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Toward Efficiency Public Policy: Lessons from the Uzbekistan's UzIMEI System

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ABSTRACT
This study critically examines the UzIMEI system—Uzbekistan's mobile device registration and customs policy—through the lens of public administration, focusing on policy efficiency, digital governance, and social equity. Implemented in 2024, the UzIMEI system aimed to formalize imports and improve tax compliance. However, it has encountered significant operational challenges, including manual processing delays, a flat-rate fee structure that disproportionately burdens low-income users, and limited public awareness. Using a literature review methodology, this paper evaluates the administrative shortcomings of UzIMEI and draws comparative insights from international best practices in Indonesia, India, and Kenya. These countries have adopted digital automation, tiered taxation, and public outreach campaigns to improve policy compliance and public service delivery. The analysis highlights that effective public policy must balance efficiency with equity and transparency. The study concludes that a hybrid reform model—comprising digital system integration, progressive fee structures, and citizen engagement strategies—offers the most viable path forward. By implementing such reforms, Uzbekistan can enhance both the effectiveness and fairness of its public services, positioning itself as a leader in equitable digital governance. This research contributes to the broader discourse on digital transformation and inclusive policy-making in emerging public administration contexts.

Introduction

The UzIMEI is Uzbekistan's system of registration of mobile devices and integrated customs declarations, which was set up in 2024 to manage the registration of mobile devices, formalise imports, and curtail tax evasion. The system has been criticised for increasing costs, procedural inefficiencies, and lack of publicity. The experiences of other markets, like India's GST on Electronics and Kenya's Device Registration System, do provide some examples of policy adjustments that improve these shortcomings.

This paper discusses reform ideas such as process digitisation, tiered fee systems, focused public engagement, and controlled subsidies. Concerning the themes that the paper addresses, it targets the Ministry of Digital Technologies, trade investors, Uzbekistan Customs Committee members, other policymakers advocating for improved trade efficiency and equity, and most of the public who have complained about the UzIMEI system. This paper discusses practical steps towards political and economic improvement due to the considerable shortcomings in the equity and inequality distribution in the current problem. In particular, the paper describes the problems arising from automatic, non-adaptive public customs processes.

The UzIMEI system, which started in 2024, requires mobile devices with SIM abilities to be registered whenever they are imported. Devices not registered are charged a tax fee of 30% alongside the registration fees. While the aims were to strengthen the device market, minimize fake products and improve the revenue of the government, this caused other operational inefficiencies. Processing power for the current procedures at the customs is done exclusively by people, therefore taking approximately 1 hour on average, which causes a lot of inconvenience to both businesses and tourists. This policy uses a flat fee for IMEI registration, which severely taxes low-income individuals by increasing budgets by 30%. Very few people seem to know what the system. This places a lot of issues with the system and outlines new operational priorities which need to be created.

Table 1. Issues of Policy Outcome Comparisons Among Nations

Country	Compliance Increase (%)	Revenue Growth (%)	Public Awareness (%)
Uzbekistan	20	12	55
Kenya	25	15	60
India	30	18	70
Indonesia	40	25	75

The table indicates compliance ratios, revenue raised, and how cognizant the public is of the issue. Indonesia grew fastest, with compliance at 40%, revenue at 25%, and awareness at 75% driven by digital technologies and retailer-centric methods (World Bank, 2021). India has a compliant growth of 30%, revenue growth of 18%, and awareness at 70% due to aggressive GST simplifications (Jain et al., 2021). Kenya captured compliance growth of 25% and revenue growth of 15%, with the awareness figure standing at 60% through outreach campaigns (GSMA, 2018). Uzbekistan does the worst with compliance growth of only 20% and revenue growth of 12% with 55% familiarity, chiefly because of the absence of system enhancement (Customs Committee of Uzbekistan, 2025).

The changes in the UzIMEI system have their reasons. To begin with, the lack of automation in customs processes is proving to be difficult, resulting in increased waiting times, administrative blunders, and unjustifiable user complaints. In addition, the tiered duty structures that are flat at the lowest tax rate ranges create access problems for consumers. This indeed opens up new dimensions to social inequalities. Moreover, the policy is not adhered to by the majority of its targets, and the associated compliance is poor due to a lack of awareness of the policy in the general public. Lastly, there are valuable lessons to be learned from the experience of other countries such as Indonesia, India, and Kenya, which suggest that the automation of the system, public campaigns aimed at increasing awareness, and especially the tiered fee structures can improve compliance and efficiency of the system in a more effective manner. There is, therefore, the possibility for Uzbekistan to make use of these experiences. This document looks into these difficulties through the evaluation of three policy approaches. The first approach is to do nothing and allow the status quo to continue while implementing small changes to the current system. With this option, customs work will be enhanced to some extent, but the fundamental problems of inequity and non-compliance will remain unresolved. The second approach is to workshop the customs and IMEI registration process by adopting a digitized system that permits the declaration of the IMEI through a central point. In Indonesia, this system has decreased processing times by about fifty per cent and improved compliance by forty per cent. The third approach is tiered fees and targeted

subsidies, where the duties are set at a proportionate level based on the device's value, and the subsidies cancel out the expenses incurred by low-income consumers.

In order to prevent the negative factors of undeclared imports and counterfeit devices in Uzbekistan's mobile device markets, the complexities in the systems were addressed through the erection of the UzIMEI system. This policy places a customs duty of 30% on all mobile devices and requires all travellers to submit customs declarations. Although these goals are commendable, the policy has several shortcomings. The manual customs processes that Excisers Claim Offices undertake to take, on average, over 60 minutes to complete, exasperating travellers and sellers alike. The policy is relatively unpopular and lower-end devices have their namespace budget increased by approximately 30% because the 30% customs duty impacts low income consumers the most. The customs requirements one of the barriers that complicate policy compliance. In contrast, a focused reform of Uzbekistan's current policy would help, like the automation and progressive fee structures that helped both Indonesia and India resolve similar problems.

Customs compensatory allowances differ based on means of travel, such as Air travel: $2.000, Train travel: $1.000, Travel via Car or Walking: $300. Devices above the quota or unreported devices are charged 30% customs duties and an IMEI registration fee of 75,000 soums (USD 6.50). The system combines customs and IMEI registration systems for coordination. Economic and Social Context Global Trends of Device Registration According to the estimates, unregistered mobile devices amount to over 20-30% of the mobile device market share in developing economies, which curtails government revenues and puts consumers at risk of poor quality goods (GSMA, 2018).

Uzbekistan has these problems, too, coupled with a lack of adequate supply of affordable devices and an expanding informal economy. Uzbekistan's Mobile Economy The country has witnessed a quick rise in mobile device subscriptions, with smartphones being ubiquitous for communication, trade, and education. Low affordability presents a challenge. More than 40 per cent of Uzbek households are, according to the World Bank (2021), IT device sensitive and spend over 10% of their income on such gadgets. Impact of the Current Policy Economic Impact Consumer Costs Increases of 30 per cent customs duty lead to greatly inflated costs of IT gadgets to the detriment of low and middle-class citizens. For instance, a $1,200 smartphone will cost $360 in customs duty; the same goes for the IMEI fee. Although policies do vary, a Kenyan country report stated that consumers will pay 15% more for mobile devices because of similar policies (GSMA, 2018). Due to tariffs, import costs for retailers have increased, and most of these retailers shift the extra cost to consumers. With the GST restructuring, India witnessed a 12% rise in the retail prices of electronics and saw formal market sales decline by 10% (Jain et al., 2021). If no measures are put in place to assist them, retailers in Uzbekistan are going to lose their business to informal businesses.

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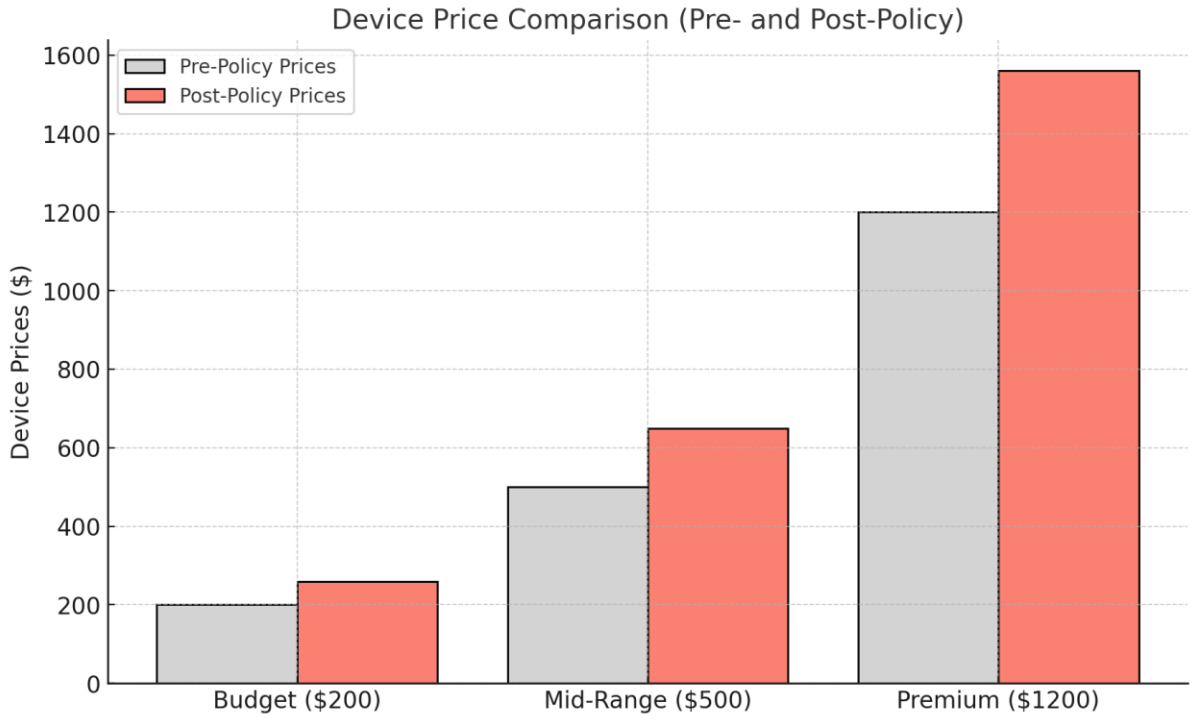

Figure 1. Price Changes of the Devices Comparison (With Policy, Without Policy)

This figure compares the device prices over the period before and after duty customs for UzIMEI came into force. With the introduction of the duty customs, the price of different devices starts from 200, and now goes up to 260. In this category, the premium device also increased from 1200 to 1560 with a growth of 30%, which is an increase of 30% in this category as well.

This has been indicated by the Customs Committee of Uzbekistan (2025). In Kenya, prices increased by 15%, while in India, the prices increased by 12% and in Indonesia, the increase was only 10% due to the gradual fee policy (GSMA, 2018; Jain et al., 2021; World Bank, 2021). UzIMEI processes customs declarations manually, and this and ineffective traveller processing, causes significant delays. During peak travel seasons, travellers have to deal with real difficulties with long wait times, and eyebrows rising over processes. The digitisation of Indonesia's Customs Automation Program demonstrates the true potential of cutting these processing times by 50% and compliance costs by 25% (World Bank, 2021). There is limited knowledge of the requirements of UzIMEI; other than being told what to do, the public doesn't know what to do. In Kenya, when a campaign was run to register devices, at the onset of the policy, only 55% of Kenyans had any knowledge of it; thus, their compliance rates were poor (GSMA, 2018). Public trust cannot be earned without transparency and outreach.

There is potential for data misuse with the combination of IMEI and customs systems. With the integration of biometric digital payment systems in Afghanistan, the same concerns were encountered during its first phase of deployment. Robust privacy regulations did help in increasing adoption by 33% in rural areas, but they are needed during integration (CGD Brief, 2022). There are several reasons why changes are required for the UzIMEI system; that is to say, these reasons are important in the UzIMEI system. The manual customs processes are prone to inefficiencies as Enabling Without Disabling The System (World Bank, 2021). Due to an increase in the rate of mobile device imports, these manual customs processes will start

to become increasingly inefficient. As it stands, the construction of the flat duty will also further worsen social inequalities whereby low-income consumers have to pay more than their equal counterparts (Jain, Sharma, & Desai, 2021). If technology-disabled people are provided with equal and justifiable access in Uzbekistan, as is required for the country to advance, then the country will be taken forward.

Method

This study adopts a literature review methodology to analyze the challenges and reform opportunities within Uzbekistan's UzIMEI system from a public administration perspective. A literature review is (Stadtländer, 2009) appropriate for this research, as it enables a comprehensive analysis of theoretical frameworks, comparative policy experiences, and governance models relevant to the case of digital public policy implementation and reform. This method supports critical insight into administrative inefficiencies, public service equity, and regulatory efficiency by synthesizing previous academic findings and policy experiences across different countries. The literature review is employed here to achieve two main objectives: (1) to situate the UzIMEI case within broader scholarly discourse on policy efficiency, digital governance, and equity in public administration, and (2) to identify international best practices in mobile device registration and customs policy reform that may offer relevant lessons for Uzbekistan. A thematic approach was applied in organizing the literature, drawing on foundational and contemporary sources in public administration, governance reform, and digital policy implementation

The review synthesizes scholarly publications, policy reports, and case studies. Key sources include:

- Peer-reviewed journals in public administration and policy (such as : Economic Policy Review, Development Policy Journal),
- International institution reports (such as : World Bank, GSMA),
- Government and institutional publications (such as : Customs Committee of Uzbekistan, 2025),
- Country-specific reform case studies from Indonesia, India, and Kenya, as documented in literature and international policy reports

The analysis was conducted by mapping the findings from literature to the core issues identified in the UzIMEI system. This includes evaluating how similar policy challenges have been addressed in other countries and identifying the administrative principles that guided successful reforms. The literature review is not merely descriptive but analytical, allowing for the evaluation of the underlying public administration dimensions of the UzIMEI policy. This supports the formulation of recommendations grounded in theory and empirical evidence, rather than anecdotal or purely technical perspectives.

Results And Discussion

Policy Efficiency

Policy efficiency is a core tenet in public administration, referring to the extent to which public policies achieve their intended goals with minimal waste of resources and optimal service delivery. In the context of the UzIMEI system in Uzbekistan, the current design and implementation reveal several inefficiencies that hinder the system's effectiveness and undermine public trust.

The most glaring inefficiency lies in the manual processing of customs declarations and IMEI registrations. Each transaction reportedly takes an average of 60 minutes to complete, which significantly slows down service delivery, especially during peak travel seasons (Customs Committee of Uzbekistan, 2025). From a public administration perspective, this situation violates the principles of streamlined bureaucracy and timely service provision, as discussed in (Canela-cacho et al., 2000) guide on policy analysis. In comparison, automated systems in countries like Indonesia have cut average processing times by more than half (World Bank, 2021), demonstrating what can be achieved through better-designed administrative systems.

Additionally, the flat customs duty of 30%—applied uniformly regardless of device value—suggests a lack of policy sensitivity to economic variation among users. Such rigid structures are often easier for governments to manage but are rarely optimal. Efficient public policy must be both responsive and adaptable to socio-economic diversity (Subirats, 2001). By failing to account for the financial capabilities of different consumer groups, the UzIMEI system imposes undue burdens on vulnerable populations and undermines public cooperation, thereby reducing overall compliance. Another dimension of inefficiency is low policy uptake and understanding. With only 55% of the population aware of the system (GSMA, 2018), the UzIMEI policy fails in one of its most basic administrative functions: informing the public. Effective policy implementation depends on clarity, communication, and citizen engagement. The lack of awareness directly correlates with the low compliance and rising dissatisfaction, resulting in a policy that fails to fully achieve its objectives despite significant administrative effort.

Furthermore, from a cost-benefit perspective, the system appears lopsided. While the policy may increase short-term revenue through duties, it also raises transaction costs, slows down processing, and alienates key stakeholders such as retailers and low-income consumers. As Bardach (Canela-cacho et al., 2000) suggests, good policy design should maximize benefits while minimizing unintended costs. In this case, the UzIMEI system sacrifices efficiency in favor of rigid control mechanisms, leading to system-wide strain and growing informal activity. The current UzIMEI policy structure does not reflect the standards of efficient public policy. It introduces procedural burdens, disregards user diversity, and fails to sufficiently inform or engage the public. A more efficient approach would involve automation of processes, tiered taxation, and targeted outreach, all of which could reduce transaction times, improve compliance, and enhance overall service delivery. As Uzbekistan continues to modernize its public institutions, efficiency must be prioritized—not just in policy formulation but in its real-world administrative execution.

Digital Governance

Digital governance refers to the use of digital technologies by governments to improve the design, delivery, and management of public services. It encompasses the automation of administrative processes, the digitization of citizen interactions, and the secure use of data to enhance transparency and responsiveness. In the case of Uzbekistan's UzIMEI system, the lack of a digital governance framework has become a major impediment to policy efficiency, equity, and public satisfaction. The UzIMEI system currently operates with minimal digital integration. Customs and IMEI registrations are processed manually, resulting in long queues and inefficient transactions, with the average processing time reported at 60 minutes per case (Customs Committee of Uzbekistan, 2025). This inefficiency reflects a missed opportunity to adopt digital governance mechanisms that have transformed public administration in other

countries. According to Heeks (2006), the digitization of public systems can reduce costs, minimize corruption, and improve administrative speed—outcomes that are vital for developing nations like Uzbekistan.

Indonesia's customs automation program provides a compelling example. The program integrated digital tools for declaration, verification, and taxation, which not only halved clearance times but also boosted compliance and public trust (World Bank, 2021). Had Uzbekistan implemented similar technologies within the UzIMEI system—such as an online registration portal, mobile apps for self-declaration, or automated kiosks at entry points—many of the current operational bottlenecks could have been alleviated.

Moreover, digital governance is not only about speed and convenience; it also enhances transparency and accountability. By digitizing the registration process and creating publicly accessible records, governments can reduce opportunities for discretionary decision-making and rent-seeking by officials. In the absence of automation, as seen in the UzIMEI process, citizens may perceive public institutions as opaque or inefficient, which erodes institutional legitimacy—a critical concern in public administration (United Nations Department of Economic and social Affairs, 2022). Another critical dimension of digital governance is data protection and digital privacy. Integrating IMEI data with customs records creates large databases of sensitive information, including the ownership and usage of mobile devices. Without a robust digital governance framework that includes cybersecurity protocols, user consent mechanisms, and independent audits, such integration could pose risks of surveillance or data misuse. Afghanistan's early attempts at integrating biometric systems for payments illustrate this point; public adoption only increased after privacy safeguards were instituted(Soskis, n.d.).

From a public service innovation perspective, digital governance allows for real-time monitoring and feedback. Governments can use dashboards to track registration rates, identify processing delays, and adapt their strategies dynamically. For Uzbekistan, this could mean identifying underperforming customs points or demographic groups with low compliance, and responding with targeted interventions. Finally, digital governance enables inclusive access, especially when mobile and web platforms are optimized for low-bandwidth environments and multilingual interfaces. In Uzbekistan's multiethnic and economically diverse society, digital inclusivity is essential to ensure that the benefits of the UzIMEI system are equitably distributed. Countries like Kenya and India have achieved broader outreach through mobile-first platforms and localized digital campaigns, which Uzbekistan can emulate (GSMA, 2018; Jain et al., 2021). The absence of a digital governance strategy in the UzIMEI system undermines its effectiveness and alienates both users and public officials. A comprehensive digital reform—rooted in principles of accessibility, transparency, and security—is not only desirable but necessary. Through targeted investment and policy design, Uzbekistan has the opportunity to transform UzIMEI from a bureaucratic bottleneck into a model of digital public service delivery

Equity In Public Administration

Equity in public administration refers to the fair and just distribution of public services, opportunities, and policy outcomes across all social groups, particularly marginalized and low-income populations. It emphasizes that governance should not only be efficient but also inclusive, ensuring that policies do not reinforce existing social disparities. In the case of Uzbekistan's UzIMEI system, equity challenges arise primarily from the uniform tax regime, lack of tiered pricing, and limited accommodations for vulnerable users.

The current structure of the UzIMEI policy imposes a flat customs duty of 30%, regardless of the mobile device's cost. While administratively simple, this approach is regressive and disproportionately affects low-income individuals, who often purchase cheaper devices yet pay the same percentage in fees as those buying high-end smartphones. For a family purchasing a $200 phone, an additional $60 in tax represents a substantial financial burden. By contrast, the same percentage applied to a $1,000 device is far less disruptive for wealthier individuals. This design effectively amplifies economic inequality, running counter to public administration principles of social justice and accessibility.

Equity also requires that citizens have meaningful access to services. However, the UzIMEI system lacks provisions for digital or physical accommodations that could help users with limited digital literacy, disabilities, or those living in remote areas. The absence of multilingual support, mobile-friendly platforms, and simplified instructions excludes many citizens from fully engaging with the policy, further marginalizing groups already at risk of exclusion from digital governance. These structural shortcomings underscore the need for targeted policy design, as discussed by scholars like Rosenbloom and Kravchuk (2005), who argue that equitable public service delivery must account for varying needs and capacities.

International Best Practices in Mobile Device Registration

International experiences show that addressing equity can enhance both policy legitimacy and public compliance. In India, the introduction of tiered GST structures allowed essential goods to be taxed at lower rates than luxury goods, thereby protecting poor consumers while maintaining state revenues (Jain et al., 2021). Similarly, Indonesia implemented progressive customs structures for imported goods, allowing affordable phones to remain within reach for low-income groups while taxing luxury electronics at higher rates (World Bank, 2021). These models demonstrate that equity and efficiency are not mutually exclusive but can be jointly pursued with thoughtful design. The UzIMEI system also lacks compensatory mechanisms such as subsidies or tax credits for low-income groups. In many developing countries, targeted subsidies have been used to offset the negative impacts of broad tax regimes on vulnerable populations. Without such interventions, low-income households are pushed into informal markets, undermining both the goals of compliance and digital inclusion. The equity shortcomings of the UzIMEI system reveal a critical need for reform that aligns with the values of fairness, inclusion, and responsive governance. Public administration in the digital era must go beyond uniform implementation and prioritize differentiated approaches that reflect citizens' diverse socio-economic realities. Adopting tiered fee structures, inclusive service design, and targeted support mechanisms would help ensure that digital policy not only functions efficiently but also serves the public equitably.

International experiences in mobile device registration offer valuable insights for reforming Uzbekistan's UzIMEI system. Countries such as Indonesia, India, and Kenya have successfully addressed similar challenges by implementing more inclusive, efficient, and technologically driven systems that combine regulatory effectiveness with citizen-centered approaches. In Indonesia, the introduction of a digitized customs and registration platform significantly reduced processing times and administrative burdens. The government implemented an online portal for IMEI registration, integrated with the national customs database, which enabled automated verification and real-time compliance tracking. According to the World Bank (2021), this digital infrastructure decreased clearance times by 50% and improved compliance by 40%. These results highlight the effectiveness of process automation and inter-agency coordination in improving administrative performance. India

addressed equity and compliance challenges through a tiered Goods and Services Tax (GST) framework. The GST reforms allowed essential electronics to be taxed at lower rates, while luxury items carried higher duties. This approach minimized the financial burden on low-income consumers and protected their access to digital technologies, a critical component of digital inclusion. Jain et al. (2021) note that the reform not only raised tax revenues by 18% but also maintained affordability in the formal market. In Kenya, the government prioritized public awareness and stakeholder engagement. Through nationwide campaigns, retail partnerships, and mobile service provider collaboration, Kenya raised public awareness of IMEI regulations and improved voluntary compliance. GSMA (2018) reported that awareness levels rose by 20%, and compliance increased by 25% within the first year. This example emphasizes the role of communication and trust-building in successful policy implementation. These cases demonstrate that effective mobile registration systems depend not only on regulations but on strategic integration of digital tools, social equity mechanisms, and public engagement strategies. For Uzbekistan, learning from these experiences can help shape a more adaptive, transparent, and citizen-responsive UzIMEI system that aligns with best practices in global digital governance.

Conclusion

This study examined Uzbekistan's UzIMEI system through the lens of public administration, focusing on policy efficiency, digital governance, equity, and international best practices. The findings reveal that the current system suffers from procedural inefficiencies, a lack of digital integration, and regressive financial impacts on low-income users due to its flat tax structure. These weaknesses are compounded by limited public awareness and inadequate citizen engagement, which hinder compliance and diminish trust in the system. Comparative experiences from Indonesia, India, and Kenya show that a combination of digital automation, tiered taxation, and public outreach can significantly improve registration outcomes and policy acceptance. These countries successfully addressed similar challenges by implementing inclusive and adaptive strategies aligned with global standards of good governance. To enhance UzIMEI's effectiveness and fairness, Uzbekistan should adopt a hybrid reform model. This includes digitizing the registration and customs process, introducing a progressive fee structure to protect vulnerable populations, and launching targeted public awareness campaigns. Such reforms would not only improve administrative efficiency but also ensure that the system serves the broader goals of equitable, transparent, and citizen-responsive governance. The policy recommendations are Digital Platform Development, Tiered Fee Structure, Public Awareness Campaigns, Data Privacy Enhancements, Retailer Incentives.

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