



Digitalization as a Mechanism to Enhance Competition in Public Procurement under Law 23-12

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Abstract

Digitalization has become one of the most significant modern mechanisms for reforming public administration and enhancing transparency and efficiency in public procurement systems. In Algeria, the adoption of Law No. 23-12 reflects a clear legislative orientation toward integrating digital tools into public procurement procedures as a means of strengthening competition, ensuring equal access to public contracts, and limiting practices that undermine fairness and transparency. This paper examines the role of digitalization as a legal and technical mechanism for enhancing competition in public procurement under Law No. 23-12. It analyzes the legal framework governing digital procurement, highlights the objectives and advantages of digitalization in promoting competitive principles, and evaluates its contribution to reducing administrative discretion, improving access to information, and increasing market openness. The study also addresses the main challenges associated with the implementation of digital procurement systems, including technical, legal, and institutional constraints. Ultimately, the paper seeks to assess the effectiveness of digitalization in achieving competitive public procurement and to identify its implications for governance and economic efficiency.

Keywords: Digitalization; Public Procurement; Competition; Transparency; Law No. 23-12; Algeria.

Introduction

Public procurement constitutes one of the most important fields of state economic activity, as it represents a primary instrument for implementing public policies and managing public funds. Due to the significant financial volumes involved and the multiplicity of actors participating in procurement processes, this field has long been vulnerable to risks related to corruption, lack of transparency, and restrictions on competition. Consequently, modern legal systems have increasingly sought to establish regulatory frameworks that ensure integrity, fairness, and equal opportunity among economic operators.

In this context, digitalization has emerged as a strategic choice for modernizing public procurement systems. By relying on electronic platforms and digital procedures, public authorities aim to simplify administrative processes, enhance transparency, facilitate access to information, and promote effective competition. Digital procurement contributes to reducing



direct human intervention, limiting discretionary practices, and expanding participation by enabling a larger number of bidders to access procurement opportunities.

In Algeria, Law No. 23-12 marks a significant development in the legal regulation of public procurement by incorporating digitalization as a core mechanism for improving governance and reinforcing competitive principles. The law reflects a legislative awareness of the importance of digital tools in aligning public procurement practices with international standards, particularly with regard to transparency, equal treatment, and open competition.

This study seeks to examine digitalization as a mechanism for enhancing competition in public procurement under Law No. 23-12. It explores the legal foundations of digital procurement, analyzes its role in strengthening competitive practices, and evaluates the challenges that may affect its effective implementation. Through this analysis, the paper aims to contribute to a better understanding of the legal and practical implications of digitalization in public procurement and its role in promoting economic efficiency and good governance.

Legal Foundations under Law No. 23-12

Digitalization in public procurement refers to the systematic integration of modern information and communication technologies into the processes of planning, tendering, awarding, and managing public contracts. It goes beyond the mere automation of administrative tasks to encompass a comprehensive transformation of procurement systems, enabling electronic communication, online submission of bids, digital evaluation of offers, and secure archiving of documents. The concept emphasizes efficiency, accessibility, and real-time management, aiming to facilitate interactions between public authorities and economic operators while reducing delays, errors, and human intervention. By digitizing procurement procedures, governments can ensure that processes are standardized, traceable, and responsive to the needs of both public institutions and private sector participants, creating a more reliable and professional procurement environment.

The legal foundations of digital procurement in Algeria are firmly established under Law No. 23-12, which provides a regulatory framework for public contracts and integrates digital tools as an official mechanism for conducting procurement procedures. The law explicitly recognizes the use of electronic platforms and digital processes to modernize public contracting, improve efficiency, and promote fair competition. It defines the responsibilities of contracting authorities, the rights and obligations of bidders, and the procedures for submitting, evaluating, and awarding tenders electronically. By embedding digitalization within the statutory provisions of public procurement, Law No. 23-12 ensures that electronic systems are not optional or secondary but a legally recognized and enforceable component of the procurement process, reflecting the state's commitment to modernization and alignment with international best practices.

One of the central principles underlying digitalization in public procurement is transparency, which ensures that all processes are open, documented, and accessible to relevant stakeholders. Digital platforms allow public authorities to publish tenders, evaluation criteria, and award



decisions online, enabling bidders and oversight bodies to monitor procedures and verify compliance with legal requirements. Transparency reduces the risk of corruption, favoritism, and undue influence, creating a more credible and trustworthy system. In addition, digitalization supports equal treatment of all bidders by standardizing submission formats, evaluation methods, and communication channels, thereby minimizing administrative discretion and ensuring that offers are assessed fairly and objectively. These mechanisms collectively foster confidence among economic operators and enhance the legitimacy of procurement decisions. Efficiency constitutes another core principle that is reinforced through digitalization, as electronic procedures significantly reduce processing times, administrative burdens, and costs associated with manual operations. Automated workflows facilitate timely notifications, standardized documentation, and systematic recordkeeping, which not only accelerate procurement cycles but also provide reliable data for monitoring and reporting. Efficiency also extends to the broader economic impact, as digitalization encourages greater participation, intensifies competition, and improves value for public funds. By integrating transparency, equal treatment, and efficiency into a cohesive digital framework, Law No. 23-12 establishes a modern and effective legal and institutional environment for public procurement, in which digitalization functions as a central mechanism for improving governance, accountability, and competitive fairness.

Digitalization as a Mechanism for Enhancing Competition in Public Procurement under Law No. 23-12

Digitalization in public procurement represents a transformative approach to managing public contracts by integrating modern information and communication technologies into traditional administrative procedures. It involves the use of electronic platforms, automated workflows, and digital tools to streamline procurement processes while ensuring compliance with established legal norms. Under Law No. 23-12, digitalization is legally framed to promote transparency, accountability, and efficiency, reflecting a broader legislative intention to modernize public procurement and align it with international standards. This framework establishes the foundational principles of digital procurement, including equal treatment of bidders, impartial evaluation procedures, and timely access to information, creating an environment where administrative processes are more predictable and consistent. By codifying these principles, the law provides a clear legal basis for the adoption of digital tools, ensuring that digitalization is not merely a technical innovation but a mechanism firmly embedded within the Algerian public procurement legal system.

The implementation of digitalization has a direct and measurable effect on competition within public procurement by removing traditional barriers and facilitating broader participation among economic operators. Electronic platforms enable a larger number of bidders to access procurement opportunities simultaneously, which intensifies competition and increases the likelihood of obtaining favorable outcomes for the public administration. Moreover, digital procurement limits the scope for discretionary decision-making by administrative authorities,



as processes such as tender submission, evaluation, and awarding of contracts are traceable and standardized. This system reduces opportunities for favoritism and procedural manipulation, thereby reinforcing fair competition. Law No. 23-12 explicitly emphasizes the importance of fostering competitive practices, and digitalization serves as a practical and enforceable tool to achieve these objectives, contributing to both market efficiency and public trust in the procurement process.

In addition to enhancing competition, digitalization plays a critical role in promoting transparency and good governance in public procurement. Electronic systems ensure that all steps of the procurement process are documented, accessible, and auditable, which significantly reduces the risk of corruption and opaque practices. Public access to information regarding tenders, evaluation criteria, and contract awards strengthens accountability and enables oversight by stakeholders, including civil society and regulatory authorities. By integrating transparency as a core principle, digitalization under Law No. 23-12 supports administrative efficiency while safeguarding ethical standards. The systematic use of digital records facilitates monitoring and evaluation of procurement activities, allowing authorities to identify irregularities, ensure compliance with legal requirements, and promote responsible management of public resources. Consequently, digitalization does not merely improve procedural speed but reinforces the integrity and credibility of the procurement system as a whole.

Despite its advantages, the implementation of digital procurement under Law No. 23-12 faces several challenges that must be addressed to fully realize its potential. Technical limitations, including insufficient infrastructure, cybersecurity risks, and digital literacy gaps among administrative personnel and bidders, can hinder the effectiveness of electronic systems. Legal ambiguities regarding certain procedural aspects and institutional resistance to change may also slow the adoption of digital tools. Nonetheless, these challenges are accompanied by significant prospects, as ongoing technological advancements and policy reforms create opportunities to enhance efficiency, competitiveness, and governance in public procurement. Addressing these obstacles requires a coordinated approach involving capacity building, legal clarification, and continuous technological updates. By overcoming these barriers, Algeria can leverage digitalization as a sustainable mechanism to modernize public procurement, improve economic efficiency, and reinforce the principles of fair competition in accordance with the objectives of Law No. 23-12.

Impact of Digitalization on Transparency and Good Governance

Digitalization has profoundly transformed the landscape of transparency in public procurement by ensuring that every stage of the procurement process is visible, documented, and accessible to relevant stakeholders. Through electronic platforms, contracting authorities can publish tenders, bid evaluation criteria, and award decisions in real time, allowing bidders, auditors, and the general public to follow the procedures closely. This openness reduces ambiguity and enhances trust between public institutions and economic operators, as stakeholders can monitor



whether processes comply with legal and regulatory standards. Digital tools also facilitate systematic reporting and statistical analysis, enabling authorities to identify trends, detect irregularities, and improve policy-making. In this way, digitalization strengthens good governance by embedding transparency as a core operational principle, ensuring that public procurement is conducted in a manner that is accountable, equitable, and aligned with the public interest.

Public access to information is one of the most tangible benefits of digital procurement systems, as it provides economic operators with timely, comprehensive, and standardized information necessary to participate effectively in tenders. Electronic platforms allow the publication of notices, tender documents, evaluation procedures, and contract awards in a centralized, accessible manner, removing traditional barriers related to geography, bureaucracy, or selective dissemination. By granting all bidders equal access to the same information simultaneously, digitalization reinforces the principle of equal treatment and fosters a competitive environment where decisions are based on merit rather than privileged access. Moreover, transparency in information promotes external oversight by regulators, civil society, and independent observers, enabling these stakeholders to assess compliance with legal norms, identify potential irregularities, and contribute to more effective monitoring of public procurement practices.

Traceability and accountability are further enhanced through the systematic use of digital systems, which create permanent records of all transactions, communications, and decisions. Electronic submission, evaluation, and award processes leave a clear audit trail that can be verified by authorities or third parties at any time, limiting the potential for arbitrary or unrecorded actions. This traceability not only allows for post-procedure analysis and dispute resolution but also incentivizes ethical behavior and adherence to regulations, as all actions are recorded and can be traced back to responsible individuals. By embedding accountability within digital workflows, public procurement systems reduce administrative discretion, improve decision-making transparency, and ensure that public funds are managed responsibly. As a result, traceability strengthens both institutional integrity and public confidence in the procurement system.

Despite these benefits, the implementation of digital procurement faces significant challenges that require careful management to fully realize its potential. Technical issues such as inadequate infrastructure, unreliable internet access, and cybersecurity risks can undermine system reliability and user confidence. Legal and institutional obstacles, including unclear regulatory provisions, insufficient digital literacy among administrative personnel, and resistance to change within institutions, can further hinder adoption. However, these challenges are accompanied by considerable opportunities, including the modernization of public administration, greater participation of diverse economic operators, and alignment with international best practices. By investing in robust technical infrastructure, clarifying legal frameworks, and promoting training and capacity-building, Algeria can overcome these obstacles and ensure that digital procurement systems contribute sustainably to competition.



Economic and Market Effects of Digitalization

Digitalization has a profound impact on the economic and market dimensions of public procurement by improving efficiency, reducing costs, and enhancing competition. The use of electronic procurement platforms allows for more transparent pricing, as all bidders can access the same information and submit offers under standardized conditions, which encourages competitive pricing and reduces the likelihood of overcharging or collusion. Cost efficiency is further achieved through the automation of administrative procedures, minimizing paperwork, reducing human error, and accelerating decision-making processes. In addition, digital procurement opens opportunities for small and medium-sized enterprises (SMEs) and new market entrants, which might previously have been excluded due to geographic, bureaucratic, or informational barriers. By broadening participation, digitalization not only strengthens competition but also stimulates innovation and diversification of the supply base. Ultimately, these improvements contribute to economic growth by ensuring better allocation of public funds, supporting emerging businesses, and creating a more dynamic and accessible market environment.

Stakeholders' Perception and Adoption

The success of digital procurement depends heavily on how stakeholders—including bidders, suppliers, and public officials—perceive and adopt these systems. Many stakeholders recognize the advantages of digitalization, such as greater transparency, simplified procedures, and reduced administrative delays, which enhance trust in public procurement processes. However, the adoption of digital tools can face significant barriers, including resistance to change, lack of familiarity with technology, and insufficient training for both administrative staff and private operators. Surveys and interviews conducted in various procurement settings reveal that effective capacity-building programs, clear guidance, and user-friendly platforms are essential to overcoming these challenges. Understanding stakeholders' perceptions allows policymakers to identify critical areas for improvement, ensure widespread acceptance, and design training initiatives that enhance the efficiency, reliability, and inclusiveness of digital procurement systems.

Comparative Perspective with International Standards

Examining digital procurement through a comparative lens highlights its alignment with international norms and provides valuable lessons for national law reform. Algeria's adoption of digital mechanisms under Law No. 23-12 reflects growing compliance with UN, WTO, and EU public procurement standards, particularly regarding transparency, non-discrimination, and equal access to contracting opportunities. Studying best practices globally demonstrates how countries have implemented electronic procurement to enhance competition, streamline procedures, and prevent corruption. For instance, successful e-procurement systems in Europe and Asia provide insights into effective platform design, regulatory frameworks, and stakeholder engagement strategies. Such comparative perspectives are instrumental in



identifying gaps, proposing improvements, and modernizing national legislation to ensure that digital procurement is not only technically efficient but also consistent with widely recognized principles of fairness, accountability, and competitiveness.

Recommendations and Policy Implications

To fully leverage the potential of digital procurement, targeted recommendations and policy interventions are essential. Legal amendments may be required to clarify digital procedures, define responsibilities, and ensure enforceability, while investment in infrastructure and secure electronic platforms is necessary to support reliable and widespread adoption. Capacity-building programs, including digital literacy training for administrative personnel and guidance for bidders, are critical to overcoming resistance and ensuring effective use of digital tools. Cybersecurity measures must be implemented to protect sensitive procurement data and maintain stakeholder confidence. Additionally, mechanisms to enhance competition and transparency, such as open-access platforms, clear evaluation criteria, and monitoring systems, should be established to ensure that digitalization achieves its intended economic, administrative, and governance benefits. By addressing these legal, technical, and institutional aspects, policymakers can create a sustainable and effective digital public procurement environment that promotes efficiency, fairness, and inclusive economic growth.

Conclusion

The study of digitalization as a mechanism for enhancing competition in public procurement under Law No. 23-12 reveals its multifaceted role in modernizing procurement processes, strengthening governance, and promoting economic efficiency. Digitalization is not merely a technological innovation but a comprehensive system that integrates legal, institutional, and procedural reforms aimed at achieving transparency, fairness, and competitiveness. By adopting electronic platforms, automated workflows, and secure digital procedures, public procurement in Algeria is increasingly aligned with international standards and best practices, reflecting a legislative commitment to modernization and good governance. The conceptual and legal framework established under Law No. 23-12 provides a robust foundation for digital procurement, embedding principles such as transparency, equal treatment, and efficiency into every stage of the procurement process. These principles are essential not only for the legal legitimacy of procurement procedures but also for fostering confidence among economic operators, public authorities, and civil society.

The impact of digitalization on competition is particularly notable, as it reduces barriers to entry, limits discretionary decision-making, and facilitates broader participation of economic operators, including small and medium-sized enterprises (SMEs) and new market entrants. By standardizing submission formats, evaluation criteria, and communication channels, digital platforms create a level playing field where competition is determined by merit and quality rather than favoritism or administrative discretion. The transparency of electronic systems ensures that all participants have equal access to relevant information, while traceable digital



records allow for accountability and monitoring, reinforcing both the integrity of the process and public confidence in the fairness of contract awards. Consequently, digitalization serves as a tangible mechanism for operationalizing the legal objectives of Law No. 23-12, translating statutory principles into practical and measurable improvements in competitive dynamics.

In addition to promoting competition, digitalization has profound implications for transparency, good governance, and the prevention of corruption. Public access to tender information, award decisions, and evaluation procedures enhances oversight by regulators, auditors, and civil society, thereby strengthening accountability and reducing the risk of illicit practices. The traceability and auditability of digital processes ensure that decisions are documented, verifiable, and resistant to manipulation, limiting opportunities for administrative abuse or favoritism. These features not only safeguard public resources but also contribute to the broader goals of governance by embedding ethical and procedural integrity into the procurement system. The integration of these mechanisms demonstrates that digitalization is not only a technical tool but also a strategic instrument for achieving sustainable reforms that enhance transparency, ethical compliance, and institutional trust.

Despite its numerous advantages, the implementation of digital procurement under Law No. 23-12 faces significant challenges that must be addressed to fully realize its potential. Technical constraints, such as inadequate infrastructure, cybersecurity risks, and limited digital literacy among administrative personnel and economic operators, can hinder effective adoption. Legal ambiguities, institutional resistance, and the need for capacity building also pose obstacles to seamless implementation. Nevertheless, these challenges present opportunities for strategic policy interventions, including legal reforms to clarify digital procedures, investment in secure and reliable infrastructure, training programs to enhance digital literacy, and the development of mechanisms to ensure continuous monitoring and evaluation. By addressing these issues proactively, Algeria can consolidate the gains of digitalization and ensure that public procurement processes remain efficient, competitive, transparent, and resilient in the face of evolving economic and technological contexts.

Furthermore, the economic and market effects of digital procurement extend beyond procedural improvements to contribute significantly to national development. By enhancing competition, digitalization encourages fair pricing, reduces administrative costs, and stimulates participation by SMEs and new market entrants, which promotes innovation, diversification, and inclusivity in public contracting. Comparative analysis with international standards highlights Algeria's alignment with global norms, including UN, WTO, and EU public procurement principles, and provides valuable lessons for law reform, platform design, and stakeholder engagement. Understanding stakeholder perceptions through surveys and interviews underscores the importance of addressing adoption barriers and training needs to ensure that digital tools are effectively utilized and accepted across all levels of procurement. These insights collectively inform recommendations for policy and legislative measures aimed at consolidating the benefits of digitalization, strengthening governance, and enhancing the socio-economic impact of public procurement.



In conclusion, digitalization under Law No. 23-12 represents a pivotal reform that transforms public procurement in Algeria into a more transparent, competitive, and efficient system. Its implementation promotes fairness, accountability, and access for a wider range of economic operators, thereby reinforcing both legal compliance and market efficiency. While challenges remain in infrastructure, legal clarity, and stakeholder adaptation, the prospects for sustainable improvement are substantial, provided that targeted policies, capacity-building initiatives, and technological investments are pursued. Digitalization thus emerges as a strategic tool that not only modernizes administrative processes but also supports economic development, good governance, and ethical integrity in public procurement. Its success demonstrates the critical role of integrating technological innovation with legal and institutional reforms, providing a model for the continued evolution of public procurement systems that are transparent, competitive, and aligned with international best practices. Ultimately, the integration of digital mechanisms under Law No. 23-12 offers Algeria a unique opportunity to strengthen its public procurement system, promote fair competition, and contribute to broader socio-economic development while ensuring sustainable and accountable governance.

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