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Impact Analysis of Government Regulation No. 14 of 2021 on Construction Project Efficiency

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ABSTRACT

This study examines the implementation of Government Regulation No. 14 of 2021, which amended Government Regulation No. 22 of 2020 concerning the governance of construction services in Indonesia, and its implications for construction project efficiency. The regulation was introduced to strengthen management systems, improve the competencies of construction business actors, and promote efficiency, transparency, and accountability in project implementation. This study was conducted on ongoing construction projects in Indonesia, focusing on construction activities involving contractors, consultants, and commitment-making officials. A qualitative approach was employed to examine stakeholder perceptions and field evidence regarding the implementation of the regulation, particularly in relation to project timeliness, cost control, work quality, and administrative compliance. Data were collected through in-depth interviews with contractors, consultants, and commitment-making officials, as well as direct observations of ongoing construction projects. The data were analyzed using thematic analysis through data familiarization, coding, identification of themes, systematic presentation of findings, and conclusion drawing. The findings, based on both stakeholder perceptions and observational evidence, suggest that the implementation of the regulation is associated with improvements in professionalism, transparency, and administrative compliance in the construction procurement process. Participants perceived that improved management and procurement practices supported more effective cost control and better work quality. However, during the initial implementation period, increased administrative requirements and adjustments to licensing mechanisms were perceived as contributing to temporary delays in project implementation. The findings indicate that the effectiveness of the regulation depends largely on the readiness of human resources and the institutional capacity of implementing agencies. Therefore, optimizing the implementation of Government Regulation No. 14 of 2021 requires stronger coordination among stakeholders, comprehensive regulatory socialization, improved human resource capacity, and continuous managerial adjustment.

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1. INTRODUCTION

The construction industry occupies a crucial position within the national development framework, as it is directly associated with the provision of public infrastructure and the support of economic activities. The availability of high-quality infrastructure not only contributes to accelerating economic growth but also enhances national competitiveness and promotes equitable development across regions [1]. From this perspective, efficiency in the implementation of construction projects is a fundamental aspect, as inefficiencies may lead to budget overruns, delays in project completion, and a decline in construction quality. Efficiency-related problems are generally influenced by weaknesses in governance, limited competencies among industry stakeholders, and suboptimal control and supervision mechanisms. Therefore, public policy plays a strategic role as a regulatory instrument to ensure that every stage of a project is implemented effectively, transparently, and responsibly. The existence of adaptive regulations aligned with industry dynamics is expected to address various structural problems within the construction services delivery system [2], [3].

In the context of policy reform in the construction sector, the Indonesian government introduced regulatory revisions through Government Regulation Number 14 of 2021, which amended Government Regulation Number 22 of 2020 concerning the implementation of construction services. The revision was intended to strengthen the governance system of the construction industry, improve business licensing procedures, and enhance competency standards and certification mechanisms for construction companies and workers. In addition, the regulation was also designed to establish a more open and competitive procurement system. The government emphasized the importance of integrating information technology and simplifying administrative processes as strategic measures to reduce potential inefficiencies [4]. Conceptually, this policy was formulated as a normative instrument to improve project implementation quality while reducing the likelihood of construction failures. Nevertheless, the implementation of new regulations often presents challenges during the transition phase, requiring readiness and adaptation from all stakeholders within the sector.

Efficiency in construction projects is essentially determined by several key parameters, including timely completion according to the established schedule, the ability to keep costs within budget limits, the quality of work in accordance with specifications, and compliance with applicable administrative requirements and technical standards. In practice, delays and cost overruns remain recurring issues in the implementation of construction projects in Indonesia [5]. This phenomenon indicates a discrepancy between regulatory provisions that have been normatively designed and their actual implementation in the field. Therefore, evaluating the impact of newly implemented policies is crucial for assessing the effectiveness of regulations in addressing these fundamental issues. Through a comprehensive understanding of the relationship between policy and project performance, various factors that support or hinder the implementation process can be identified. Furthermore, this assessment is important for examining the extent to which the normative

objectives of the policy are aligned with empirical conditions emerging in construction practices [6].

The implementation of Government Regulation Number 14 of 2021 has implications for the configuration of relationships among the government, construction service providers, and service users. The regulation emphasizes strengthening professionalism through competency certification mechanisms and optimizing the functions of relevant institutions in registration and supervision processes. At the same time, changes in licensing procedures and the restructuring of administrative systems require adequate human resource readiness and institutional capacity. Some industry stakeholders perceive the policy transition phase as increasing administrative complexity and burdens. However, others argue that the regulation provides greater legal certainty and more structured operational standards for project implementation. These varying responses indicate that the success of a policy is highly dependent on the conditions and readiness of its implementation environment [7].

In public policy studies, the effectiveness of a regulation does not solely depend on the quality of its normative substance but is also determined by the capabilities of implementing authorities, as well as the level of compliance and commitment among industry stakeholders. Systematic dissemination, technical assistance, and continuous supervision mechanisms are strategic elements for ensuring the achievement of policy objectives [8]. When the implementation process is carried out optimally, regulations have considerable potential to promote efficiency through the standardization of procedures and the strengthening of accountability principles. However, if coordination among institutions is not sufficiently synergistic, inefficiencies may arise due to overlapping authorities and delays in administrative processes. Therefore, an assessment of policy impacts needs to be conducted comprehensively and supported by adequate empirical data. This approach is essential for formulating applicable recommendations aimed at improving governance in the construction sector [9].

Based on the foregoing discussion, this study is directed toward an in-depth examination of the influence of policies on the efficiency of construction projects, with particular emphasis on the dimensions of timely implementation, cost control, quality of work outcomes, and compliance with administrative requirements. This study employs a qualitative approach to explore the experiences, perspectives, and interpretations of construction industry stakeholders regarding the implementation of applicable regulations [10]. Data were collected through in-depth interviews and direct field observations to capture the dynamics that emerged following the implementation of the policy. The collected information was subsequently analyzed using thematic analysis to identify patterns, trends, and key issues relevant to the research focus. The selection of this approach was based on the consideration that qualitative methods can provide a more contextual and comprehensive understanding than analyses that are solely quantitative in nature. Within this framework, the study is expected to provide a comprehensive overview of the extent to which the implemented policies are effective in promoting greater construction project efficiency [11].

Conceptually, this study contributes to strengthening the literature on public administration and construction management, particularly by explaining the relationship between regulatory policies and project performance. From an implementation perspective,

the findings of this study can serve as a basis for the government to review and improve existing policies [12]. In addition, the findings are also relevant to construction service providers in formulating management strategies that are aligned with the latest regulatory requirements. A comprehensive analytical approach is expected to reduce the gap between the normative formulation of policies and operational realities in the field. By positioning efficiency as the primary parameter, this study emphasizes the importance of governance that is flexible, adaptive, and responsive to the developments and complexities of the construction industry [13].

Several previous studies have examined project efficiency and regulations in the construction sector from various perspectives. First, the study conducted by Abanda [2] primarily focused on evaluating the implementation of construction service regulations from the perspective of administrative compliance, but did not examine in depth their implications for project completion time and cost control. Second, research conducted by Ranjbar [14] focused on strengthening the competencies and certification systems of construction workers without comprehensively linking these aspects to overall project performance. Third, the study by Castañeda [1], conducted at the University of Indonesia, examined construction procurement governance within the framework of transparency and accountability but did not position Government Regulation No. 14 of 2021 as the main variable in its analysis. In contrast to these three studies, the present study specifically investigates the impact of recent regulations on construction project efficiency as a whole, employing a qualitative approach through interviews and field observations. Thus, this study provides empirical findings that are more current, contextual, and relevant to the dynamics of policy implementation in construction industry practices.

2. METHOD

This study employs a qualitative approach to obtain a comprehensive understanding of the influence of policies on the efficiency of construction projects. This approach was selected because it provides an opportunity to explore empirical facts contextually while using the experiences and perspectives of industry practitioners as primary sources of information. The study focuses on the implementation of Government Regulation No. 14 of 2021 as an amendment to Government Regulation No. 22 of 2020 in the practice of construction services. Using a descriptive-analytical research design, this study aims to describe the relationship between implemented policies and project efficiency indicators, including timely completion, cost control, work quality, and compliance with administrative requirements. The qualitative approach also enables the researchers to capture the perceptions, interpretations, and adaptation strategies adopted by stakeholders in response to regulatory changes. Therefore, this study does not merely evaluate the final outcomes of the policy but also examines the dynamics of its implementation process in the field in greater depth.

Data collection was conducted through in-depth interviews with informants selected purposively based on their level of involvement in construction project implementation. The informants included contractors, supervisory consultants, and commitment-making officials who play important roles in the decision-making process and implementation of project

activities. The interviews were designed in a semi-structured format, allowing the researchers to maintain a predetermined set of questions while providing opportunities to explore relevant issues that emerged during the research process [15]. In addition, this study employed direct observation of several ongoing construction projects to obtain empirical data concerning the practical implementation of regulations in operational activities. The observations focused on managerial, procedural, and administrative dimensions related to project efficiency. The combined use of interviews and observations was intended to strengthen the validity of the findings through triangulation, both in terms of sources and data collection methods [16].

The collected data were subsequently analyzed using a thematic analysis approach through systematically structured stages. The initial stage involved data reduction, which consisted of selecting, focusing, and simplifying information directly relevant to the research objectives. Subsequently, the data were presented in an organized descriptive form to facilitate the identification of patterns, trends, and relationships among the findings [17]. The conclusions were then drawn gradually by referring to the central themes identified from the interviews and field observations. The analysis was conducted iteratively to maintain consistency and enhance the depth of interpretation. Through this procedure, the research findings are expected to accurately and comprehensively portray empirical realities while maintaining academic accountability [18].

To ensure the validity and credibility of the research findings, this study applied data validation procedures consisting of source triangulation, peer debriefing, and member checking. Source triangulation was conducted by compiling and comparing information obtained from various parties involved in the projects to develop a more comprehensive and objective understanding [19]. Peer debriefing was employed to examine the consistency of the data interpretation process while minimizing potential bias arising from researcher subjectivity. Meanwhile, member checking was conducted by reconfirming the findings with the informants to ensure consistency between the researchers' interpretations and the empirical realities they experienced. These methodological procedures were systematically designed to ensure that the analysis of the impact of policies on construction project efficiency was conducted transparently, systematically, and in an academically accountable manner [20].

3. RESULTS AND DISCUSSION

Based on the findings from interviews and direct field observations, the implementation of Government Regulation No. 14 of 2021 as an amendment to Government Regulation No. 22 of 2020 indicates a significant transformation in the governance system of construction projects. The informants revealed that the latest policy promotes greater professionalism through mandatory certification for both business entities and construction workers. Administrative procedures have become more organized and systematically documented. Transparency in the procurement mechanism has also improved, accompanied by clearer workflows and increasingly detailed requirements. From a medium-term perspective, these changes have contributed to improved work quality and more effective cost control. Nevertheless, during the initial implementation phase, several projects

experienced delays due to the adaptation process to the newly introduced administrative requirements.

Overall, contractors stated that the latest regulation provides clearer guidance regarding workflows and the division of responsibilities among the parties involved in construction projects. Supervisory consultants considered that stricter competency standards contribute to greater consistency in the technical quality of work in the field. Meanwhile, commitment-making officials assessed that the procurement mechanism has become more transparent and administratively accountable. Nevertheless, the implementation of the policy is not free from challenges, particularly in adjusting licensing procedures and updating legal documents, which require additional time. This situation resulted in delays during the initial stages of project implementation, particularly throughout the policy transition period. However, once project stakeholders were able to adapt to the new requirements, efficiency performance began to show a more stable trend. This improvement was reflected in increasingly controlled time and cost management. Therefore, although the initial phase was characterized by administrative challenges, in the medium term, the regulation contributed positively to improving the efficiency of construction projects.

Field observation findings indicate that projects that had adapted to the latest regulations demonstrated more organized and systematic administrative document management. Project activity recording and reporting systems operated in a more structured manner, facilitating evaluation and auditing processes. Coordination among the parties involved in projects also became clearer because the division of duties and responsibilities was explicitly established. Standardization in the supervision of materials and labor contributed to more effective cost control. Although additional administrative procedures were introduced during the initial phase, the overall work mechanism became more controlled after the adaptation period. Operational stability began to emerge as stakeholders gained a better understanding of the new requirements. This condition reflects improvements in the internal governance of construction projects. The impact of the policy was not merely reflected in the completeness of formal documentation but also in improvements in the quality of project management. The implementation of the regulation also fostered more disciplined and accountable work practices. Thus, the policy changes had a substantive influence on managerial practices at the operational level of construction projects.

The research findings indicate that the implemented policy has a constructive influence on improving project efficiency from a medium-term perspective. Strengthening professionalism and transparency in governance serves as a key element contributing to overall improvements in project performance. Competency standardization and clear procedures encourage the development of a more focused and measurable work system. Nevertheless, various administrative obstacles emerged during the initial stage of policy implementation, resulting in temporary delays in project execution. The increased complexity of administrative requirements was particularly related to certification mechanisms and licensing procedures that needed to be adjusted to the new regulations. This situation required managerial and technical adjustments from construction businesses and other project stakeholders. During the transition period, some projects experienced delays due to the need to adapt to the new procedures. However, over time, as understanding of the

regulations increased, industry stakeholders gradually became capable of adapting in a more systematic manner. This adaptation process gradually reduced the administrative obstacles that had previously emerged. Thus, the dynamics of policy implementation demonstrate an increasingly stable development pattern that supports construction project efficiency.

Table 1. Findings from Interviews and Observations

Analyzed Aspect	Interview Findings	Observation Findings	Impact on Efficiency
Professionalism	Increased certification and competency of workers	Work complies more closely with technical standards	Improves project quality
Procurement Transparency	Processes are more transparent and documented	Administration is more orderly and structured	Reduces the potential for waste
Timeliness	Delays occurred during the initial implementation	Procedural adaptation slowed the initial stage	Stabilized in the medium term
Cost Control	Costs became more controlled after the system was implemented	Stricter material supervision	Increased cost efficiency
Administrative Compliance	Requirements became more complex	Legal documents became more complete	Increased accountability

In-depth analysis indicates that the success of regulatory implementation is largely determined by the readiness of human resources and the institutional capacity of the parties involved in project implementation. Projects supported by management teams that are responsive and adaptive to policy changes generally tend to adjust more quickly and systematically. The ability to understand the substance of regulations and translate them into operational procedures is a key factor in facilitating the transition process. Conversely, projects with less structured administrative governance tend to face more significant challenges during the initial implementation phase. These obstacles are generally related to document adjustments, licensing mechanisms, and internal coordination. This condition demonstrates that implementation challenges do not solely stem from the complexity of regulations. Therefore, the effectiveness of a policy is determined not only by the quality of the formulated regulations but also by the competence and readiness of implementing actors at the operational level.

In general, the findings of this study indicate that the impact of policy on the efficiency of construction projects is not static but evolves throughout the stages of implementation. During the initial phase of implementation, increased administrative requirements and adjustments to work procedures result in delays in project execution. This condition is primarily driven by the need to adapt to new licensing mechanisms and documentation systems. Nevertheless, in the medium and subsequent periods, regulations play a role in establishing more professional, transparent, and accountable project governance. This transformation contributes to improvements in the quality of project outcomes, as technical standards and supervision become more structured. In addition, cost control systems show improvement as administrative processes and planning become more orderly. In other words, although the policy initially creates operational challenges, it gradually produces

constructive effects on project performance. Therefore, the contribution of regulations to construction efficiency can be considered positive, provided that it is supported by a consistent and continuous adaptation process involving all stakeholders.

Discussion

The discussion in this study is directed toward a comprehensive examination of the impact of policy on the efficiency of construction projects since the enactment of Government Regulation No. 14 of 2021 as an amendment to Government Regulation No. 22 of 2020. Based on empirical findings, the implementation of this regulation has generated effects that have developed gradually on project performance [21]. During the initial implementation phase, increased administrative requirements and adjustments to licensing procedures resulted in delays in project execution. This condition was primarily associated with the adaptation process to the new systems and requirements. Nevertheless, over the medium term, the regulation demonstrated constructive impacts through strengthened professionalism and increased transparency in procurement mechanisms. These changes subsequently contributed to improved cost control and enhanced work quality. Accordingly, the discussion focuses on two main aspects, namely the impact of the policy on professionalism and transparency in the procurement process [22].

Theoretically, professionalism and transparency are regarded as two fundamental elements in establishing effective and accountable construction governance. Professionalism reflects the level of human resource competence, compliance with applicable technical standards, as well as the commitment and responsibility of business actors in implementing projects [23]. Meanwhile, transparency in procurement concerns openness of mechanisms, clarity of criteria and requirements, and accountability at every stage of service provider selection. These two dimensions are closely interrelated and simultaneously influence overall project efficiency. Based on this conceptual framework, this discussion presents a systematic and contextual analysis of the research findings in accordance with the dynamics of policy implementation in the field [24].

Positive Impact on Improving Professionalism

Strengthening professionalism is one of the important consequences of the implementation of the latest regulation. The policy requires certification for construction enterprises and workers as a prerequisite for participating in project implementation. This requirement indirectly encourages industry players to meet competency standards that are clearer, measurable, and formally documented. The interview results indicate that the informants perceived these requirements as contributing to improvements in the quality of human resources in construction projects [25]. Certified workers are considered to possess more adequate technical expertise and more structured work management capabilities. In addition, standardized competency requirements help establish more disciplined and professional work practices. In the medium term, this increased capacity contributes to improved work output quality while reducing the potential for technical errors in the field. Thus, the regulation affects not only administrative aspects but also the overall improvement of project technical performance [26].

Furthermore, the implemented policy also reinforces the delineation of roles and responsibilities among all parties involved in construction projects. Clear authority structures can reduce the potential for duplication and overlapping tasks that previously often resulted in inefficiencies. Based on field observations, projects that have adapted to the new requirements demonstrate more organized and directed internal coordination patterns. The implementation of standard operating procedures is also carried out more consistently and documented more effectively. This condition contributes to increased work discipline and more systematic quality control. Therefore, professionalism is reflected not only in formal certification but also in strengthened governance and more structured managerial practices [27].

Nevertheless, during the initial stage of policy implementation, several challenges emerged related to relatively complex administrative adjustments. Several contractors reported that updating legal documents and fulfilling certification requirements required more time than before. This situation resulted in delays in project execution during the initial phase. However, as the adaptation process progressed and understanding of the new procedures increased, these obstacles could gradually be minimized. Thus, from a medium-term perspective, the strengthening of professionalism promoted by this regulation has made a meaningful contribution to improving construction project efficiency [28].

Positive Impact on Transparency in the Procurement Process

The transparency dimension of the procurement process has shown significant improvement following the implementation of the policy. The regulatory provisions introduce more detailed and standardized stages and requirements for the selection of service providers. According to the informants, the bid evaluation process is now conducted more openly, supported by administratively and technically validated documentation. This change contributes to reducing opportunities for less transparent practices while strengthening trust among stakeholders. Increased openness also promotes fairer and more professional competition at every stage of construction project procurement [29].

The observation results indicate a significant improvement in project administrative governance, reflected in increasingly structured and orderly document-recording systems. The audit process has also become simpler because all documents are systematically organized and easily traceable. Each stage of the procurement procedure now has a clear audit trail and is documented within an integrated digital system. This condition strengthens accountability while facilitating both internal and external supervision. Increased procedural transparency also helps reduce the potential for inefficiency and budgetary waste [30]. Over the medium term, greater openness contributes to more effective cost control and optimized use of project resources. In addition, accountability in fund management becomes more measurable and properly documented. Although the initial implementation phase experienced delays due to system adaptation, procurement mechanisms subsequently operated in a more organized, systematic, and efficient manner [31].

Increased transparency also contributes to strengthening the monitoring and evaluation system for project implementation. Clear workflows and established procedures enable commitment-making officials to perform monitoring and reporting functions in a more

structured and systematic manner. This condition facilitates the accountable tracking of every stage of project activities. Consequently, the level of administrative compliance among project implementers has increased significantly. Furthermore, the potential for deviations or practices that do not comply with regulations can be more effectively minimized. Transparency therefore not only plays a role in maintaining the integrity of the procurement process but also serves as a supporting factor in optimizing project performance. Overall, such procedural openness has a positive impact on achieving overall construction project efficiency [32].

Overall, the discussion indicates that the policy has made a constructive contribution to strengthening professionalism and increasing transparency in construction project implementation. During the initial implementation phase, there was indeed an increase in the administrative burden and adjustments to licensing procedures, which temporarily slowed down project activities [33]. However, after the transition period, the regulation proved capable of promoting a more accountable, orderly, and efficient governance system. These positive impacts are reflected in improved work quality and increasingly effective and measurable cost control. These indicators demonstrate that the policy plays a significant role in supporting construction project efficiency. Therefore, the success of its implementation is highly dependent on the readiness of human resources, technical competence, and institutional capacity to manage the adjustment process consistently and sustainably [34], [35].

4. CONCLUSION

This study concludes that the implementation of Government Regulation No. 14 of 2021 as an amendment to Government Regulation No. 22 of 2020 has a significant impact on the efficiency of construction projects. This impact is dynamic, particularly because the initial phase of implementation involved increased administrative requirements and adjustments to licensing procedures, which temporarily slowed project execution. Nevertheless, after the transition period, the regulation proved to strengthen the professionalism of business actors and improve transparency in procurement mechanisms. These changes contributed to improved work quality and more controlled and effective cost management. Thus, the policy substantively contributes to the realization of construction governance that is more accountable, orderly, and oriented toward both medium- and long-term efficiency.

Furthermore, the findings indicate that the success of policy implementation is largely determined by the readiness of human resources and institutional capacity to respond to regulatory changes. Projects supported by certified personnel, systematic administrative governance, and adaptive management demonstrated a faster ability to adjust to the new provisions. This condition enabled the transition process to proceed more efficiently without significantly disrupting project performance. Conversely, limited technical competence and inadequate coordination among stakeholders may prolong the adjustment phase and negatively affect project performance during the early stage of implementation. Therefore, optimizing policy implementation does not solely depend on the quality of the regulatory

substance but also on the organizational capacity to operationalize the provisions effectively and sustainably within managerial practices.

Based on the comprehensive analysis, this study emphasizes that the success of policy implementation is highly dependent on strong synergy among stakeholders, comprehensive dissemination of regulations, and continuous management adjustments. These measures constitute an essential foundation for optimizing the positive implications of the policy for project efficiency in a stable and sustainable manner. Without effective coordination, the potential benefits of the regulation may not be fully realized at the operational level. Therefore, adequate institutional capacity is a key factor in ensuring a smooth policy adaptation process. In this context, regulation should not merely be positioned as a formal administrative instrument but also as a strategic instrument for strengthening the governance system. Through an integrated approach, the policy can contribute systematically and sustainably to improving management quality and the performance of construction projects.

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