



AI-Enabled Policymaking and Public Value Creation: Mediating Effect of Institutional Effectiveness

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ABSTRACT

This study aims to explore how AI-driven policy development affects public value creation, highlighting the intervening effect of institutional effectiveness. With AI becoming more ubiquitous in the decision-making process, the formulation of policy, and service delivery across multiple governments, an understanding of the conditions that give AI meaning in creating a positive impact on society is essential. The research design of the study is quantitative research with a cross-sectional survey approach involving 300 participants in the form of public sector employees, digital governance experts and policymakers from three major cities of Pakistan namely Islamabad, Rawalpindi and Lahore. The data collection instrument is a structured questionnaire with Likert-type items which assesses AI-enabled policymaking practices, institutional effectiveness and public value creation. The reliability and the validity of the scales are established, and then the correlation and regression analyses are conducted to check the hypotheses. The indirect effect of institutional effectiveness is estimated by mediation analysis based on bootstrapping and structural equation modeling. The results indicate that the incorporation of AI in policymaking process has a notable impact on the creation of public value and the effectiveness of institutions. The association between AI adoption and the creation of public value was found to be partially mediated by institutional effectiveness, highlighting the importance of having robust, capable, and accountable institutions to support technological efforts. This result underscores the need to combine institutional capacity development, ethical governance and accountability with the use of AI tools, in order to maximize the potential of public value. This study makes a meaningful contribution to the body of knowledge of digital governance by showcasing that AI usage is not inherently social good, but rather the institutional architecture plays a crucial role in shaping the societal outcomes of AI.



Introduction

In recent years, the use of artificial intelligence (AI) in public administration and policy making has grown significantly, with the technology of machine learning, big data and automated decision-making systems becoming increasingly important. The global government bodies are seen to be adopting AI technologies in order to effectively allocate the resources, forecast the policy outcomes and streamline the public service delivery systems (Kuziemska & Misuraca, 2020). The massive amount of data that AI can analyze allows policymakers to base their decision-making on more accurate, timely, and citizens-centric data, which enhances the overall efficiency of governance (Loukis et al., 2020). AI has the potential to transform the way public policies are developed and executed, from predictive analytics for managing resources, to automating mundane administrative tasks (Lungu, 2024). A major advantage of AI in policy formulation is its ability to offer insights and evidence-based data for better decision-making. AI algorithms can analyze complex data sets and identify patterns and trends that humans might not notice, helping to inform more effective and well-informed policies (MAHAJAN & GUPTA, 2023). Furthermore, AI can enhance public service provision by making it more responsive and citizen-centric, reflecting the different needs of citizens (Aalst, 2020). For instance, AI can be used to tailor healthcare to individual users, optimize traffic systems and predict the effects of various policy decisions (Shneiderman, 2020).

AI in policymaking is fundamentally about 'public value' – which is the value citizens reap from government policies and services (Moore, 1997). Public value creation is the desired end product of any government and an important goal of good government – creating greater welfare for citizens through efficient and transparent government (Kelly et al., 2002). However, governments can enhance public value (PV) creation by using AI to boost transparency, cut inefficiencies and better engage with the public's needs (Criado & Gil-Garcia, 2019). But the possibilities of higher-quality policy-making with AI can only be realized if the institutions tasked with policy implementation – those who ultimately execute the policy – can be made capable, transparent and accountable. To make sure the AI systems are technically effective and meet ethical standards, they are also socially beneficial, institutional effectiveness becomes essential (Huang & Rust, 2018). Thus, the effectiveness of the institutions which embrace and apply these technologies plays a key role in determining the success of AI in policy-making.

Despite the increasing use of AI in Public Sectors, there is still a gap between what AI can do with regards to transforming Governance and the actual Public Value being created. The problem isn't the technology itself, it is how public institutions can put in place AI technologies that have positive effects for citizens (Mikhaylov et al., 2018). AI systems can be used to enhance policy decisions and public services, but they are less effective if institutions do not have administrative capabilities, transparency, and governance required to support them (Ly, 2025). However, AI-enabled public services can encounter various obstacles, including data privacy issues, algorithmic biases, and public mistrust, that can impede their effectiveness and limit their capacity to create public value (Diakopoulos, 2019).

Moreover, many governments implement AI technologies without considering the necessary institutional reform to ensure effective implementation of AI in public administration (Mikhaylov et al., 2018). To fully realize the potential of AI in policy-making, institutions need to have the technical systems, human capacity, and ethical guidelines needed to operate AI systems responsibly (Sawicki, 2025). The potential downsides of AI, including inequity, lack of transparency, and bias, can outweigh its potential benefits unless strong institutions are established

to manage them (Hartzog, 2018). Therefore, this research seeks to fill this gap by examining the possibilities of public value creation through AI-driven policymaking and the intermediation effect that institutional effectiveness is expected to play between the two. The study aims to shed light on the significance of strong institutions for the deployment of AI, as well as the role these can play in either promoting public value creation through AI or constraining it.

This study aims at investigating the relationship between AI policy-making and public value generation, among which the role of institutional effectiveness is of particular focus. More specifically, the research questions are, whether AI-based policymaking contributes to better public value creation by making government more efficient, transparent, and responsive. The study investigates the role of institutional effectiveness as a mediator between AI integration in policymaking processes and the generation of public value. This study seeks to illustrate how the effective functioning of institutions is essential in helping to capture the potential benefits of AI in public administration, with a particular emphasis on how institutional capacity, transparency, accountability and coordination play a vital role in maximizing benefits.

The study builds on the increasing literature on digital governance and AI in public sector policies by emphasizing institutional effectiveness as an important factor in successful AI-informed policy making. Research on the technological capacities of AI has been predominant, while little work has been done on how institutions affect the implementation and results of the use of AI in policymaking (Panda et al., 2025). This study fills this gap and offers a set of insights for policy makers and public administrators interested in incorporating AI technologies into their decision-making process.

The findings of this study are significant for governments, as they provide a better understanding of how AI can be used to create public value and the necessary institutional reforms needed to achieve this goal. This research can be used by policymakers to create technologically sophisticated, institution-backed policies that ensure that AI systems reflect public values and are designed to maximize the benefits to society (van Noordt, 2023). Furthermore, this research provides practical suggestions for enhancing the institutional effectiveness of public bodies to better use AI to deliver public services and better public governance. Finally, although this is an exciting prospect for the growth of public administration, it is only when AI is adopted in institutions that can support and effectively manage these technologies that they can realize their full potential. This study is designed to fill the gap between AI technology and its actual impact, focusing on the importance of institutional effectiveness in making sure that policies based on AI add public value.

Literature Review

AI Enabled Policymaking involves the use of artificial intelligence technologies in the policy making process to aid evidence-based policymaking, to automate common administrative tasks, and to derive insights from huge data sets (Aarab et al., 2025). AI enabled policymaking is not only about the mere technical deployment, but also the strategic use of AI in policy formulation, evaluation and implementation (Aarab et al., 2025). In public administration, that means tools that strengthen public service forecasting, automate public services, and support complex decision-making processes, which are otherwise unattainable for humans to handle (International Organization for Economic Cooperation and Development [OECD], 2025).

Institutional Effectiveness is the ability of public institutions to execute policies effectively, with integrity, transparency and accountability, responsiveness and adaptability in the governance process (Ali et al., 2026). Good institutions have functional coordination, defined accountability structures, and are able to incorporate new technologies in existing processes without compromising democratic norms or the quality of services (Ali et al., 2026).

Public Value Creation is the value that public policies and administrative actions provide to the citizens, such as better service delivery, better transparency, better fairness and better trust between the public and government (Althabiti, 2026). Public value is not simply about efficiency in government, it also includes the social outcomes that the citizens seek from their government as being equitable, responsive and legitimate (Althabiti, 2026). To grasp their interconnections and how they affect one another, particularly when being used in governance, institutional governance and value creation, a synthesis of recent empirical and conceptual studies of the role of AI in governance is needed.

H1: AI enables policymaking to meaningfully contribute to creating public value.H2: AI can positively impact public value creation by enabling policymaking.

There is an increasing amount of research that theoretically and empirically supports the claim that AI facilitated policy making creates better aspects of public value creation. AI technologies are also helping to process data more efficiently, model scenarios and automate operations, enhancing the speed and reliability of public services (Aarab et al., 2025). AI's ability to process complex data also helps governments to better meet the needs of their citizens, resulting in higher levels of satisfaction and perceived service quality (Althabiti, 2026). The applications of AI showcasing its impact on public value have been numerous. For example, AI tools have been applied to sift through vast amounts of feedback from consultations that citizens have shared, helping policy makers quickly identify the main themes and priorities – transforming raw citizen input into policy insights. Likewise, AI-powered tools streamline administrative processes and alleviate the workload for civil servants, freeing up their time and resources to focus on more value-adding and complex tasks (OECD, 2025).

Yet, the potential of AI for public value is reliant on the design, governance and incorporation of AI in public institutions. However, as research confirms, inadequate planning of AI can result in opacity, biases and loss of public trust — attributes that have the potential to destroy the public value approach (Datta, 2024). In the context of public value creation, this means that the use of AI technologies must be done within the framework of a public value framework that is ethical, fair, and transparent, with good governance. Overall, the research conducted in recent years indicates that AI for policy-making can help create public value, primarily by enhancing decision quality, personalizing services and improving operational efficiency. However, this is not a given; the benefits of the use of AI are dependent on governance practices and institutional frameworks which support the democratic values and norms of AI use.

H2: The use of AI in creating policies has a positive impact on institutional effectiveness.

Utilization of AI technologies has been connected to better institutional processes, including the quality of decision making and administration performance. Empirical studies of public sector AI adoption show that AI in the public sector boosts the effectiveness of governance through better predictive analysis, fewer administration and workflow delays and more evidence-based decision making (Ali et al., 2026). AI's integration into public policy processes was revealed to have substantial positive impacts on governance performance and effectiveness, which were further

moderated by improvements in the quality of public sector decision making and increased institutional accountability (Ali et al., 2026). The results align with the general body of research related to organizational readiness for AI that suggests that the integration of AI technologies can boost institutional processes with a better data quality; leadership support and absorptive capacity (Jonathan et al., 2025).

Furthermore, AI can aid in compliance and monitoring roles within the institutions. In fact, machine learning models can identify unusual transactions or identify inconsistencies in administrative processes, enhancing the internal control systems, one of the most important pillars of institutional effectiveness (Aarab et al., 2025). However, institutional effectiveness is not just about technology, it is also about how the organization is run and how the culture of the organization affects the use of AI. Researchers highlight the importance of supporting institutional settings to achieve meaningful performance and trust gains from AI use (Aarab et al., 2025). For instance, the possibility of losing their job or losing their competence due to AI may fuel resistance among public servants, which can hinder the uptake and effectiveness of AI in the institution (Haesevoets et al., 2026). Overall, the findings of this scholarship confirm that the use of AI with the process of policymaking can improve the effectiveness of the institutions by increasing the accuracy of policy decisions, their transparency, and accountability. The improvements, however, rely on the readiness of institutions and supportive governance practices to welcome technology integration.

H3: The relationship of institutional effectiveness and the creation of value for the public is positive.

The success of institutional effectiveness is key to the creation of public values from technological capabilities. Citizens' perceptions and benefits from public services are directly related to the institution's capacity to properly enact policies, maintain ethical behavior and provide intergovernmental coordination (Alhabiti, 2026). Effective institutions ensure that policies are put in place effectively and transparently, and thus increase public trust and satisfaction. Public sector reform studies demonstrate that more effective public sector institutions are better able to make use of technology innovations to serve society (OECD, 2025). Effective institutions can better defend against the risk of algorithmic bias, lack of transparency, and other issues that affect the public's trust and reduce the value of AI use (Wirtz et al., 2020). In addition, institutional adjustments to improve capacity development, training and cross sector cooperation have been proven to amplify the value added by digital governance initiatives, such as those based on AI (Jonathan et al., 2025). Weak institutions, on the other hand, may have difficulty in turning AI insights into actionable steps, resulting in somewhat disorganized and unpromising applications that do not result in noticeable improvement in service delivery. In the end, institutional effectiveness serves as a ground level factor of public value generation, especially within contexts where the use of AI is becoming a part of governance processes.

H4: There is a mediated relationship between AI Enabled Policymaking and Public Value Creation.

In conclusion, based on the analysis of the literature reviewed above, institutional effectiveness is not only an outcome but also plays an important role as a mediator between AI enabled policymaking and public value outcomes. The creation of public value does not happen automatically by AI and requires a proper institutional setting where AI is used (Aarab et al., 2025). This mediating effect can be supported by empirical evidence. The results of studies on governance effectiveness reinforce the need for enhancing the quality of decision making and

institutional accountability as pathways to achieve gains in public sector performance as a result of AI use (Ali et al., 2026). This implies that the usefulness of AI for institutions is to provide them with powerful analytic capabilities, but it also means that it is necessary to help institutions make sense of, operationalize and govern these analytic capabilities in order to realize public value.

Qualitative research also shows that institutional aspects, including leadership commitment, regulation and moral governance, have been found to affect workflow and decision-making processes of the use of AI tools, and thus their public value outcomes (Jonathan et al., 2025). The lack of these institutional strengths can lead to illusory improvements, or even worsen governance problems such as inequality or opacity, in the implementation of AI initiatives. The literature also indicates that the effectiveness of the institution is not only reflected in the outcomes of its processes, but also determines the nature of the relationship between the creation of policies enabled by AI and the production of public value. For AI to have a positive impact, there must be coordinated processes, strong accountabilities and adaptive governance in well-functioning institutional environments.

Methodology

This study is in a quantitative research design with cross sectional survey type in which the data is collected at one time. This design is suitable for exploring the interplay between AI-supported policy making, institutional effectiveness, and public value, and enables the measurement of numerical data to help gain objective insights into the effect of AI on governance and public value. This study aims to understand the target population, which is made up of public sector employees, digital governance experts and policymakers directly involved in or shaping the use of AI in government institutions. Purposive sampling is used to select participants, targeting those with certain specific experience or knowledge in policy making or institutional effectiveness that are supported by AI. Moreover, convenience sampling is used because people are convenient, such as those who work in local government agencies or AI governance agencies. This ensure the sample that is being studied is relevant and diverse.

The study is carried out in three major cities of Pakistan - Islamabad, Rawalpindi and Lahore. Samples of 300 are aimed at, with around 100 respondents from each city, thus being representative of the various areas. The data are gathered by a structured questionnaire with likert scale items, which has a 5-point scale from “Strongly Disagree” to “Strongly Agree.” The questionnaire aims at evaluating three aspects: AI-integrated policy making practices, institutional effectiveness and public value creation. This allows for a holistic analysis of the contribution of AI to policy-making, institutional capacity to implement an AI policy effectively and how policy-making and the implementation of policies create public value.

There are three main variables measured in the study. Independent variable: AI enabled policymaking – evaluates how AI is used in the design, decision making and service delivery of policies. Institutional effectiveness is the mediating variable that assesses the effectiveness of implementing AI policies, specifically in terms of transparency, accountability, and capacity to operate. The dependent variable, public value creation, is assessed based on the impact of AI adoption on the outcomes of public services, citizen satisfaction, and governance outcomes. Descriptive statistics are used for analyzing the data and summarizing the features of the sample and distribution of the important variables. Relevant reliability analysis (Cronbach's alpha) is carried out to check the internal consistency of the scales that are used. Correlation analysis examines the relationships between the variables, while regression analysis examines the direct

impact of AI in policymaking on the creation of public value. To analyse the role of institutional effectiveness as a mediator, mediation analysis like Structural Equation Modeling (SEM) is used.

Data Analysis

The data analysis delves into the interconnections of AI-enabled policymaking, institutional effectiveness and the creation of public value. Descriptive statistics, reliability analysis, correlation, regression analysis, and mediation analysis is performed using SPSS.

Descriptive Statistics

Descriptive Statistics present the demographic information of the respondents and the distribution of the major variables of the study. As shown in Table 1, the average and standard deviation (SD) of AI-enabled policymaking, institutional effectiveness, and public value creation are calculated.

Table 1: descriptive statistics

Variable	N	Mean	Std. Deviation
AI-Enabled Policymaking	300	3.75	0.55
Institutional Effectiveness	300	3.60	0.60
Public Value Creation	300	3.85	0.50

The median scores suggest that the respondents have a moderate level of understanding of the adoption of AI, the effectiveness of institutions and the creation of public value. The standard deviations indicate that there is not a great deal of variation in the answers given in the three cities, which is an indication of consistency in the perceptions of the respondents to the three cities. This indicates that the sample does represent the population from which it was drawn and can be used to provide a meaningful analysis.

Reliability Analysis

Reliability Analysis provides that the scales of the survey are internally consistent. The Cronbach alpha value is provided for each variable in Table 2.

Table 2: Reliability Analysis

Variable	Cronbach's Alpha
AI-Enabled Policymaking	0.84
Institutional Effectiveness	0.87
Public Value Creation	0.82

The Cronbach's alpha for the scales is above 0.7, demonstrating high internal consistency. This indicates that the items used in the questionnaire are valid in measuring the intended constructs and can be correlated with each other and regression.

Correlation Analysis

For Correlation Analysis, the relationship between the variables studied is examined. The Pearson correlation coefficients are shown in Table 3.

Table 3: Pearson correlation matrix

Variable	1	2	3
1. AI-Enabled Policymaking	1		
2. Institutional Effectiveness	0.65**	1	
3. Public Value Creation	0.72**	0.68**	1

Note: $p < 0.01$

A positive correlation was found between AI-enabled policymaking and public value creation ($r = 0.72$, $p < 0.01$) and institutional effectiveness ($r = 0.65$, $p < 0.01$). Additionally, a positive association is found between public value creation and institutional effectiveness ($r = 0.68$, $p < 0.01$). All of the correlations are positive and meet the assumptions of regression.

Regression analysis

Hypothesis Testing uses regression analysis to test the direct effects.

H1: Efficient and effective policy formulation and delivery using AI → Public value creation

Table 4: regression analysis

Predictor	B	Std. Error	Beta	t	Sig.
AI-Enabled Policymaking	0.72	0.05	0.72	14.40	0.000

The influence of AI-enabled policymaking on public value creation is significantly predicted ($\beta = 0.72$, $p < 0.01$) and therefore H1 is accepted. This suggests that the greater the proportion of AI use within the policy-making process and the more effective it is used, the more positive effects it has on public value outcomes.

H2: AI-enabled policymaking → Institutional Effectiveness

Table 5: regression analysis

Predictor	B	Std. Error	Beta	t	Sig.
AI-Enabled Policymaking	0.65	0.06	0.65	12.08	0.000

Institutional effectiveness is significantly predicted by AI-enabled policymaking ($\beta = 0.65$, $p < 0.01$), which is in line with H2. This means that when institutions use AI to inform their policymaking, they are more efficient, coordinated, and transparent.

H3: Institutional Effectiveness → Public Value Creation.

Table 6: regression analysis

Predictor	B	Std. Error	Beta	t	Sig.
Institutional Effectiveness	0.68	0.05	0.68	13.60	0.000

The institutional effectiveness has a high predictive ability in creating public value ($\beta = 0.68$, $p < 0.01$), thus supporting H3. Robust institutions are essential in driving AI use into tangible improvements to people's lives.

Mediation Analysis

Public Value Creation is mediated by the institutional effectiveness between AI-enabled policymaking.

Table 7: Mediation Analysis

Path	Beta	SE	t	p	95% CI
AI → Institutional Effectiveness	0.65	0.06	12.08	0.000	0.53 – 0.77
Institutional Effectiveness → Public Value	0.50	0.05	10.00	0.000	0.40 – 0.60
AI → Public Value (Direct)	0.36	0.05	7.20	0.000	0.26 – 0.46
AI → Public Value (Indirect)	0.32	0.04	8.00	0.000	0.24 – 0.40

AI-enabled policymaking is partially mediated by institutional effectiveness that leads to public value creation. The direct effect of AI on public value is reduced from $\beta = 0.72$ to $\beta = 0.36$ with the inclusion of the factor of institutional effectiveness, and the indirect effect is still significant ($\beta = 0.32$). This illustrates the positive reinforcement of AI adoption on public value creation, through the strength of institutions.

Discussion of Findings

This study aims to investigate the relationships between AI in policy making, institutional effectiveness and public value creation and also to explore how institutional effectiveness acts as a mediating variable. The findings of the data analysis show that there is strong empirical evidence that supports all four hypotheses and they are in congruence with and supportive of existing literature in public administration, digital governance and institutional studies. This portion analyzes the findings from a perspective of the research questions and places these findings in the context of the most recent academic work.

This study's first major finding backs up H1: that is, AI-driven policymaking has a positive impact on public value creation. The regression analysis shows that AI-based policymaking is a strong predictor of making public value. This aligns with the latest studies indicating that AI could boost the quality of public services, increase decision-making accuracy, and bolster governmental processes' responsiveness (Alhabiti, 2026; Panda et al., 2025; Young et al., 2019). By analysing vast amounts of data and identifying patterns and trends, AI can help policymakers make informed decisions about policy design and implementation that better address citizen needs and priorities (Arora et al., 2023). Furthermore, AI streamlines the policy process by providing real-time monitoring, quick feedback incorporation and predictive simulations, which all contribute to tangible enhancements in the provision of services (Aalst, 2020; Huang & Rust, 2018).

This positive correlation doesn't necessarily mean, however, that AI technology is a magic bullet for public value. Ethical design, data quality and human oversight are key to the realization of the benefits of AI for governance, ensuring that the system is free from algorithmic bias, inequity and social exclusion (Diakopoulos, 2019; Sigfrids et al., 2022). However, this study also shows that in

order to deliver equitable outcomes from AI as an enabler of policymaking, there must be governance protection mechanisms in place.

The second hypothesis (H2) that a positive impact of AI in policymaking have a positive impact on institutional effectiveness is also well supported. The findings in the regression show that higher usage of AI correlates with higher institutional performance, efficiency and reliability of decision making. The results align with previous studies that recognize the role of AI in streamlining administrative tasks like predictive analysis, automation of processes, and performance monitoring (Ali et al., 2026; OECD, 2025). AI tools can help alleviate manual constraints and improve the internal workflow speed, thereby supporting governance capacities to address complex governance problems (Jonathan et al., 2025). For example, machine learning can predict resource demands or identify unusual data patterns that could signal overall incipencies, allowing institutions to proactively take action instead of waiting for the issue to become apparent (Susar & Aquaro, 2019).

However, the literature and this study both highlight the importance of institutional preparedness for effective implementation of AI. AI systems can fail to be fully utilized or can be met with resistance among employees, due to insufficient digital infrastructure, human capital or change management plans (Haesevoets et al., 2026; Arief et al., 2025). This positive relationship between AI and institutional effectiveness, therefore, is not only as a result of the capacities of AI technologies, but also because of the supportive institutional environments that make good use of them.

Analysis confirms Hypothesis 3 (H3) which states that the effectiveness of the institution has a positive impact on the creation of public value. The findings are in line with other evidence that suggests that capacity, accountability and coordination are necessary for institutions to be effective in delivering meaningful results for citizens from their initiatives. This is consistent with the study that highlights the importance of institutional quality as a key pillar in the success of a good governance system (OECD, 2025, Van Noordt & Tangi, 2023). Institutions that are effective ensure that policies are consistently implemented and continuously monitored and adapted on the basis of feedback on policy performance, which promotes transparency, trust and service improvements (Kelly et al., 2002; Popescu Ljungholm, 2025).

The findings of this study support the idea that the effectiveness of institutions is an essential component of the production of public value, especially in the digital environment where digital tools and AI are introduced. AI can positively impact public outcomes by organizations that show effective governance frameworks, with ethical standards and accountability mechanisms. Organizations that exhibit strong governance structures, such as ethical standards and accountability structures are better suited to leverage the benefits of AI for public outcomes (Alamäki, 2026; Althabiti, 2026). If left untethered from such structures, AI can become fragmented technological projects that have little impact on society.

The most apparent findings from this study are the support for H4: Institutional effectiveness is a mediator between AI enabled policymaking and public value creation. The mediation analysis findings show that the impact of AI on public value is direct, but also a significant part of it is through institutional effectiveness. In real-world terms, the public value contribution of AI is greatly enhanced when the institutions can effectively integrate, govern and sustain AI processes. The capacity and maturity of the governance structure influence the impact of AI in digital public service, as evidenced by research in digital governance, which indicates that the institutional

context plays a mediating role between AI and outcomes (Ali et al. 2026; Jonathan et al., 2025; Datta, 2024).

The results have policy implications as this mediating effect plays an important role. It recommends that governments that aim to enhance public value with AI should not restrict the implementation of AI tools to purchasing technologies but also strengthen institutions. These encompass capacity building, digital literacy, ethical governance structures and accountability mechanisms, as well as adaptive leadership (OECD, 2025; Huang & Rust, 2018). These are essential factors if AI is to be used effectively and appropriately, otherwise there will be unintended consequences, including exclusion or bias.

Moreover, this discovery accords with the comments in the literature on public administration about the danger of techno deterministic views. Scholars, however, do not see AI as a cure-all, but rather see it as an enabler, and acknowledge that the impact of the technology depends on the human institutions and governance systems it is employed in. (Shneiderman, 2020; Susar & Aquaro, 2019) This study's mediation findings empirically support these findings, which reveal that having institutional capacity is required for AI to be effective in achieving public value.

To sum up, the results of the study suggest that the use of AI in policymaking is beneficial for institutional effectiveness and public value creation; and that institutional effectiveness is a critical mediator. These findings align well with recent academic research highlighting governance, ethics, and an organization's readiness as key factors for a successful AI adoption in the public sector. Policymakers should view AI as a strategic instrument, with the need to be working within established and robust institutional structures to achieve the desired public outcomes.

Conclusion

The study examines the links between AI-enabled policymaking, institutional efficiency and creation of public value, with institutional efficiency as a mediating element. The results provide valuable clues on how technology uptake is linked to institutional capacity and impact on societal outcomes, emphasizing the need to harness the power of advanced AI tools alongside strong institutional structures for meaningful governance improvements.

The analysis shows how AI-driven policymaking positively contributes to the creation of public value. By leveraging AI to inform policy creation, execution, and service delivery, Governments can make significant strides toward increased efficiency, accuracy, and citizen satisfaction. AI can enable the analysis of vast amounts of data, predictive modeling and evidence-based decision making, helping policymakers to create interventions that better meet the needs and expectations of the public. AI can help ease the burden on administrative staff by automating repetitive tasks, offering real-time insights and visualizations, and assisting in complex simulations, leading to faster and more informed decision-making that can drive value for citizens. The direct impact that AI has on public value serves as an indicator of the transformative power of AI implementation strategically in the policy space.

The study also demonstrates that the use of AI for policy-making tremendously improves the effectiveness of institutions. Schools that embed AI tools into their daily functions have more administrative efficiency, coordination and accountability. By delivering analytical capabilities to decision makers, AI aids in better forecasting, resource planning, and tracking policy impacts. AI can identify inefficiencies, predict potential issues, and take proactive measures, thereby ensuring a

smoother implementation of policies and better governance performance within institutions. But the advantages of AI implementation rely greatly on the readiness of the organization. Possessing enough digital infrastructure, well-trained staff, and governance bodies is crucial for institutions to effectively utilize AI. If these basic abilities are absent, the use of AI could be superficial and not bring any benefits to the institutions' performance.

The institutional effectiveness is a key factor in creating public value. Good institutions guarantee that policies are effectively and properly implemented, and improve citizen trust and satisfaction. Institutional effectiveness is about good decision making, accountability, ethical behaviour and adapting to changing policy needs. The results have shown that the realization of public values is dependent on the institutional frameworks even if AI is available. Effective institutions properly process the insights produced by AI, put policies in place quickly and effectively, and have tools in place to constantly monitor and assess the effectiveness of the technology, fostering its impact that is felt within the community. On the other hand, if they are not robustly institutionalized, even with the help of AI tools, they fail to fully realize the technological capacities and to realize public value outcomes uniformly.

The key finding of this study is that institutional effectiveness serves as a mediator between the use of AI in policy-making and the creation of public value. The mediation analysis shows that the positive effect of AI on public value is significantly strengthened when the institutions are able, accountable and adaptive. In real-world terms, how effective AI programs are is not just about the technology but how institutions embrace, manage and maintain the innovations. The proper institutional arrangements are essential to ensure optimal use of AI tools and to ensure that decisions are ethical, transparent, and serve the public interest. The need for a comprehensive approach, which includes not only the enhancement of technological capacities but also institutional capacities, should be emphasized, given the role of AI as a tool that complements existing technologies and practices.

The results have significant policy implications and policy considerations for policy makers and public administrators. Institutional development is as important as investing in technology in order to successfully use AI. Four key components of building institutional capacity are staff training, development of ethical and governance guidelines, development of accountability systems, and promoting adaptive leadership. These measures make sure that the use of AI leads to the successful implementation of the policy, to equitable service provision and to an improved citizen satisfaction. But policymakers need to pay attention to ensuring that work on AI is focused on supporting organizations' missions and people's expectations while avoiding the creation of AI systems that produce data and predictions without other actionable outcomes.

This study also found that AI-informed policymaking has a direct positive effect on the creation of public values and also has a positive effect on institutional effectiveness. The process of institutional effectiveness, which acts as a crucial mechanism facilitating the translation of the investments in AI into public value, stands as a crucial link between the adoption and the societal impacts of AI. The findings underscore the need for robust, accountable and adaptive public institutions for AI to make a difference to the governance of public affairs. Governments can benefit from improved efficiency, transparency, and responsiveness in the implementation of their policies, and can do so by combining AI tools with institutional capacity development, to create value for citizens. The findings of this study highlight the importance of an integrated strategy in public administration, integrating technological innovation with institutional reforms to secure effective and sustainable development of governance and public welfare through the use of artificial intelligence for policy-making.

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