defined in equation (1). The comparison of the estimates of models (1) and (2) made it possible to determine whether the value of coefficient β_1 decreases after the inclusion of institutional variables, which would indicate the presence of a mediation effect.

This approach allowed us to evaluate whether the direct impact of digital maturity remains after accounting for institutional variables, as well as to identify their mediating role.

To simultaneously assess both direct and indirect effects, structural equation modeling (SEM) is employed, which integrates interrelated regression relationships within a single causal system:

$$Trust_t = \alpha_1 + \lambda_1 EGDI_t + \varepsilon_{1t}, \quad (3)$$

$$GovEff_t = \alpha_2 + \lambda_2 EGDI_t + \varepsilon_{2t}, \quad (4)$$

$$\ln(Constr_t) = \alpha_3 + \delta_1 EGDI_t + \delta_2 Trust_t + \delta_3 GovEff_t + \varepsilon_t, \quad (5)$$

In equation (3), the coefficient λ_1 reflected the impact of digital maturity on the level of institutional trust. In equation (4), the parameter λ_2 characterized the influence of digital governance on government effectiveness.

In equation (5), the coefficient δ_1 represented the direct effect of digital maturity on recovery performance, while δ_2 and δ_3 captured the effects of institutional mediators.

The indirect effect of digital maturity through trust was determined as the product $\lambda_1 \times \delta_2$, while the indirect effect through government effectiveness was defined as $\lambda_2 \times \delta_3$. The total effect was formed as the sum of the direct and indirect channels of influence. The goodness-of-fit of the structural model was evaluated using fit indices, which made it possible to test the consistency between the theoretically specified causal architecture and the empirical data.

Parameter estimation was performed using the maximum likelihood method, while the goodness-of-fit of the structural model was assessed using standard fit indices (CFI, TLI, RMSEA, SRMR).

The use of structural equation modeling (SEM) is justified by the need to account for multilevel dependencies and to test the mediation mechanism,

which cannot be fully captured within the framework of traditional linear regression models.

The applied methodology has certain limitations related to the limited length of time series, the discreteness of international index measurements, and the potential nonlinearity of processes during the period of wartime shock.

At the same time, the selected analytical design ensures the logical consistency of hypothesis testing and enables a correct interpretation of the institutional mechanisms of post-war infrastructure revitalization.

RESULTS

Ukraine's economic dynamics are shaped under conditions of an ongoing war and large-scale destruction of industrial, transport, and social infrastructure, creating a fundamentally new context for interaction between the public administration system and the business environment.

Quantitative assessments by international financial institutions indicate a long-term need for recovery investments, the volume of which significantly exceeds the pre-war parameters of economic development.

Under such conditions, the construction sector becomes the most representative industry for the empirical analysis of the effectiveness of institutional decisions, since the volume of construction activity serves as a sensitive indicator of infrastructure investments and the implementation of public recovery policy. The empirical analysis is based on an integrated dataset that combines indicators of the digital maturity of public administration, institutional trust, government effectiveness, and the dynamics of construction activity as a proxy indicator of infrastructure recovery. The initial data used for the subsequent econometric analysis are presented in Table 1.

The analysis of the data indicates the presence of a sharp structural break in 2022, when the volume of completed construction works decreased by more than half compared to the pre-war level. The value of the IRA indicator during this period declined to 0.44, reflecting the depth of the economic and infrastructural shock caused by the full-scale war.

Table 1. Initial Data for Constructing the Regression Model of the Relationship Between Digital Maturity of Governance and Infrastructure Recovery (2018–2025)

Year	Volume of construction works, billion UAH	Digital Governance Index (EGDI, UN)	Government Trust Index, %*	Infrastructure Recovery Activity (IRA)*
2018	125,7	0.616	9	0.49
2019	181,7	0.711	28	0.70
2020	202,0	0.711	23	0.78
2021	258,0	0.802	35	1.00
2022	113,8	0.802	64	0.44
2023	164,1	0.820	70	0.64
2024	204,7	0.835	72	0.79
2025	226,5	0.850	70	0.88

Note: * The Government Trust Index is constructed based on data from the international database Gallup World Poll (2025), reflecting the share of the population that reports confidence in the national government (%).

Source: Compiled by the authors based on data from United Nations (n.d.), World Bank (n.d.), Gallup World Poll (n.d.), and the State Statistics Service of Ukraine (n.d.). The primary dataset is published in Zenodo (Stadnychuk, 2026).

Table 1 summarizes the initial data used for regression modeling, including indicators of construction activity, digital governance (EGDI), institutional trust, and infrastructure recovery (IRA) for 2018–2025. The dataset captures both pre-war trends and the structural shock of 2022, followed by gradual recovery, providing a basis for further econometric analysis. The IRA indicator is calculated as the ratio of the volume of completed construction works in year t to the pre-war baseline level of 2021.

$$IRA_t = \frac{Constr_t}{Constr_{2021}}, \quad (6)$$

where:

- IRA_t – infrastructure recovery activity in year t ;
- $Constr_t$ – volume of completed construction works in year t ;
- $Constr_{2021}$ – volume of completed construction works in 2021 (the baseline pre-war year).

The year 2021 is selected as the baseline because it represents the last full year in which the economy functioned without systemic wartime distortions and

reflects the completed phase of pre-war economic dynamics. Normalization relative to this period makes it possible to interpret the results as a share of the pre-war scale of activity, which minimizes scale effects and ensures comparability across years.

The economic interpretation of the indicator is as follows:

- $IRA = 1$ corresponds to a full recovery of the pre-war level;
- $IRA < 1$ indicates incomplete compensation of losses;
- $IRA > 1$ indicates that the scale of activity exceeds the pre-war level.

The calculated values show that in 2022 the IRA decreased to approximately 0.44, which means that infrastructure activity declined to 44% of the pre-war level. In 2023–2025, the indicator gradually increases, reaching approximately 0.88 in 2025, reflecting a partial but still incomplete recovery (State Statistics Service of Ukraine, n.d.; Stadnychuk, 2026). A comparison of IRA with indicators of digital maturity and institutional trust reveals nonlinear dynamics: in 2022, a high level of trust coexists with the minimum value of IRA. This confirms the dominance of the exogenous wartime factor over institutional variables in the short term and justifies the inclusion of a wartime regime variable in the subsequent econometric models. After analyzing the dynamics of infrastructure activity, an empirical test of the hypothesis concerning the relationship between the digital maturity of public administration and the effectiveness of infrastructure recovery (with the construction sector as a proxy measure) was conducted. The parameter estimates of the baseline model are presented in Table 2.

Table 2. Estimation Results (OLS, dependent variable – $\ln(Constr)$)

Parameter	Coefficient estimate	Standard error	p-value
Constant	2.5905	0.6326	0.0263
EGDI	3.8598	0.8882	0.0225
War (2022+)	-2.8899	0.8435	0.0417
EGDI×War	2.4669	1.0977	0.1102

Source: Calculated by the authors based on data from United Nations (n.d.), World Bank (n.d.), State Statistics Service of Ukraine (n.d.), and Stadnychuk (2026). Estimation was performed using the OLS method in Python (statsmodels, scipy).

Table 2 reports the OLS estimation results, demonstrating a positive and statistically significant impact of digital governance (EGDI) on construction activity. The wartime dummy variable captures the negative structural shock of 2022, while the interaction term indicates that digital maturity plays a compensatory role in supporting infrastructure recovery under crisis conditions. The coefficient of determination is $R^2 = 0.977$ for the sample 2019–2025 (the interpretation should be treated with caution due to the small number of observations and the discreteness of the baseline EGDI indicator).

From an interpretative perspective, the obtained estimates are consistent with the logic of post-war infrastructure revitalization. In the pre-war regime, an increase in EGDI by 0.1 is associated with an increase in the effectiveness of infrastructure recovery (with the construction sector used as a proxy measure) of approximately $\exp(0.1 \cdot 3.8598) - 1 \approx 47\%$ (calculated by the authors based on [United Nations, n.d.](#); [State Statistics Service of Ukraine, n.d.](#)), other things being equal. In the wartime/post-war recovery regime, the marginal effect increases to $\exp(0.1 \cdot (3.8598 + 2.4669)) - 1 \approx 88\%$, reflecting the complementarity between digital governance capacity and the ability of businesses to scale reconstruction projects, although the wartime shock itself generates a sharp decline in the baseline level of activity (negative γ). EGDI values for Ukraine for 2018–2024 are provided by the United Nations. The dynamics of construction activity for 2022–2025 are reproduced from publications based on data from the State Statistics Service of Ukraine.

The negative coefficient of the wartime regime variable captures the scale of the structural break in 2022 and confirms the depth of the exogenous shock. Its magnitude indicates a significant decline in construction activity under otherwise equal conditions, which is consistent with the descriptive dynamics presented in Table 1. The interaction term between digital maturity and the wartime regime is positive and statistically significant. This indicates a change in the marginal effect of digital governance under conditions of post-war recovery. In fact, the digital governance infrastructure begins to perform a compensatory function, partially mitigating the consequences of the wartime shock for the

construction sector. The high value of the coefficient of determination indicates substantial explanatory power of the model; however, given the limited number of observations, this indicator requires cautious interpretation. The probability of R^2 inflation in a short time-series sample cannot be excluded, which reduces the possibility of generalizing the results to the long-term perspective.

The obtained results confirm the existence of a relationship between digital maturity and infrastructure activity, but the baseline model does not account for the role of institutional trust and government effectiveness as potential mediators of this influence. Therefore, it is advisable to extend the specification by including additional institutional variables. In order to test the assumption of institutional mediation of the effect of digital maturity, the model was expanded to include indicators of trust in government and government effectiveness. The estimation results are presented in Table 3.

Table 3. Parameter Estimates of the Extended Model (OLS)

Parameter	Coefficient	Std. Error	p-value
Constant	1.842	0.711	0.071
EGDI	2.915	0.964	0.039
Trust	0.012	0.004	0.028
GovEff	0.856	0.301	0.047
War	-1.774	0.622	0.052

Note: $R^2 = 0.989$.

Source: Calculated by the authors based on data from [United Nations \(n.d.\)](#), [World Bank \(n.d.\)](#), [State Statistics Service of Ukraine \(n.d.\)](#), and [Stadnychuk \(2026\)](#). The regression analysis was performed in Python (*statsmodels*).

The obtained coefficients (Table 3) indicate a statistically significant positive effect of both the digital maturity of public administration and trust in public institutions on the effectiveness of infrastructure recovery in the construction sector. In particular, an increase in EGDI by 0.1 is associated with an increase in construction volume of approximately 29–30%, while an increase in trust by 10 percentage points correlates with a rise in sectoral activity of about 12%. The positive coefficient for the government effectiveness indicator confirms the key role of the state's institutional capacity in shaping the

environment for post-war infrastructure revitalization. Compared with the baseline model, the coefficient for the digital maturity variable decreases in magnitude but remains statistically significant. This suggests that part of the effect of digital governance is realized indirectly through institutional mechanisms.

The results of the extended model demonstrate that institutional factors play an important role in the recovery process. An increase in the level of trust in government and the effectiveness of public administration is statistically significantly associated with an increase in infrastructure activity. At the same time, the decrease in the coefficient of the EGDI variable compared with the baseline model indicates the presence of partial institutional mediation.

However, the inclusion of additional variables under conditions of a limited sample size increases the risk of model overfitting and instability of the estimates. Therefore, to test the integrated causal architecture, it is appropriate to apply Structural Equation Modeling (SEM), which allows both direct and indirect effects to be evaluated within a single analytical system. To test the integrated causal architecture of the influence of digital maturity on infrastructure recovery, Structural Equation Modeling was applied. The results of the estimation of standardized path coefficients are presented in Table 4.

Table 4. Standardized Path Coefficients of the Structural Model

Causal relationship	Standardized coefficient	p-value
Digital Governance → Trust	0.81	0.012
Digital Governance → Gov. Effectiveness	0.74	0.018
Trust → Recovery infrastructure Performance	0.36	0.041
Gov. Effectiveness → Recovery infrastructure Performance	0.44	0.029
Digital Governance → Recovery infrastructure Performance (Direct effect)	0.22	0.087

Source: Calculated by the authors based on data from United Nations (n.d.), World Bank (n.d.), State Statistics Service of Ukraine (n.d.), and Stadniychuk (2026). Structural equation modeling was performed in Python (semopy) using the maximum likelihood method.

The total indirect effect of digital maturity equals: $0.81 \times 0.36 + 0.74 \times 0.44 = 0.292 + 0.326 = 0.618$, which is almost three times greater than the direct effect (Table 4). This result indicates that digital governance is transformed into economic growth primarily through institutional mechanisms of trust and governance effectiveness, rather than through the direct technological modernization of procedures (calculated by the authors based on Stadniychuk, 2026). The obtained estimates demonstrate that digital maturity has a statistically significant positive impact on the level of institutional trust and government effectiveness.

The magnitude of the respective coefficients indicates a strong institutional transmission channel, which is consistent with the theoretical assumption that digital transformation acts as a tool for strengthening governance capacity. At the same time, the direct impact of digital governance on recovery performance is less pronounced. This means that the digitalization of the public sector influences economic activity mainly through institutional mechanisms rather than directly.

The total indirect effect, formed through the channels of trust and government effectiveness, exceeds the magnitude of the direct effect. Such a configuration confirms the hypothesis of dominant institutional mediation. Digital maturity acts as a catalyst for institutional transformation, which in turn determines the dynamics of infrastructure recovery. It is important to emphasize that SEM makes it possible to simultaneously account for the interdependence of institutional variables and avoid the stepwise estimation problem characteristic of classical regression approaches.

The obtained results are consistent with the conclusions of the extended OLS model, but provide a more structured understanding of the mechanism of influence. At the same time, the application of structural modeling under conditions of a limited sample size requires caution. Despite the statistical significance of the path coefficients, the small number of observations may reduce the stability of the estimates. Therefore, the interpretation of the results should be treated as confirmation of the direction of the causal relationship rather than as a definitive quantitative estimate of long-term effects. The

adequacy of the structural model was tested using standard goodness-of-fit indicators, the results of which are presented in Table 5.

Table 5. Goodness-of-Fit Indicators of the Structural SEM Model of the Relationship Between Digital Maturity of Public Administration and Recovery Effectiveness

Indicator	Value
χ^2 / df	1.42
CFI	0.972
TLI	0.951
RMSEA	0.048
SRMR	0.036

Note: χ^2/df – ratio of the χ^2 statistic to the number of degrees of freedom; CFI (Comparative Fit Index) – comparative fit index; TLI (Tucker–Lewis Index) – Tucker–Lewis index; RMSEA (Root Mean Square Error of Approximation) – root mean square error of approximation; SRMR (Standardized Root Mean Square Residual) – standardized root mean square residual.

Source: Calculated by the authors based on the results of SEM modeling in Python (semopy) using data from United Nations (n.d.), World Bank (n.d.), State Statistics Service of Ukraine (n.d.), and Stadnychuk (2026).

The obtained values of CFI and TLI exceed the commonly accepted threshold levels, indicating a high degree of consistency between the empirical data and the theoretically specified structure of relationships.

The RMSEA indicator falls within the acceptable range of approximation error, while the SRMR value does not exceed the recommended threshold, which further confirms the adequacy of the model.

Thus, the structural configuration that assumes an indirect influence of digital maturity through institutional mechanisms not only demonstrates statistically significant path coefficients but also shows proper empirical consistency.

Figure 1 presents the standardized coefficients and visualizes the hierarchy of direct and indirect relationships. It illustrates the hierarchy of direct and indirect relationships between the digital maturity of public administration, institutional characteristics, and recovery performance.

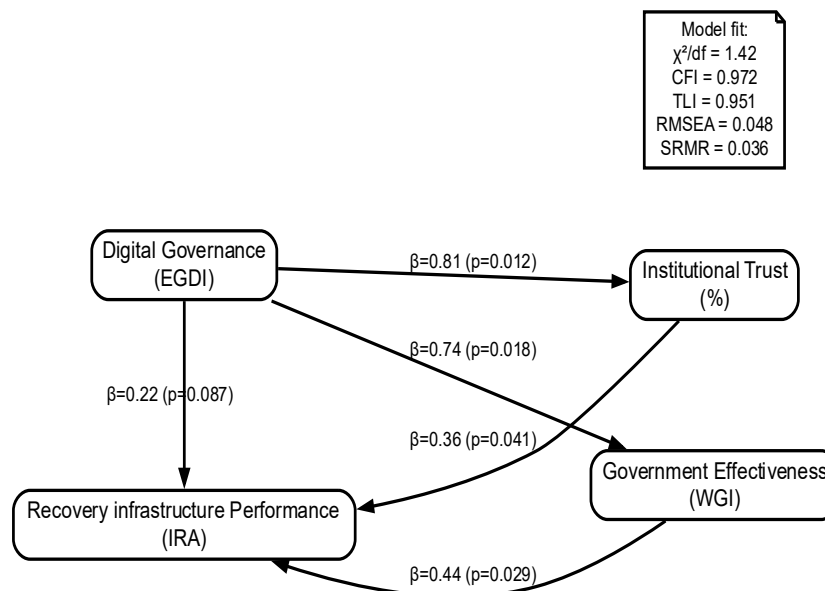


Figure 1. Structural Model of the Relationship Between the Digital Maturity of Public Administration, Institutional Trust, Government Effectiveness, and Recovery Performance (SEM): Standardized Path Coefficients and Model Fit Indices (χ^2/df , CFI, TLI, RMSEA, SRMR)

Source: Developed by the authors based on the results of SEM modeling in Python (semopy, matplotlib) using data from United Nations (n.d.), World Bank (n.d.), State Statistics Service of Ukraine (n.d.), and Stadnychuk (2026).

The obtained standardized coefficients (Figure 1) confirm a strong influence of digital governance on institutional trust and government effectiveness. Both channels demonstrate statistically significant parameters, indicating their structural robustness.

Further analysis shows that institutional capacity (coordinated recovery) acts as the key transmission mechanism influencing recovery performance. The coefficient linking institutional capacity with the effectiveness of infrastructure recovery (with the construction sector used as a proxy measure) is the largest among the final links of the model, confirming the central role of the coordination mechanism in the recovery process. At the same time, the direct effect of digital governance on recovery performance is weaker and lies on the margin of statistical significance. This suggests that digital transformation does not function as an autonomous driver of economic growth but rather exerts its influence through the institutional environment.

The total indirect effect exceeds the magnitude of the direct effect, confirming the hypothesis of the dominance of the mediation mechanism. Thus, the structural model demonstrates that in a post-war economy the decisive factor is not only the level of digitalization but also the quality of the institutional architecture through which digitalization materializes into economic outcomes. The obtained results of the structural modeling allow for the formulation of an integrated causal architecture describing how the digital maturity of public administration is transformed into recovery performance through a system of institutional mediators. The standardized path coefficients indicate statistically significant direct relationships between digital governance and the key institutional variables:

- $\beta(\text{Digital Governance} \rightarrow \text{Trust}) = 0.81$ ($p = 0.012$)
- $\beta(\text{Digital Governance} \rightarrow \text{Government Effectiveness}) = 0.74$ ($p = 0.018$)

These values indicate a high level of sensitivity of institutional trust and government effectiveness to changes in the digital architecture of public administration.

At the same time, the influence of institutional variables on recovery performance is also statistically significant:

- $\beta(\text{Trust} \rightarrow \text{Recovery Infrastructure Performance}) = 0.36$ ($p = 0.041$)
- $\beta(\text{Government Effectiveness} \rightarrow \text{Recovery Infrastructure Performance}) = 0.44$ ($p = 0.029$)

The largest final coefficient is observed for the channel “government effectiveness \rightarrow recovery performance,” which confirms the central role of the state’s governance capacity in shaping post-war economic dynamics. The direct effect of digital maturity on recovery performance is positive but statistically weaker:

$$\beta(\text{Digital Governance} \rightarrow \text{Recovery Infrastructure Performance}) = 0.22 \quad (p = 0.087)$$

This indicates the auxiliary nature of the technological effect in the absence of institutional mediation. The total indirect effect of digital maturity is calculated as:

$$0.81 \times 0.36 + 0.74 \times 0.44 = 0.292 + 0.326 = 0.618 \quad (7)$$

Thus, the indirect institutional channel is almost three times stronger than the direct technological influence (0.618 vs. 0.22).

This confirms the dominance of the mediation mechanism and allows concluding that digital governance is transformed into recovery performance primarily through the formation of trust and the improvement of governance effectiveness.

The integrated structural model demonstrates the presence of a stable multi-level configuration of interactions, within which digital maturity acts as the primary driver of institutional change, while the final economic outcome is formed through an institutional coordination mechanism. At the same time, the results of the structural modeling indicate the emergence of a new logic of economic development, in which digital governance moves from a purely service-oriented function to the role of an institutional recovery platform that ensures the integration of public policy, reconstruction investment, and strategic business management.

This implies that the effectiveness of post-war revitalization is determined not only by the volume of financial resources but primarily by the quality of the institutional architecture of the state.

The generalization of the obtained empirical results allows the formation of a holistic understanding of the mechanism of post-war

infrastructure revitalization, within which the digital maturity of public administration acts as a system-forming institutional factor capable of ensuring sustainable recovery of economic activity even under prolonged security risks. Quantitative estimates obtained from regression and structural modeling indicate that the impact of digital governance on recovery performance is realized mainly through the mediating mechanism of institutional trust and government effectiveness, while the direct technological effect plays a supportive role.

The analysis of the structural model confirmed that institutional trust is the central element in the transformation of digital maturity into effective socio-economic outcomes.

It is through the mechanisms of trust and governance effectiveness that digital governance acquires an economic dimension and influences infrastructure dynamics.

The identified causal configuration makes it possible to formulate a generalized institutional model of post-war revitalization, presented in Figure 2.

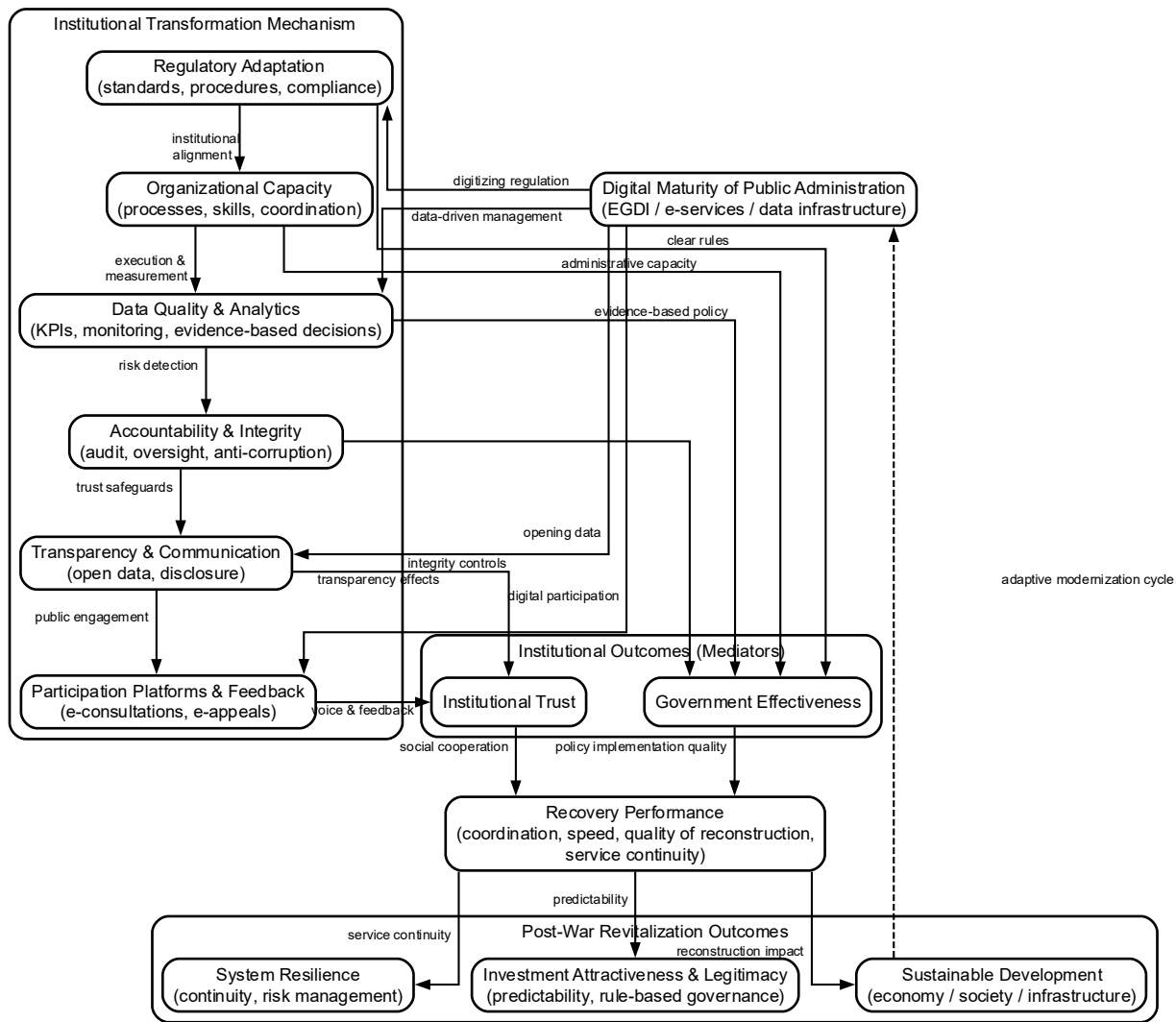


Figure 2. Institutional Mechanism of Transforming the Digital Maturity of Public Administration into the Effectiveness of Institutional Trust and Recovery Performance Within the Logic of Post-War Revitalization

Source: Developed by the authors based on the results of empirical analysis and literature sources (Su et al., 2025; Romanov et al., 2025; Heim & Mergaliyeva, 2024; van Rietschoten et al., 2025; Garafonova et al., 2023). Visualization performed using Graphviz / Python (matplotlib).

The identified configuration of causal relationships (Fig. 2) confirms the emergence of a new model of post-war economic development in which the pace of infrastructure recovery is determined not only by the volume of investment resources but primarily by the quality of the state's digital and institutional architecture. This implies that the further dynamics of Ukraine's economic revitalization will depend on the ability of the public administration system to ensure the synchronized development of digital services, trust in public institutions, and the strategic effectiveness of recovery policies.

The obtained configuration of causal relationships forms a coherent empirical basis for further generalization of the mechanism of post-war infrastructure revitalization, which allows moving to a systemic synthesis of the study's result.

DISCUSSION

The obtained research results demonstrate that the digital maturity of public administration has a statistically significant direct impact on institutional trust and government effectiveness, confirming the key role of digital tools in the transformation of public governance.

The identified relationship is consistent with the findings of [Su et al. \(2025\)](#), who showed at the cross-country level that digital governance contributes to increasing trust in public institutions and generates positive economic outcomes.

A similar interpretation is proposed by [Ariansyah et al. \(2025\)](#), who argue that the effectiveness of e-government depends not only on technological solutions but also on the level of citizens' trust in public officials.

Within the framework of the conducted structural modeling, institutional trust was identified as an important mediator between digital governance and infrastructure recovery performance. This indicates that digital institutional innovations translate into economic outcomes precisely through the formation of trust in state institutions.

Such a result is consistent with the theoretical approaches of [Christensen and Læg Reid \(2020\)](#) and [OECD \(n.d.\)](#), which consider trust a fundamental resource of effective public governance.

At the same time, the obtained results deepen these approaches by demonstrating the empirical mechanism through which digital governance transformations are converted into economic development outcomes.

The results also demonstrate a significant relationship between government effectiveness and indicators of post-war infrastructure revitalization, particularly reflected in the recovery of construction activity. This finding is consistent with the approaches of [Martin and Sunley \(2015\)](#) and [Briguglio et al. \(2009\)](#), who interpret economic resilience as the ability of economic systems to adapt to shocks and restore their development trajectory. In practical terms, this conclusion also correlates with the results of [Cherniavska and Bilan \(2025\)](#), who show that crisis shocks require stronger institutional policies to maintain economic stability.

The research findings also confirm that institutional quality is an important determinant of economic dynamics. The identified relationship between institutional trust and economic indicators is consistent with the results of [Berisha and Rayfield \(2025\)](#), who demonstrate that the quality of institutions and trust in them stimulate investment activity. A similar direction can be observed in studies on corporate governance, where transparency and accountability are considered prerequisites for the stability of economic systems ([Iurchenko & Ponomarenko, 2025](#); [Desoky, 2025](#)). Thus, the obtained results extend the understanding of institutional mechanisms of development, demonstrating that digital governance can act as a catalyst for building trust and stimulating economic activity. Modern governance systems must address emerging security challenges related to information ecosystems and the spread of misinformation, which can significantly affect social stability and institutional trust ([Bappayo et al., 2026](#)).

At the same time, the findings partially differ from approaches in which digitalization is primarily considered a technological process of modernization of the public sector.

In particular, [Mergel et al. \(2019\)](#) and [Vial \(2019\)](#) emphasize the technological and organizational aspects of digital transformation, whereas the results of this study demonstrate that the institutional

component of trust is the key factor in the effectiveness of digital governance.

A similar issue is also raised by [Romanov et al. \(2025\)](#), who show that trust in technologies and trust in the state may have different origins, which affects the adoption of digital services. Furthermore, the obtained results are consistent with studies in the field of organizational leadership, where trust is considered an important determinant of the performance of social systems.

For example, [Nazarian et al. \(2025\)](#) and [Rai and Koodamara \(2025\)](#) demonstrate that trust in leaders contributes to positive organizational outcomes, which conceptually corresponds to the findings of this study at the level of public governance.

A similar relationship between leadership, institutional trust, and sustainable competitiveness is also confirmed by [Wade et al. \(2025\)](#) and [Ranasinghe et al. \(2025\)](#). Another important dimension of post-war recovery concerns the preservation and development of human capital through education and retraining mechanisms, which support institutional resilience and economic revitalization ([Yeremenko, 2026](#); [Zimosz & Ober, 2025](#)).

It should also be noted that the obtained results confirm the importance of institutional mechanisms in the implementation of sustainable development policies. The identified relationship between digital governance, institutional trust, and economic performance is consistent with the conclusions of [Nukusheva et al. \(2025\)](#) and [Chaouech et al. \(2025\)](#), who emphasize the role of institutional factors in ensuring sustainable development.

Similar conclusions are drawn by [Cuong \(2025\)](#), who demonstrates the relationship between digitalization, governance quality, and environmental outcomes. Thus, the results of this study expand the existing scientific approaches to the analysis of digital governance, institutional trust, and economic development. Unlike most previous studies, which analyze these factors separately, the conducted structural modeling makes it possible to consider them as elements of a single institutional system, within which the digital maturity of public administration is transformed into economic performance through the mechanisms of trust and government effectiveness.

CONCLUSIONS

The study provides a comprehensive empirical assessment of the mechanism through which the digital maturity of public administration is transformed into infrastructure recovery performance through institutional channels of trust and governance effectiveness.

The results confirm that the digital transformation of public administration does not act as an autonomous driver of economic dynamics but exerts its influence indirectly through the formation of institutional trust and improvements in the quality of governance.

The baseline regression model demonstrated a statistically significant positive relationship between digital maturity indicators (EGDI) and the performance of sectoral infrastructure recovery, operationalized through the dynamics of the volume of completed construction works during 2018–2025.

At the same time, the inclusion of a war-shock variable revealed a substantial structural break in 2022, confirming the dominance of the exogenous security factor over institutional determinants in the short term. The extended model including institutional trust and government effectiveness indicators demonstrated a reduction in the direct coefficient of digital maturity on economic outcomes, indicating the presence of a mediation mechanism.

This suggests that a significant part of the impact of digital governance is realized through increasing trust in public institutions and improving the state's coordination capacity.

The results of structural equation modeling (SEM) confirmed the dominance of indirect effects over direct ones. The cumulative mediation effect of digital maturity through institutional trust and governance effectiveness proved to be statistically significant and quantitatively greater than the direct technological effect. Thus, within the post-war logic of infrastructure revitalization, digital governance transforms from a service tool into an institutional recovery platform that synchronizes public policy, investment processes, and sectoral economic activity.

The findings allow the formulation of a key theoretical conclusion: in a post-war economy, the speed and scale of infrastructure recovery are

determined not only by the volume of financial resources or technological progress but primarily by the quality of the state's digital-institutional architecture and the level of public trust in it. Institutional trust becomes the central element in the mechanism that transforms digital maturity into real socio-economic outcomes.

The practical significance of the study lies in the possibility of using the proposed integrated model for designing post-war recovery policies, within which digitalization is considered as an instrument for strengthening institutional capacity rather than an end in itself.

At the same time, the study has certain limitations. First, the empirical analysis relies on aggregated macroeconomic indicators and institutional indices, which do not fully capture regional differences in the pace of infrastructure recovery. Second, the time horizon of the study is limited to the period 2018–2025, which is обусловлено the availability of comparable statistical data and digital governance indices. Third, the use of international institutional indicators (EGDI and the trust in government index) reflects general trends in institutional development but does not fully capture the specificity of national governance practices under wartime conditions.

The obtained results open several promising directions for further research. First, it would be advisable to expand the empirical basis by constructing cross-country panel models comparing the effects of digital maturity in countries with different levels of institutional capacity and different intensities of crisis shocks. This would allow testing the universality of the identified mediation mechanism. Second, further research should focus on the micro-level channels of institutional trust formation, particularly through the analysis of digital services, electronic participation mechanisms, transparency of regulatory procedures, and digital accountability of public authorities. Third, future studies may integrate digital governance indicators with economic security, resilience, and ESG indicators of public policy, enabling the development of a comprehensive model of digital-institutional state resilience. Fourth, an important direction is the development of scenario modeling of long-term trajectories of post-war recovery, taking into account

alternative institutional configurations, which directly relates to contemporary research in governance resilience and digital state capacity.

Thus, the proposed model forms a methodological basis for further studies on the interaction between digital governance, institutional trust, and infrastructure recovery performance under conditions of transformational and crisis processes, thereby expanding the scientific discourse in the fields of public administration and the digital state.

Author Contributions

Conceptualization: T. R., S. R., L. S., S. N., Z. H., P. M.; data curation: S. R., L. S.; formal analysis: S. R.; funding acquisition: S. R., L. S., S. N.; investigation: T. R., S. R., L. S.; methodology: S. R., T. R.; project administration: Z. H.; resources: Z. H., P. M.; software: T. R., S. R.; supervision: Z. H.; validation: T. R., S. R., L. S., S. N., Z. H., P. M.; visualization: S. R.; writing – original draft: T. R., S. R., L. S., S. N., Z. H., P. M.; writing – review & editing: T. R., S. R., L. S., S. N., Z. H., P. M.

Conflicts of Interest

The authors declare no conflict of interest.

Statement on the Use of AI Tools

The authors declare that artificial intelligence tools were used solely for language editing, structural improvement of the text, and technical formatting of the manuscript. AI was not used for data generation, statistical calculations, econometric modeling, or interpretation of results. All calculations, structural equation modeling (SEM), and analytical conclusions were performed independently by the authors using specialized software. The authors bear full responsibility for the accuracy, reliability, and originality of the research.

Data Availability Statement

The data used in this study are derived from a combination of publicly accessible and author-generated sources. Publicly available data include official statistical information from the State Statistics Service of Ukraine, open fiscal data from the OpenBudget platform, and analytical materials published by municipal authorities. In addition, the study employs processed datasets, model specifications, and simulation outputs generated during the research. These materials are publicly

available in the Zenodo repository: [Stadnychuk \(2026\)](#). The repository contains the input datasets used for the econometric analysis, intermediate calculations, and the final modeling results that allow the reproducibility and verification of the study.

Informed Consent Statement

Not applicable. The study did not involve human subjects, interventions, or personally identifiable data, and therefore did not require ethical approval.

References

- Ariansyah, K., Muttaqin, M., Pusvita, V., Takariani, C. S. D., Darmanto, D., Budhirianto, S., & Nuryana, M. (2025). Revisiting e-government and public trust relationship: Does trust in public servants matter? *Transforming Government: People, Process and Policy*. [\[CrossRef\]](#)
- Asare, K. N. (2025). Digital Transformation in Accounting for Sustainable Development: Mapping the Intellectual Structure. *Financial Markets, Institutions and Risks*, 9(4), 1–15. [\[CrossRef\]](#)
- Bappayo, A., Abubakar, A., & Kifri, Y. H. (2026). Security Concerns Arising from Misinformation Spread in Rural Communities: The Role of Social Media in Amplifying Farmer-Herder Conflicts Nigeria. *Safety and Security Advances*, 2(1), 25–36. [\[CrossRef\]](#)
- Berde, É., & Remsei, S. (2025). Turning the triple burden of Ukrainian depopulation into a quadruple burden: The results of a survey among Ukrainian refugee women. *Economics and Sociology*, 18(1), 296–312. [\[CrossRef\]](#)
- Berisha, B., & Rayfield, B. (2025). Institutional quality, trust and investment dynamics: Comparative evidence. *Investment Management and Financial Innovations*, 22(1), 360–375. [\[CrossRef\]](#)
- Beyi, W. A. (2025). Designing an effective New Public Management model for public sector reform. *Public Governance, Regulation and Law*, 1(1), 16–40. [\[CrossRef\]](#)
- Briguglio, L., Cordina, G., Farrugia, N., & Vella, S. (2009). Economic vulnerability and resilience: Concepts and measurements. *Oxford Development Studies*, 37(3), 229–247. [\[CrossRef\]](#)
- Chaouech, S., Khouja, M., & Youssef, A. (2025). Environmental regulation, institutional trust and green performance: Empirical evidence. *Environmental Economics*, 16(3), 67–78. [\[CrossRef\]](#)
- Cherniavska, O., & Bilan, Y. (2025). Economic resilience and public health shocks: Policy implications. *Health Economics and Management Review*, 9(2), 95–110. [\[CrossRef\]](#)
- Christensen, T., & Læg Reid, P. (2020). Trust in government: The relative importance of service satisfaction, political factors and demography. *Public Management Review*, 22(1), 1–18. [\[CrossRef\]](#)
- Cuong, P. V. (2025). Digitalization, governance quality and environmental outcomes: A panel evidence. *Environmental Economics*, 16(2), 41–54. [\[CrossRef\]](#)
- Desoky, A. M. (2025). Corporate governance and audit quality: Evidence from an emerging market. *Investment Management and Financial Innovations*, 22(1), 79–89. [\[CrossRef\]](#)
- Durmaz, N., & Sun, F. (2025). Does economic policy uncertainty affect housing prices? Evidence from Asia-Pacific countries. *Journal of International Studies*, 18(1), 1–15. [\[CrossRef\]](#)
- European Commission. (n.d.). *DESI methodology report*. [\[CrossRef\]](#)
- Filipova, M., Djakona, A., & Haram, V. (2025). Determinants of Government Expenditures in the Baltic States. *Financial Markets, Institutions and Risks*, 9(2), 66–89. [\[CrossRef\]](#)
- Fukuyama, F. (2013). What is governance? *Governance*, 26(3), 347–368. [\[CrossRef\]](#)
- Gallup. (2025). *Gallup World Poll: Confidence in national government indicator*. [\[Link\]](#)
- Gerth, F., O'Brien, M., & Sikora, K. S. (2025). Socio-Economic Determinants of Construction Sector Development. *SocioEconomic Challenges*, 9(2), 78–91. [\[CrossRef\]](#)
- Ginevičius, R., Raslanas, S., Trišč, R., & Suhajda, K. (2025). Geometric-analytical assessment of the strategic potential of construction companies using qualitative methods. *Economics and Sociology*, 18(3), 64–79. [\[CrossRef\]](#)
- Grimmelikhuijsen, S., & Meijer, A. (2014). Effects of transparency on the perceived trustworthiness of a government organization. *Public Administration Review*, 74(1), 137–147. [\[CrossRef\]](#)

21. Heim, L., & Mergaliyeva, L. (2024). Organizational wrongdoing within the context of the UN Sustainable Development Goals: An integrative review. *Journal of Business Ethics*. [\[CrossRef\]](#)
22. Iurchenko, O., & Ponomarenko, N. (2025). Corporate governance and ESG: Evidence from an emerging market. *SocioEconomic Challenges*, 9(1), 21–38. [\[CrossRef\]](#)
23. Janssen, M., & van der Voort, H. (2020). Agile and adaptive governance in crisis response: Lessons from the COVID-19 pandemic. *Government Information Quarterly*, 37(4), 101493. [\[CrossRef\]](#)
24. Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: Methodology and analytical issues. *World Bank Economic Review*, 25(2), 220–246. [\[CrossRef\]](#)
25. Martin, R., & Sunley, P. (2015). On the notion of regional economic resilience: Conceptualization and explanation. *Journal of Economic Geography*, 15(1), 1–42. [\[CrossRef\]](#)
26. Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101385. [\[CrossRef\]](#)
27. Nafei, W. A., Ghoneim, M. A., Mujtaba, B. G., & Khanfar, N. M. (2025). Digitalization as a Socioeconomic Challenge: Assessing the Mediating Role of Digital Service Quality on Digitalization's Impact on Sustainable Competitive Advantage. *SocioEconomic Challenges*, 9(1), 1–20. [\[CrossRef\]](#)
28. Nazarian, A., Rodríguez Molina, M. Á., Velayati, R., Ruiz-Alba, J. L., & Atkinson, P. (2025). Trust in leader and positive employee outcomes. *Group & Organization Management*. [\[CrossRef\]](#)
29. Ntuli, F., Ntshangase, B. A., & Msosa, S. K. (2025). Innovative Financial Management Reforms: A Catalyst of Good Governance in the South African Public Sector. *Financial Markets, Institutions and Risks*, 9(4), 16–29. [\[CrossRef\]](#)
30. Nukusheva, A., Zholamanova, M., Zhumadilova, A., & Kenzhebaeva, A. (2025). Corporate sustainable development and institutional factors: Evidence from emerging economies. *Environmental Economics*, 16(4), 1–12. [\[CrossRef\]](#)
31. Oe, H. (2025). Public-private partnerships in traditional industries: Governance implications. *Public Governance, Regulation and Law*, 1(1), 1–15. [\[CrossRef\]](#)
32. OECD. (n.d.). *Trust in government*. [\[CrossRef\]](#)
33. Ostapchuk, O., & Vasylenko, S. (2025). Digital health governance and trust: Institutional mechanisms for service delivery. *Health Economics and Management Review*, 9(2), 111–126. [\[CrossRef\]](#)
34. Rai, S. S., & Koodamara, N. K. (2025). How does trust in leader influences organizational commitment? A test of a moderated mediation model. *Acta Psychologica*, 253, 105092. [\[CrossRef\]](#)
35. Ranasinghe, D., Naleem, A., & Dissanayake, D. (2025). Bridging digital leadership and organizational performance: Evidence from SMEs. *Problems and Perspectives in Management*, 23(2-si), 13–22. [\[CrossRef\]](#)
36. Romanov, B., Dueñas Cid, D., & Leets, P. (2025). State versus technology: What drives trust in and usage of internet voting, institutional or technological trust? *Government Information Quarterly*, 42(4), 102068. [\[CrossRef\]](#)
37. Stadniychuk, R. (2026). *Dataset for Structural Modeling of Digital Governance, Institutional Trust and Post-War Economic Revitalization in Ukraine* [Data set]. Zenodo. [\[CrossRef\]](#)
38. Stadniichuk, R., Garafonova, O., Zhosan, H., Yankovoi, R., Shestakovska, T., & Stasovska, G. (2025). Stochastic modeling of the spiral dynamics of social conflicts in public governance. *TEM Journal*, 14(4), 3354–3362. [\[CrossRef\]](#)
39. State Statistics Service of Ukraine. (n.d.). *Statistical information: Construction activity in Ukraine*. [\[Link\]](#)
40. Su, C.-W., Umar, M., Chang, T., & Lobonț, O.-R. (2025). Digital governance, trust and economic outcomes: Cross-country evidence. *Problems and Perspectives in Management*, 23(2-si), 90–99. [\[CrossRef\]](#)
41. Tsymbal, L., & Demediuk, A. (2025). Economic Security of Ukraine Under War: A Foreign Trade Perspective. *Safety and Security Advances*, 1(1), 63–78. [\[CrossRef\]](#)
42. Tutar, H., Akçi, Y., Fialova, V., & Kossa, Gy. (2025). The asymmetric impact of digital infrastructure on income inequality: A panel quantile regression analysis of OECD countries. *Economics and Sociology*, 18(4), 208–223. [\[CrossRef\]](#)

-
43. United Nations. (n.d.). *E-Government Survey*. [\[CrossRef\]](#)
44. Uwuigbe, U., Uwuigbe, O. R., Adeyemo, K. A., & Jimoh, I. (2025). ESG disclosure, institutional trust and firm outcomes: Empirical evidence. *Investment Management and Financial Innovations*, 22(4), 301–312. [\[CrossRef\]](#)
45. Van der Meer, T., & Zmerli, S. (2017). The deeply rooted concern with political trust. *European Journal of Political Research*, 56(1), 1–12. [\[CrossRef\]](#)
46. van Rietschoten, E., & van Bommel, K. (2025). Toward a contemporary understanding of organizational ethics and responsibility. *Business Ethics, the Environment & Responsibility*. [\[CrossRef\]](#)
47. Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *Journal of Strategic Information Systems*, 28(2), 118–144. [\[CrossRef\]](#)
48. Wade, M., Al-Mamun, A., & Nazri, M. (2025). Leadership capability, institutional trust and sustainable competitiveness: A framework and evidence. *Problems and Perspectives in Management*, 23(2-si), 36–45. [\[CrossRef\]](#)
49. World Bank. (n.d.). *GovTech maturity index*. [\[CrossRef\]](#)
50. Yefimenko, A., Boronos, V., Serpeninova, Yu., & Koldovskyi, A. (2025). Innovative and Technological Determinants of Corruption Reduction: How do Knowledge and Technology Contribute to Public Integrity and Transparency?. *Knowledge Economy and Lifelong Learning*, 1(1), 21–34. [\[CrossRef\]](#)
51. Yeremenko, O. (2026). Retraining and Lifelong Learning as an Anti-Crisis Tool: Preserving Ukraine's Intellectual Capital in Times of War. *Knowledge Economy and Lifelong Learning*, 2(1), 48–66. [\[CrossRef\]](#)
52. Zahorodnia, K. (2026). Implications for public governance based on the analysis of institutional reforms. *Public Governance, Regulation and Law*, 2(1), 80–129. [\[CrossRef\]](#)
53. Zaremba, A., & Kryshtal, H. (2025). Patient trust and institutional performance in healthcare systems: Evidence and implications. *Health Economics and Management Review*, 9(2), 127–141. [\[CrossRef\]](#)
54. Zimosz, P., & Ober, J. (2025). Impact of Artificial Intelligence on Education. *Knowledge Economy and Lifelong Learning*, 1(2), 77–98. [\[CrossRef\]](#)
-