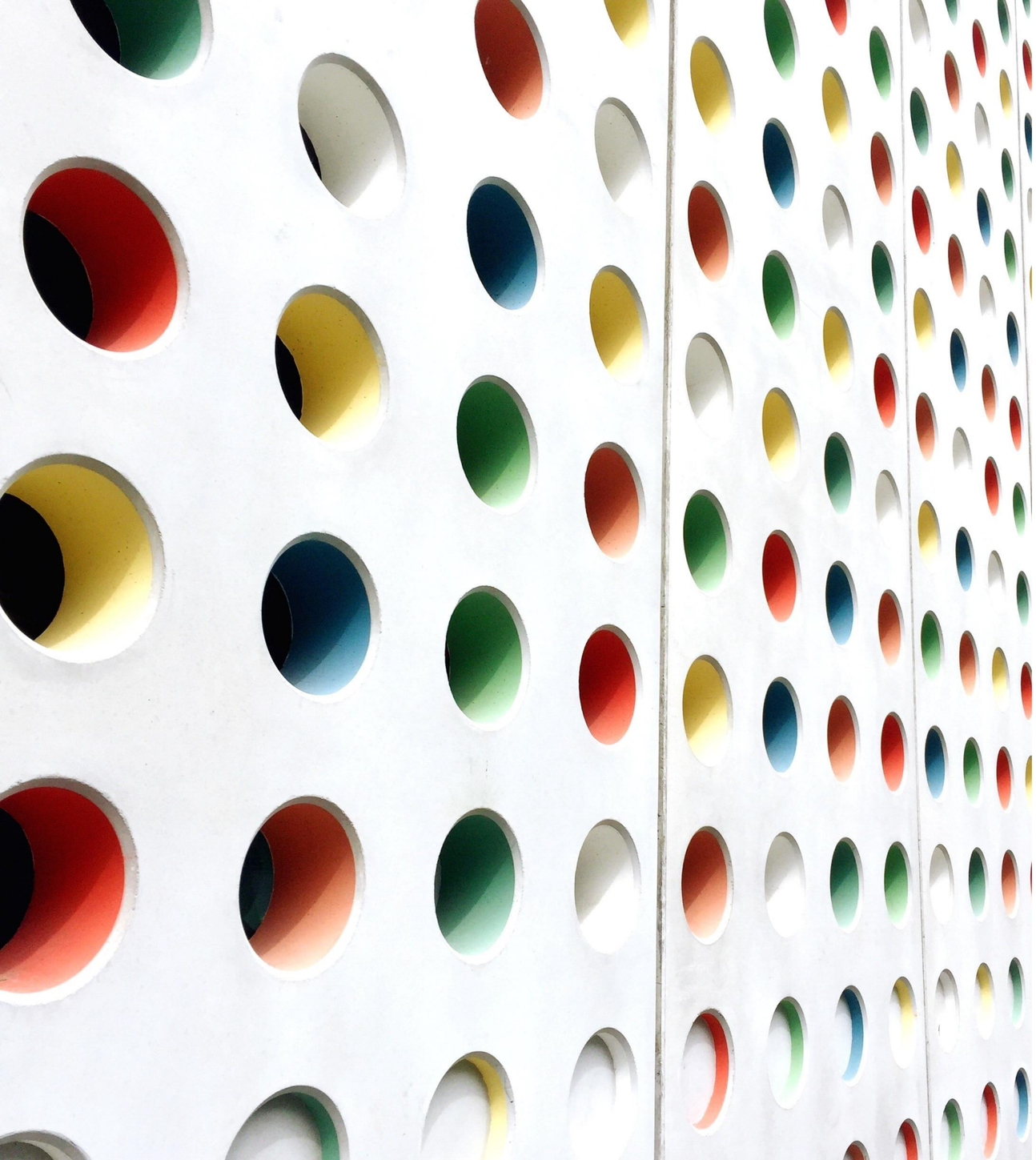


Management of Social Services

WEEK 13: TECHNOLOGY IN SOCIAL SERVICE MANAGEMENT (Nature and Role)

Lecturer: Gloria Angela Mukova (MSc.)

Recap – previous week

Infrastructure as a Social Service

Infrastructure management and provision

- Governance structure
- Key actors in infrastructure management and delivery
- Infrastructure financing

Fig. 1. Infrastructure Services – Gamma app

This Week … …

Technology in Social service management

Reshaping how governments design policy, deliver services, and engage with citizens in the 21st century.

Fig. 2. Technology in Social Services – Gamma app

Technology in Social service management

- The nature of technology in social services management
- The role of technology in social services management

The Paradigm Shift: From Analogue to Digital

Yesterday

- Paper-based documentation
- Siloed departmental systems
- Manual, time-intensive processes
- Limited citizen access
- Intuition-driven decisions

Today

- Digital-first infrastructure
- Integrated service ecosystems
- Automated workflows
- 24/7 citizen engagement
- Evidence-based policy

Technology is a **transformative force** that fundamentally reshapes the entire value chain of social services, from initial policy design through to frontline citizen experience.

The Nature of Technology in social services

Technology as an Infrastructure

The foundational digital public infrastructure enabling all other services—national broadband, digital identity systems, and cloud platforms.

As a Connectivity Platform

Networked and interoperable systems connecting G2C, G2B, and G2G—breaking down institutional silos.

The Nature of Technology in social services

As a Data aggregator and analyzer

Collecting, storing, and processing vast datasets to generate actionable insights and shift from intuition to evidence-based decisions.

As a Process Re-Engineer

Inherently disruptive to established workflows, eliminating redundant steps and automating routine bureaucratic tasks.

Technology and the Service Chain

Three Critical Domains of social services

01

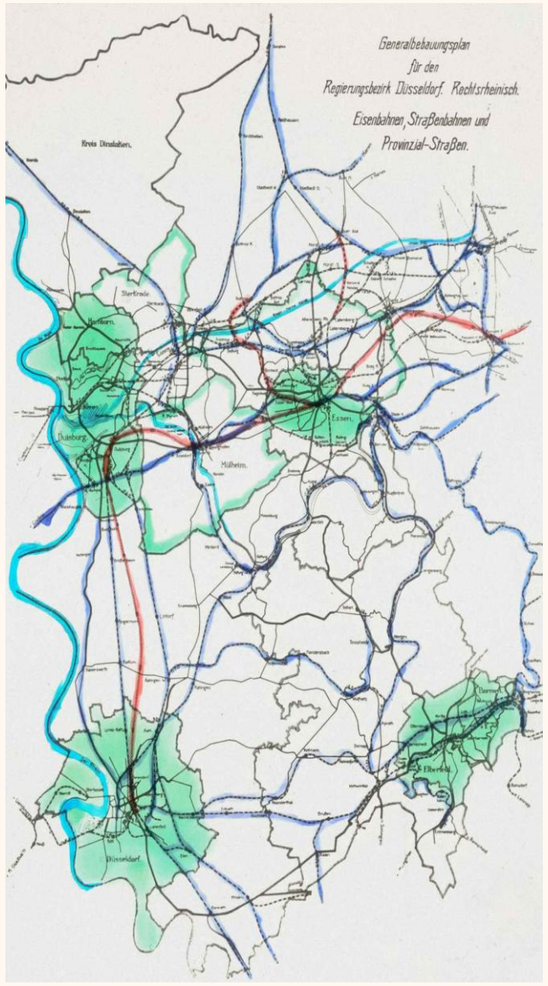
Social service Management

Strategic oversight and resource optimisation—the backbone ensuring programmes achieve impact.

02

Social service Administration

Efficiency and transparency mechanisms—the engine processing eligibility and entitlements.



03

Social service Delivery

Access and citizen experience—the frontline where services meet people's lives.

The Role of Technology in Social Service management, administration and provision

Technology in service Management: Data-Driven Strategic Oversight

Evidence-Based Decision Making

Analytics and AI identify needs, target interventions, and predict crises before they escalate.

Real-Time Performance Monitoring

Digital dashboards track KPIs, enabling swift responses and continuous programme improvement.

Fig. 3. Technology in Social Services – Gamma app

Technology in service Management: Data-Driven Strategic Oversight

Financial Transparency

ERP systems ensure accountable budgeting, procurement, and resource allocation—reducing leakage.

Workforce Optimisation

HR systems track staff deployment, training needs, and performance across departments.

Technology in Administration: Building the Efficiency Engine

1

Digital Identity Systems

Uniquely verifiable identity prevents fraud, eliminates duplicate registrations, and establishes legal rights.

2

Unified Social Registries

A single, authoritative source of beneficiary data shared across multiple programmes and departments.

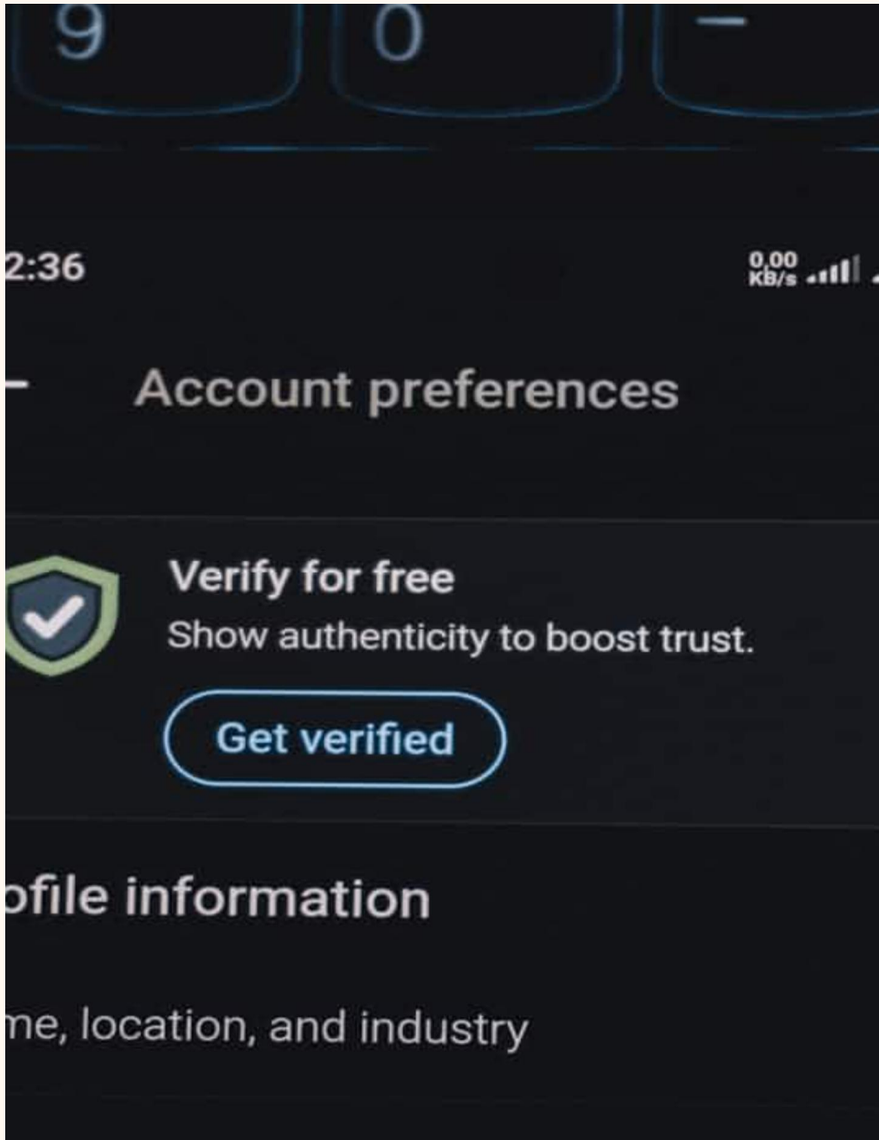


Fig. 4. Technology in Social Services – Gamma app

3

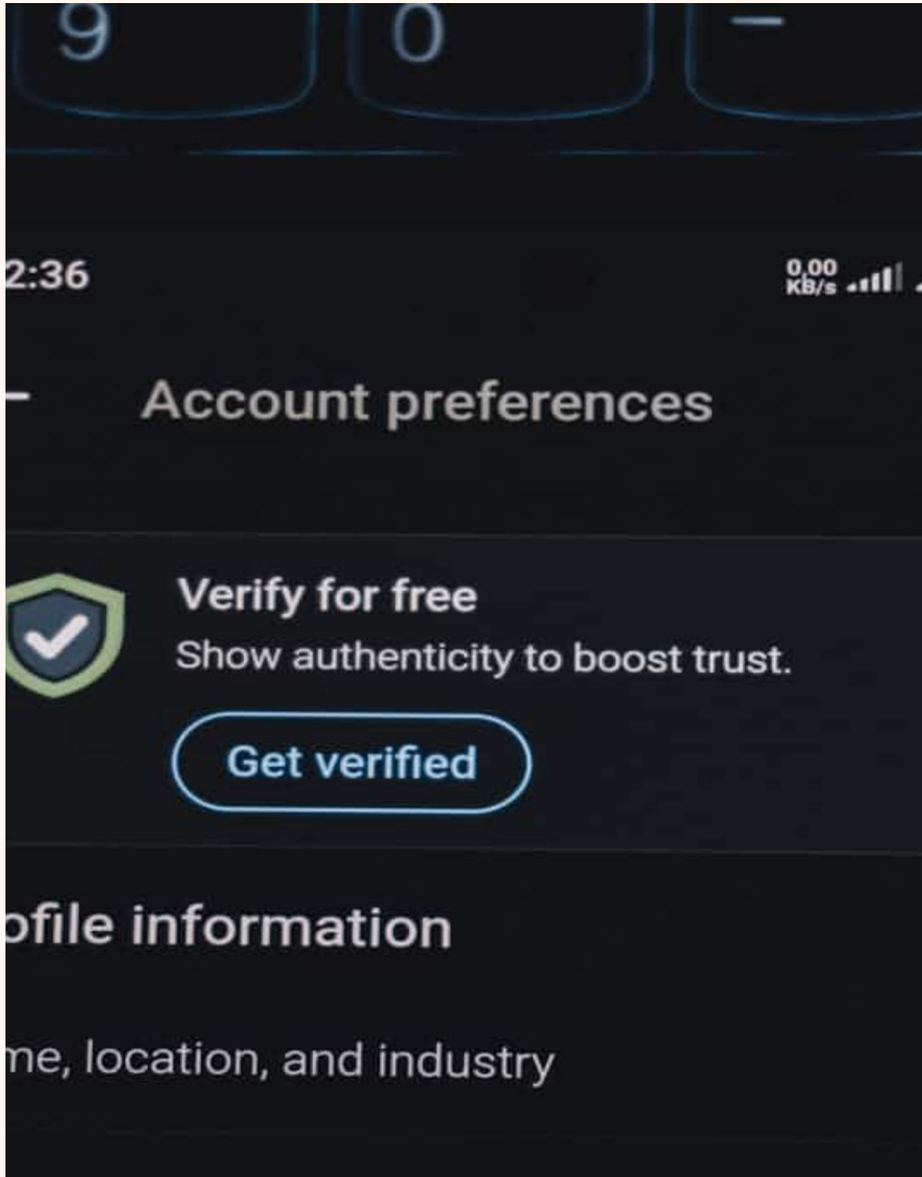
Civil Registration (CRVS)

Digital birth and death certificates form the foundation for legal identity, citizenship rights, and service access.

4

Integrated Case Management

Comprehensive software enabling social workers to track client interactions, coordinate services, and ensure continuity of care.



Technology in service Delivery: Transforming Citizen Experience

Digital Service Portals

Centralised e-government platforms and mobile apps for applying for benefits, accessing information, and providing feedback—anytime, anywhere.

Direct Digital Transfers

Secure payments directly to mobile money or bank accounts reducing delays and corruption.

Technology in service Delivery: Transforming Citizen Experience

Remote Service Provision

Tele-health, online learning, and virtual consultations extend essential services to rural and underserved communities.

Grievance Systems

Digital channels empower citizens to report problems, track resolutions, and hold agencies accountable.

Critical Enablers for Success of technology

For Technology to deliver transformation, these foundational elements must be in place:

Governance & Policy

Digital governance frameworks, data privacy regulations, security standards, and interoperability mandates.

Institutional Capacity

Digital skills for civil servants and citizens, combined with effective change management to guide cultural transformation.

Digital Inclusion

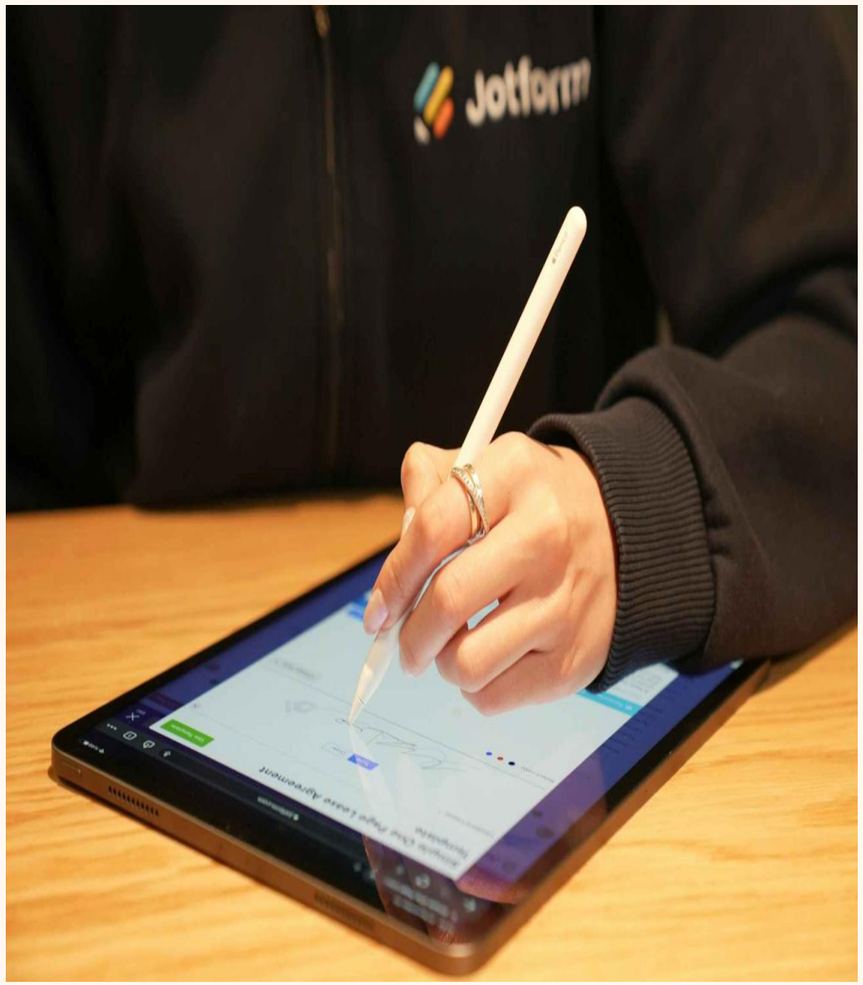
Addressing the digital divide through accessible design, affordability, and ensuring marginalized groups aren't left behind.

The Role of Technology in Social Services management, administration and provision

Technology is far more than computers and software in the public sector. It represents a fundamental shift in how governments serve citizens, breaking down traditional barriers and creating new pathways for engagement, efficiency, and equity.

Fig. 5. Technology in Social Services – Gamma app

Technology in Education: Building Digital Learning Ecosystems



Strategic Management

- Data analytics identifying low enrolment and dropout patterns
- GIS mapping optimising teacher and facility allocation
- Real-time dashboards tracking pupil-teacher ratios and performance

Operational Systems

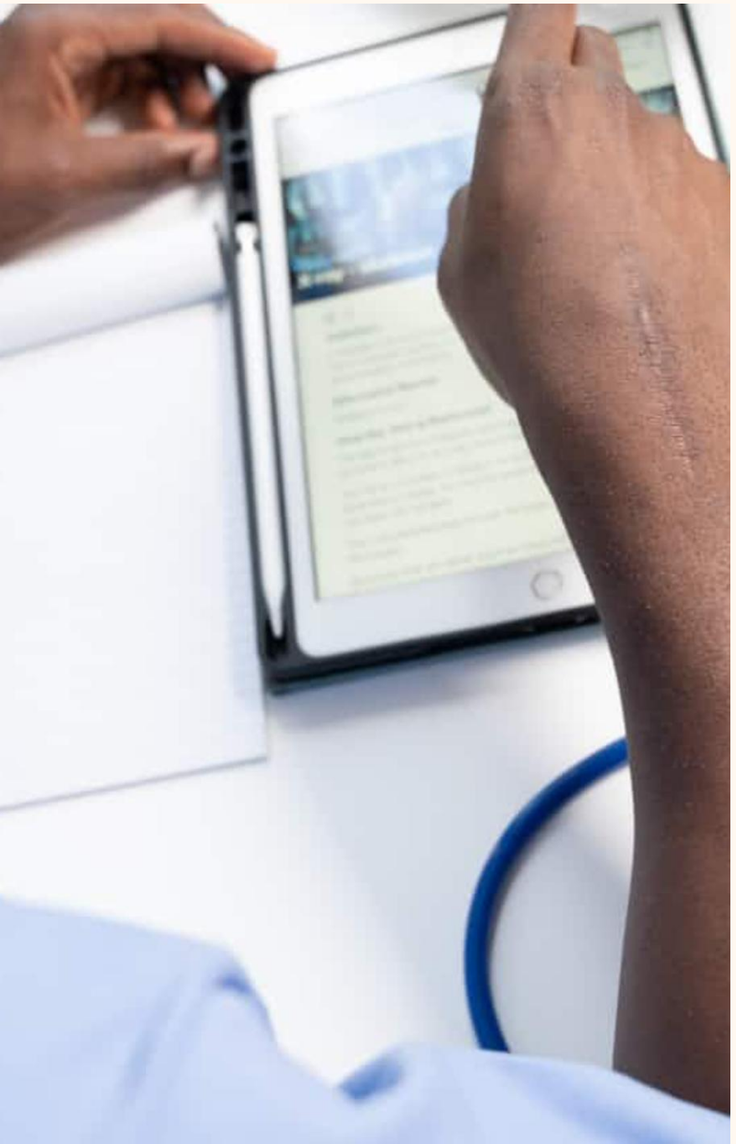
- Education Management Information Systems (EMIS) for records and payroll
- Digital procurement for textbooks and infrastructure

Citizen Services

- E-learning platforms supplementing classroom teaching
- Parent apps monitoring attendance and fees
- Online teacher professional development

Fig. 6. Technology in Social Services – Gamma app

Technology in Health sector: From Paper Records to Predictive Care



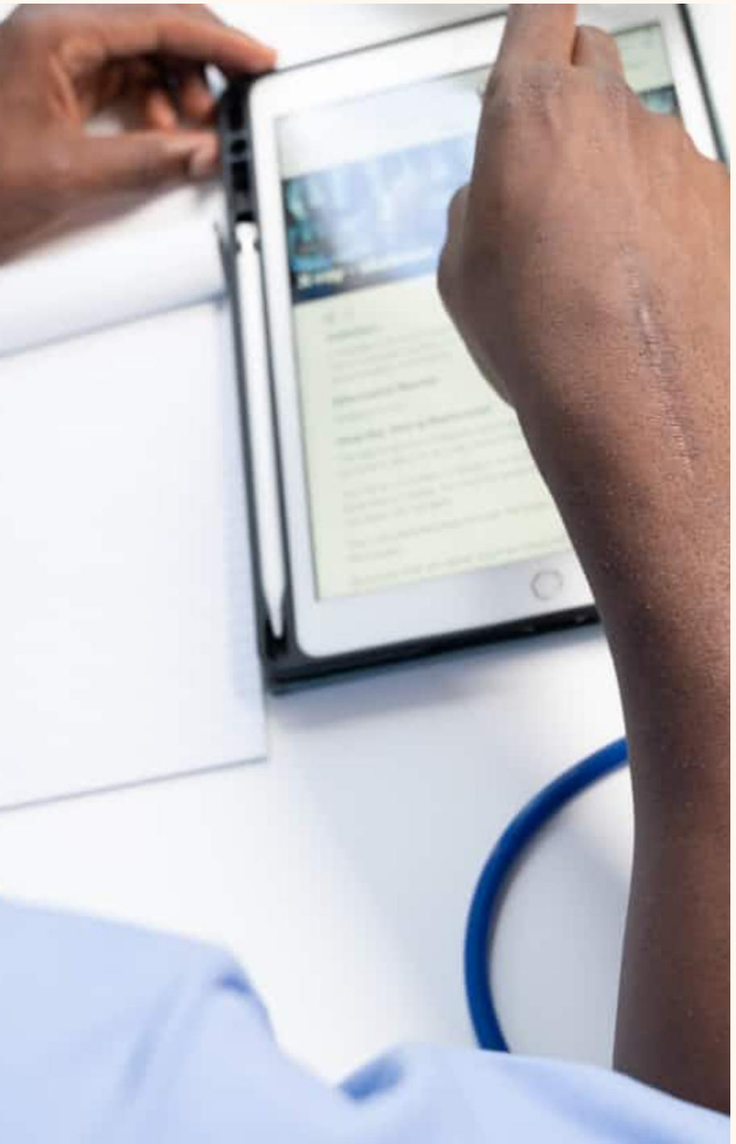
Management

Predictive analytics model disease outbreaks whilst resource tracking monitors essential drug stock levels, directly addressing critical supply chain failures.

Administration

Electronic Health Records (EHR) enable seamless patient history sharing. Health Management Information Systems (HMIS) integrate reporting, logistics, and HR functions.

Fig. 7. Technology in Social Services – Gamma app



Provision/ Delivery

Telemedicine reaches rural communities. Mobile health (mHealth) sends appointment reminders and medication alerts. Online portals provide test results and booking services.

Technology in Housing, Land & Property management: Securing Rights Through Digital Systems

Transforming Land Administration

Digital land registries and cadastral systems reduce fraud, accelerate transactions, and provide secure property rights—fundamental to economic development and citizen security.

Planning & Oversight

- Geospatial analysis for urban planning and slum upgrading
- Data hubs monitoring housing deficits to inform policy

Citizen Access

- Online portals for public housing applications
- Digital building permit submissions
- Electronic property tax assessment and payment

Fig. 8. Technology in Social Services – Gamma app

Technology in Transport & Infrastructure: Closing the Maintenance Gap

Asset Management

Digital systems schedule and track road maintenance, directly addressing infrastructure degradation challenges.

AI Traffic Systems

Optimise flow and reduce congestion through intelligent management and GIS-based network planning.

User Services

Real-time tracking apps, digital licensing, vehicle registration, and electronic toll collection enhance citizen experience.

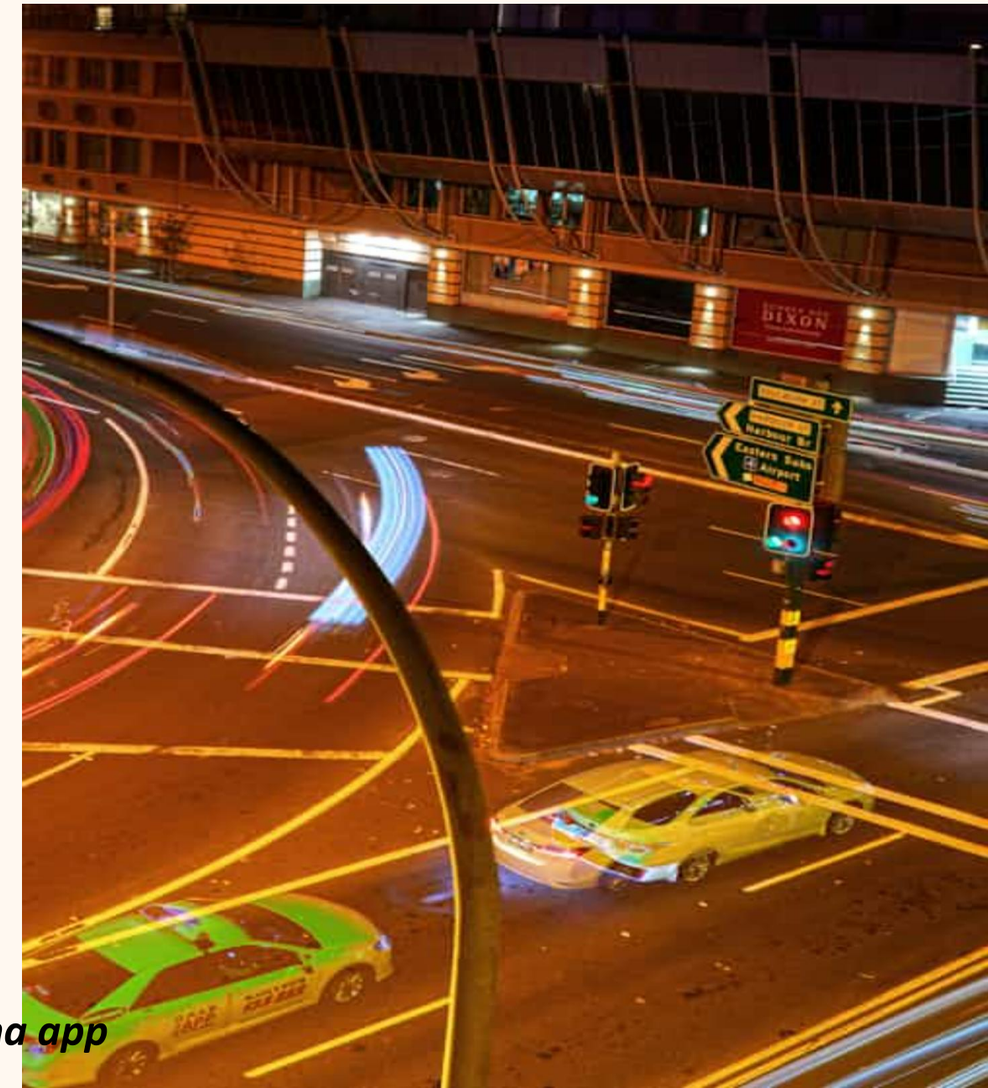


Fig. 9. Technology in Social Services – Gamma app

Technology in Water & Sanitation: Smart Systems for Essential Services

Intelligent Monitoring

Smart sensor networks detect leaks and monitor water quality in real-time, reducing non-revenue water and ensuring public health safety.

Responsive Administration

Digital work order systems enable maintenance crews to respond swiftly to reported issues. Customer Information Systems (CIS) streamline billing and client management.

Fig. 10. Technology in Social Services – Gamma app

Cross-Cutting Technology Capabilities

Data Security & Privacy

Robust cybersecurity frameworks protect sensitive citizen information while maintaining public trust in digital government services.

Mobile-First Design

Recognition that most citizens access services via smartphones, particularly in emerging markets where mobile penetration exceeds computer ownership.

Cross-Cutting Technology Capabilities

Interoperability Standards

Common data standards and APIs enable systems to communicate, breaking down silos and creating seamless citizen experiences.

Digital Inclusion

Ensuring technology serves all citizens, including those with limited literacy, disabilities, or poor connectivity through multi-channel service delivery.

The Path Forward: Technology-Enabled Public Services

> Technology is not an end in itself, but a powerful means to achieve the fundamental goal of public administration: delivering equitable, efficient, and responsive services that improve citizens' lives and strengthen the social contract between government and the governed.

Success requires strategic investment, institutional capacity, policy reform, and sustained political commitment to digital transformation across all layers of the service chain.

Fig. 11. Technology in Social Services – Gamma app

Tomorrow's Social Services

> Technology serves as a **multiplier of efficiency, equity, and effectiveness** in social services—but only when implemented with intention, inclusion, and integrity.

AI-Powered Insights

Predictive analytics and intelligent automation for proactive service delivery

IoT Integration

Real-time monitoring and responsive systems for vulnerable populations

Blockchain Trust

Transparent, tamper-proof records building citizen confidence

Fig. 12. Technology in Social Services – Gamma app

Technology Challenges and Risks

Technical

- System failures and downtime
- Cybersecurity threats
- Vendor lock-in risks
- Legacy system integration

Social

- Digital exclusion of vulnerable groups
- Algorithmic bias in automated systems
- Erosion of public trust
- Privacy concerns

Operational

- High implementation costs
- Bureaucratic resistance
- Skills gaps and training needs
- Long-term sustainability

Conclusions

The nature of technology in social services is systemic and transformative. Its role is to create a coherent, efficient, and responsive service ecosystem out of previously fragmented sectors. By leveraging data and digital channels, governments can shift from being passive, reactive providers to being proactive, data-driven stewards of public welfare, directly tackling the challenges of access, quality, and maintenance as identified in earlier analyses of various social services.

Reference list

- Figure 1. Infrastructure services, Gamma app
- Figure 2-12. Technology in social services, Gamma app
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Next week

Technology in social service management

- Case studies