



DIGITAL TRANSFORMATION OF PUBLIC ADMINISTRATION IN UZBEKISTAN: REFORM PHASES, PLATFORMIZATION, AND PUBLIC SERVICE MODERNIZATION

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Abstract. Uzbekistan has accelerated the digitalization of public services through legal reforms, infrastructure investments, and the expansion of unified service channels. However, international research shows that simply increasing the service catalog does not lead to meaningful transformation unless back-office interoperability, data governance, and user-centered design help reduce document burdens and procedural uncertainties. This paper presents a three-wave maturity model of Uzbekistan's progress: (1) establishing basic infrastructure and internal digitization; (2) platform development and hybrid service delivery via a unified portal and one-stop shops; and (3) moving toward data-driven, proactive services based on life events. Using qualitative analysis of documents, institutional mapping, and benchmarking against OECD/UN/World Bank frameworks, the study links each stage's enablers to expected outcomes like efficiency, transparency, and inclusion, as well as key risks such as data quality issues, interagency coordination gaps, cybersecurity and privacy threats, and uneven adoption. An analytical matrix highlights priority policy actions, including clearer data stewardship, enforceable interoperability standards, security-by-design, and institutionalized user experience (UX) standards integrated into administrative procedures and remedy mechanisms. Lessons from India's digital public infrastructure show how reusable core components can accelerate scaling while also heightening governance requirements for accountability and trust.

Keywords: digital government, e-government, public service digitization, platform government, interoperability, user experience.

O'ZBEKISTONDA DAVLAT BOSHQARUVINING RAQAMLI TRANSFORMATSIYASI: ISLOHOT BOSQICHLARI, PLATFORMALASHTIRISH VA DAVLAT XIZMATLARINI MODERNIZATSIYALASHTIRISH

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Annotatsiya. Ushbu maqolada O'zbekistonda davlat boshqaruvi va davlat xizmatlari tizimining raqamli transformatsiyasi jarayoni tahlil qilinadi. So'nggi yillarda mamlakatda davlat xizmatlarini raqamlashtirish huquqiy islohotlar, institutsional yangilanishlar, raqamli infratuzilmaga investitsiyalar hamda yagona xizmat ko'rsatish kanallarini rivojlantirish orqali sezilarli darajada jadallashdi. Shu bilan birga, xalqaro tajriba shuni ko'rsatadiki, xizmatlar sonining ko'payishi o'z-o'zidan chuqur institutsional transformatsiyani anglatmaydi. Bunday transformatsiya, avvalo, idoralararo interoperabellik, sifatli ma'lumotlar boshqaruvi va foydalanuvchiga yo'naltirilgan xizmat dizayni orqali hujjatlar aylanishi, takroriy talablar va ma'muriy noaniqliklarni qisqartirish bilan bog'liq. Maqolada O'zbekistonning raqamli hukumat

yo'lidagi taraqqiyoti uch bosqichli yetuklik modeli asosida yoritiladi: birinchi bosqich bazaviy infratuzilma va ichki raqamlashtirishning shakllanishi; ikkinchi bosqich yagona portal va "yagona darcha" markazlari asosida platformaviy va gibrid xizmat ko'rsatish tizimining rivojlanishi; uchinchi bosqich esa real vaziyatlarga asoslangan, ma'lumotlarga tayanuvchi proaktiv xizmatlarga o'tish jarayonidir. Tadqiqot hujjatlarni sifat jihatidan tahlil qilish, institutsional xaritalash va OECD, BMT hamda Jahon banki yondashuvlari bilan qiyosiy taqqoslash metodlariga asoslanadi. Tahlil natijalari shuni ko'rsatadiki, har bir bosqich samaradorlik, shaffoflik va inklyuzivlikni oshirish uchun muayyan imkoniyatlarni yaratadi, biroq shu bilan birga ma'lumotlar sifati, idoralararo muvofiqlashtirish, kiberxavfsizlik, shaxsiy ma'lumotlarni himoya qilish va xizmatlardan foydalanishdagi notekislik kabi xatarlarni ham yuzaga keltiradi. Maqolada ushbu muammolarni bartaraf etish uchun ma'lumotlar stewardshipini aniqlashtirish, majburiy interoperabellik standartlarini joriy etish, security-by-design tamoyilini amaliyotga tatbiq etish hamda foydalanuvchi tajribasi standartlarini ma'muriy tartib-taomillar bilan uzviy bog'lash zarurligi asoslanadi. Hindistonning raqamli jamoat infratuzilmasi tajribasi esa qayta foydalaniladigan yadro komponentlar miqyoslashni tezlashtirishi mumkinligini, biroq bu boshqaruv, hisobdorlik va ishonch mexanizmlariga nisbatan yanada yuqori talablarni yuzaga keltirishini ko'rsatadi.

Kalit so'zlar: raqamli hukumat, elektron hukumat, davlat xizmatlarini raqamlashtirish, platformaviy boshqaruv, foydalanuvchi tajribasi, proaktiv xizmatlar.

ЦИФРОВАЯ ТРАНСФОРМАЦИЯ ГОСУДАРСТВЕННОГО УПРАВЛЕНИЯ В УЗБЕКИСТАНЕ: ЭТАПЫ РЕФОРМ, ПЛАТФОРМИЗАЦИЯ И МОДЕРНИЗАЦИЯ ГОСУДАРСТВЕННЫХ УСЛУГ

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Аннотация. В данной статье анализируется процесс цифровой трансформации государственного управления и системы государственных услуг в Узбекистане. В последние годы в стране существенно ускорилась цифровизация государственных услуг за счёт правовых реформ, институциональных изменений, инвестиций в цифровую инфраструктуру и развития единых каналов предоставления услуг. Вместе с тем международный опыт показывает, что количественное расширение перечня услуг само по себе не означает глубокой институциональной трансформации. Такая трансформация возможна лишь при наличии межведомственной интероперабельности, качественного управления данными и пользовательски-ориентированного проектирования услуг, позволяющих сократить документооборот, повторяющиеся требования и административную неопределённость. В статье развитие цифрового правительства в Узбекистане рассматривается через трёхэтапную модель зрелости: первый этап-формирование базовой инфраструктуры и внутренней цифровизации; второй этап-развитие платформенного и гибридного предоставления услуг на основе единого портала и центров «одного окна»; третий этап- переход к проактивным услугам, основанным на данных и жизненных ситуациях граждан. Исследование опирается на качественный анализ документов, институциональное картирование и сравнительное сопоставление с подходами ОЭСР, ООН и Всемирного банка. Результаты анализа показывают, что каждый этап создаёт определённые возможности для повышения эффективности, прозрачности и инклюзивности, однако одновременно порождает риски, связанные с качеством данных, межведомственной координацией, кибербезопасностью, защитой персональных данных и неравномерностью использования цифровых сервисов. В статье обосновывается необходимость уточнения ответственности за управление данными, внедрения обязательных стандартов

интероперабельности, применения принципа security-by-design и интеграции стандартов пользовательского опыта в административные процедуры. Опыт цифровой общественной инфраструктуры Индии показывает, что повторно используемые базовые компоненты способны ускорить масштабирование системы, но одновременно усиливают требования к качеству управления, подотчётности и доверию.

Ключевые слова: цифровое государство, электронное правительство, цифровизация государственных услуг, платформенное управление, пользовательский опыт, проактивные услуги.

Introduction.

Over the past decade, digital transformation has become essential for modernizing government administration worldwide. Digitizing public services is not just about converting paper documents into digital formats; it involves redesigning entire administrative processes, standardizing data exchange, minimizing discretion and errors, and organizing services around citizens' needs and life events. International evaluations typically measure this transformation through three interconnected dimensions: online service availability, enabling infrastructure, and human capacity. Meanwhile, current digital-government research emphasizes that effective transformation is socio-technical: outcomes depend on institutions (laws, incentives, coordination), data and interoperability, and user experience (UX), rather than just on technology deployment.

Uzbekistan has accelerated e-government reforms since the mid-2010s. The Law “On the Electronic Government” (2015) established a legal basis for information systems, electronic services, and interagency exchanges. Subsequent reforms expanded public service centers, created a unified interactive portal, introduced electronic identification and signatures, and developed sector-specific information systems as part of the broader “Digital Uzbekistan-2030” strategy. However, international experience shows that simply counting services or portals does not accurately reflect maturity: ‘digitized bureaucracy’ can persist even when back-office verification remains fragmented, requiring citizens to repeatedly submit the same information. Therefore, a mature digital government depends on the once-only principle, strong data governance, secure interoperability, and user-centered service design. This paper explores three questions:

(RQ1) What stages has Uzbekistan’s e-government service transformation gone through, and what are the institutional and technological characteristics of each stage?

(RQ2) How do the one-stop shop and platform approaches impact transaction costs, transparency, and service quality?

(RQ3) What factors impede sustainable transformation, and which policy and institutional solutions are best suited for advancing proactive, life-event services?

The rest of the paper begins with an integrated literature review that combines international frameworks with empirical and policy studies focused on Uzbekistan, using India’s digital public infrastructure as a comparative reference. It then describes the methodology and analytical framework, which includes a three-stage maturity model and an outcome–risk matrix. Next, it presents findings based on each stage and synthesizes key risks and policy levers in an analytical table. The paper then discusses implications for governance and design choices, drawing lessons and warnings from India, before outlining limitations, directions for future research, and concluding remarks.

Literature review.

Clarifying three closely related concepts is important for understanding both global literature and research specific to Uzbekistan. Digitization refers to the technical process of converting analog information into digital formats, such as scanning paper records and storing them in electronic databases. Digitalization goes beyond data conversion by redesigning

workflows and service delivery to revolve around digital tools and platforms, like online application processes, the use of e-signatures, and automated case-status tracking. Digital transformation is even broader, encompassing systemic institutional, organizational, and cultural change, where digital systems become central to how public services are designed, implemented, managed, and evaluated.

Second, scholarship increasingly distinguishes between “e-government” (often focused on portals and service catalogs) and “digital government” (adopting a whole-of-government, data-driven, ecosystem approach). Digital government emphasizes interoperability, shared standards, data governance, and cross-agency coordination to enable seamless end-to-end services.

Third, maturity is assessed through multi-pillar frameworks. The OECD’s Digital Government Strategies highlight strategic management, interagency coordination, open standards, data management, and citizen-focused design, including the once-only principle. The United Nations E-Government Survey evaluates online services, telecom infrastructure, and human capital, while also emphasizing inclusion and digital participation. Additionally, the World Bank’s GovTech approach considers readiness through core government systems, public service delivery, digital citizen engagement, and GovTech enablers such as architecture standards, digital ID, data exchange, cybersecurity, and skills. Together, these frameworks suggest that sustainable improvement requires balancing ‘visible’ interfaces with ‘invisible’ foundations like data quality, security, and institutional coordination (Organisation for Economic Co-operation and Development, 2014, 2020).

Uzbekistan’s digitization agenda is rooted in formal strategies and legal acts, but successful implementation relies on coordination capacity and institutional alignment. A key legal milestone is the 2015 e-government law, which establishes electronic public services and interagency exchange. The 2018 law on administrative procedures extends due-process principles to administrative actions, including licensing, permitting, registration, and other public services, suggesting that digitized workflows should remain reviewable, remedy-oriented, and procedurally fair. The strategic policy environment is guided by the Digital Uzbekistan–2030 strategy, which supports infrastructure growth, digital skills development, and the modernization of public administration.

Uzbekistan-focused scholarship can be grouped into three main strands: (i) doctrinal and descriptive studies that trace the legal and institutional evolution of e-government; (ii) evaluations of program implementation accompanied by stage-based accounts of reform progress; and (iii) a growing body of critical research warning that rapid digitization may advance faster than the consolidation of administrative-procedure safeguards, producing “digital rigidity” when legal requirements and platform logic do not align. While this literature is valuable for documenting and mapping reform trajectories, much of it remains constrained by limited measurement and a lack of robust causal evidence on service-level outcomes such as processing time, error rates, appeals, informal payments, and distributional effects (Republic of Uzbekistan, 2020).

A more explicit and methodical part of the evidence focused on Uzbekistan examines why citizens use (or do not use) online services despite their increased availability. Survey-based adoption modeling in Uzbekistan reveals that performance expectancy (perceived benefits) and trust are strong predictors of the intention to use the Single Portal of Interactive Public Services (SPIPS), with service quality also playing a role. Complementing this mechanism-based evidence, recent field research on Public Service Centers (PSCs) and the online portal highlights ongoing consumer preference for in-person channels in some areas and identifies specific usability issues (registration difficulties, confusion about access keys, navigation problems) as obstacles to portal adoption. Together, these findings point to a ‘last-mile’ challenge: supply-side expansion can outpace demand-side adoption unless the

government actively promotes awareness, improves usability, builds trust, and redesigns the service process to reduce steps and paperwork.

International literature offers validated models for understanding these mechanisms, including technology acceptance and unified acceptance frameworks, as well as information-systems success models that combine system quality, information quality, service quality, user satisfaction, and net benefits. For Uzbekistan, the policy relevance is that adoption depends not only on portal functionality but also on procedural clarity, risk perceptions, and the credibility of remedy channels when systems fail or produce incorrect outcomes (Bélanger & Carter, 2008).

Equity issues are becoming increasingly prominent in Uzbekistan's discussions on digitization. Evidence indicates that offline PSCs still play a vital role in promoting inclusion, particularly for citizens with limited internet access, low digital skills, language barriers, or disability-related needs. Research on the digital divide highlights that inequality exists on at least two levels: access to infrastructure and devices, and the second level of inequality in skills and effective use. For public service delivery, this means a "digital-only" strategy could increase the risk of exclusion unless it includes hybrid channels (a portal plus PSCs), targeted digital literacy initiatives, accessibility standards, and proactive communication.

From a governance perspective, inclusion is closely linked to UX. Even when internet access is available, complicated service processes, unclear requirements, and low transparency about the status of activities can discourage usage and erode trust. Therefore, inclusion should be regarded as a core design principle integrated into service standards, not as an afterthought addressed only through offline channels (Bélanger & Carter, 2008).

A growing body of international research suggests that digital government is most effectively scaled through platformization: the government develops standardized core components such as digital identification, payments, notifications, electronic documents, registries, and an integration bus, and reuses them across numerous services. This strategy reduces additional integration costs and supports consistent security and user experience standards. However, platform government also underscores the need for stronger governance: issues such as data ownership, accountability, permitted uses, logging and audit requirements, and service-level agreements must be clearly established to prevent interagency silos and shifting risks.

Uzbekistan-specific policy analysis points to a distinct governance risk: when administrative-law requirements are not aligned with platform design and operational logic, digital systems can produce rigidity often experienced as digital obstacles where legally valid applications cannot be processed, or where automated checks operate without sufficient transparency, explanation, or accessible remedies. This suggests that progress from digitization to full transformation requires an explicit and enforceable rules package, including clearly assigned data-governance responsibilities, standardized one-time implementation protocols, harmonized registries, cross-agency KPIs linked to budgeting and performance incentives, and a robust complaint and review mechanism that is fully consistent with administrative procedures (Organisation for Economic Co-operation and Development, 2014, 2020).

India's Digital India initiative is widely recognized as a leading example of digital public infrastructure (DPI) and platform-based scaling. Key components Aadhaar (digital identity), UPI (real-time payments), DigiLocker (verifiable digital documents), and UMANG (a unified mobile interface) demonstrate how reusable elements, open standards, and network effects can foster innovation across both public and private services. For Uzbekistan, this experience is strategically important because it shows how a modular platform ecosystem can reduce integration costs and support 'life-event' service redesign.

India's experience also highlights governance needs: privacy protections, legal oversight, accountability, and trust-building are crucial as identity and data-driven services grow. Therefore, comparing India should involve both enabling design choices (standards,

interoperability, reuse) and institutional safeguards (auditability, consent frameworks, and remedies) (Bélanger & Carter, 2008).

Research methodology.

The study uses a qualitative-analytical research approach that combines documentary analysis, institutional mapping, and comparative benchmarking. This approach is suitable for studying digital government as a socio-technical reform in which observable service outcomes are influenced by formal rules (laws, decrees, standards), organizational incentives, data interoperability systems, and user-focused design choices. Instead of blaming technology alone for outcomes, the analysis views reforms through an institutional perspective that connects enabling factors to service delivery performance and governance risks (Organisation for Economic Co-operation and Development, 2020; United Nations Department of Economic and Social Affairs, 2024; World Bank, 2022).

Evidence was gathered from three different sources. First, key national legal and strategic documents were reviewed, including the Law “On the Electronic Government” (2015), the Law “On Administrative Procedures” (2018), and the “Digital Uzbekistan-2030” Strategy decree (2020). Second, official descriptions of the main service channels and infrastructure were examined, including the unified portal (my.gov.uz), electronic identification services, open data portals, and related institutional reports, where available. Third, international benchmarks along with Uzbekistan-specific empirical studies and policy analyses were used to cross-check mechanisms and constraints, including UN and OECD assessments, World Bank GovTech materials, adoption modeling research, and fieldwork on user satisfaction and channel preferences (Republic of Uzbekistan, 2015, 2018, 2020).

The analysis utilizes a three-stage (three-wave) maturity model for electronic public services:

Stage I - Infrastructure and electronic document management: foundational telecommunications, internal office automation, electronic signatures, electronic document management, and core registries.

Stage II - Platformization and interagency integration: a unified service catalog or portal and shared modules (identity/authentication, payments, notifications), along with interoperability standards and registry connectivity that enable once-only processes.

Stage III - Data-driven management and proactive services: redesigning life-event services, personalizing experiences, utilizing analytics, AI-supported assistance, omnichannel user experience, and an open (governed) API ecosystem.

To connect stages to evaluative criteria, the study uses an outcome–risk matrix with three outcome categories: (i) efficiency and transaction cost reduction, (ii) transparency and accountability, and (iii) inclusion and trust. It also identifies five main risk clusters: digital inequality, data quality failures, coordination breakdowns, cybersecurity and privacy threats, and human-capacity and change-management constraints. This matrix is operationalized through a set of qualitative indicators (such as step counts, document re-submissions, status transparency, usability barriers, and rule–code alignment) and interpreted with reference to international digital government norms.

The analytical process involved four steps. (1) Regulatory-institutional mapping: identifying key institutions, mandates, and coordination arrangements related to e-services and one-stop shops. (2) Stage mapping: assigning observed reforms and service-channel developments to the three-stage model and pinpointing enabling components at each stage. (3) Mechanism tracing: connecting stage-specific enablers to outcomes through plausible channels (e.g., once-only verification reduces document burdens; status logging enhances accountability). (4) Risk synthesis and policy levers: consolidating constraints from the Uzbekistan-focused evidence base and international frameworks into a single analytical table to support practical recommendations.

Because administrative data on service processing times, rejection rates, or complaint resolution were not available in a consistent format for all services, the study highlights mechanism-based reasoning supported by triangulation across authoritative reports and empirical studies.

Analysis and discussion of results.

In Stage I, Uzbekistan's digital-government trajectory is characterized by infrastructural and organizational readiness: expanding connectivity, introducing electronic signatures, digitizing internal records, and adopting electronic document management. The primary benefits in this stage accrue to internal efficiency (faster document circulation, lower archiving and retrieval costs, reduced workflow delays). However, Stage I alone does not guarantee citizen-facing simplification: if verification processes remain fragmented and registry data are not interoperable, citizens continue to face repeated documentation requirements.

Stage II shifts the center of gravity from internal digitization to service delivery: a unified portal and a PSC network provide catalog access and assisted service completion. Platformization is evidenced by shared components such as identity, payments, notifications, and standardized service catalogs. The principal performance mechanism in this stage is interoperability: when registries and agencies exchange data reliably, once-only verification becomes feasible, reducing steps, documents, and discretionary interactions.

Stage II also expands transparency. Digital services can create audit trails (timestamps, responsible units, status changes) that enable monitoring of delays and process bottlenecks. Yet Stage II intensifies dependence on data quality and governance: duplicate records, inconsistent formats, and unclear data stewardship responsibilities can undermine automated verification, reduce trust, and reintroduce manual procedures.

Stage III represents a shift from reactive application-based services to proactive, life-event services supported by analytics and data-driven management. In such a model, events recorded in registries (e.g., birth registration, business registration, address change) can trigger service initiation, eligibility checks, and targeted notifications. International practice suggests that Stage III benefits depend critically on strong legal safeguards, consent and purpose limitation, explainability of automated checks, and robust incident response. In Uzbekistan, Stage III elements are emerging but remain constrained by persistent interoperability gaps, uneven data governance maturity, and capacity limitations in service design, cybersecurity, and change management.

Discussion

The results indicate that Uzbekistan's future progress will depend less on expanding online services and more on improving end-to-end service experiences. When only the application front-end is digital, while verification, approvals, and registry checks remain fragmented, citizens might face 'digitized bureaucracy' rather than simplification. Therefore, platformization and interoperability are crucial for genuinely lowering transaction costs.

A key governance implication is that integration issues are rarely purely technical. They often reflect institutional realities: unclear accountability for data quality, limited incentives to share data, and risk-averse behavior when liabilities for incorrect information are not well defined. This suggests the need for an explicit 'rules package' that includes data governance, registry harmonization, SLAs, interagency KPIs, and budget incentives aligned with service quality goals.

India's DPI experience offers a useful benchmark for Uzbekistan's platform development. Reusable components such as identity, payments, documents, and a unified mobile interface can reduce costs of adding new services and foster private-sector innovation under open standards. However, this same ecosystem raises privacy and accountability challenges: as more services rely on centralized identity and data, failures and breaches can swiftly erode trust. Therefore, openness through APIs must be paired with governance-by-

design, including authentication, logging, audit trails, licensing, and enforceable security standards.

Finally, UX is not just about appearance but a crucial governance factor: unclear language, too many steps, and hidden status updates can undermine trust and reduce usage even if services are available. Therefore, a mature service portfolio requires institutionalized UX standards, regular testing, and feedback mechanisms, such as complaint analytics and satisfaction metrics, that are tied to managerial accountability.

Table 1.
Analytical matrix of e-government transformation in Uzbekistan: stages, enabling components, outcomes, and key risks

Stages	Enablers (what must exist)	Service effects (what improves)	Binding risks (what blocks progress)	Policy priorities (what to fix first)
I. Foundations & internal digitization	Connectivity + EDMS; e-signature; initial registries; baseline cybersecurity	Faster internal workflows; lower paperwork costs; preconditions for integration	Fragmented/low-quality registries; “digitized paperwork” without redesign; uneven skills/infrastructure	Registry cleanup + unique identifiers; interoperability blueprint; basic security controls; civil-service digital/process skills
II. Platformization & hybrid delivery (portal + PSCs)	Unified portal/catalog; PSC network; shared modules (e-ID, payments, notifications); integration backbone; service standards & logs	Once-only verification reduces steps/documents; traceability increases accountability; multichannel inclusion	Data quality failures; interagency resistance/incentive misfit; UX friction and low awareness; concentrated cyber risk	Data stewardship + exchange SLAs/KPIs; enforce interoperability; institutionalize UX/accessibility; independent security audits + monitoring
III. Data-driven & proactive services (life events)	Real-time interoperability; analytics; governed APIs; automation/AI (with safeguards); privacy-by-design + auditability	Proactive services; continuous improvement via evidence; scalable cost reduction; higher transparency if explainable	Rules-code misalignment (“digital rigidity”); privacy/bias/opacity risks; unclear accountability; capability constraints	Embed administrative-procedure remedies (review/appeal); privacy & algorithmic governance; human-in-the-loop for high-impact decisions; build GovTech/UX/data capacity

Limitations and Future Research

This study has three main limitations. First, it relies mainly on documentary evidence, international benchmarks, and a limited number of Uzbekistan-focused empirical studies; comprehensive administrative microdata on processing times, rejection rates, and appeal outcomes are unavailable across different services. Second, the analysis is conducted at the

national level and does not fully account for subnational differences in infrastructure, digital skills, and institutional capacity. Third, the comparison with India is illustrative rather than based on a systematic cross-country dataset.

Future research can strengthen the evidence base by combining citizen surveys with administrative data (portal logs, PSC throughput, error and rework rates, complaint resolution times) and employing quasi-experimental designs when digital services are gradually introduced across regions. Additional work should operationalize ‘digital rigidity’ through legal–technical audits that identify where legally valid cases fall through digital workflows and evaluate the effectiveness of remedy and review mechanisms. Equity-focused studies should oversample rural and low-connectivity populations and include accessibility audits for people with disabilities.

Policy Recommendations

Building on Table 1 and the mechanism evidence, five priority directions emerge.

1) Strengthen data governance and registry quality.

- Define formal roles for data owners and data stewards across key registries; establish measurable data-quality standards (such as completeness, timeliness, consistency, and uniqueness) and conduct routine quality audits.

- Standardize identifiers and metadata; implement a phased de-duplication and migration plan to reduce inconsistent records.

2) Make interoperability enforceable.

- Adopt a reference architecture and mandatory interoperability standards; specify SLAs for data exchange and assign accountability for failures.

- Align cross-agency KPIs and budgeting with overall service performance, including time, steps, rework rates, and satisfaction.

3) Develop a trust framework centered on security and privacy by design.

- Incorporate security-by-design and privacy-by-design into service development lifecycles; require risk assessments, independent audits, and incident response exercises for high-risk components.

- Implement clear rules for consent, purpose limitation, retention, and auditability, especially for proactive services.

4) Standardize UX and inclusive service practices.

- Establish UX and accessibility standards as mandatory; develop a UX testing capability (lab/committee) and connect the results to service approval.

- Maintain hybrid delivery methods (portal + public service centers) to promote inclusion; invest in targeted digital literacy programs and outreach.

5) Develop a governed platform ecosystem inspired by DPI lessons.

- Focus on reusable core components like identity, payments, notifications, verifiable documents, registries, and integration bus, and minimize duplication across agencies.

- Establish a managed API ecosystem with licensing, authentication, logging, and monitoring to support controlled innovation while safeguarding data and accountability.

Conclusion and suggestions.

This paper examined the transformation of electronic public services in Uzbekistan using a three-stage maturity model and an outcome–risk matrix. It argued that Stage I focused on building foundational infrastructure and internal digitalization; Stage II expanded service delivery through a portal and PSC network and began platformization; and Stage III advances toward data-driven, proactive services centered around life events. Throughout the stages, the analysis highlights that sustainable progress depends on ‘invisible’ foundations such as interoperability, data governance, cybersecurity, privacy-by-design, and institutionalized UX standards embedded within an administrative-procedure framework that ensures reviewability and remedies.

Policy priorities are clear: enhance data stewardship and registry quality; formalize rules and incentives for interagency data exchange; establish UX standards and feedback mechanisms; and create a governed API ecosystem that balances openness with security and accountability. India's digital public infrastructure demonstrates how reusable core components can accelerate scaling, but it also emphasizes the need for legal oversight and trust infrastructure. For Uzbekistan, advancing toward proactive services will require coordinated progress in technology, institutions, and human capital.

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