

Governance

mGov - Connecting Government with Citizens

A WORLD BANK HOW-TO-NOTE ON MOBILE GOVERNMENT

Khuram Farooq
Senior Governance Specialist

kfarooq@worldbank.org

João Ricardo Vasconcelos
Senior Governance Specialist

jvasconcelos@worldbank.org



WORLD BANK GROUP
Equitable Growth, Finance & Institutions

October 25, 2023

Mobile Network Subscriptions

11 million
1990



8.6 billion

2021

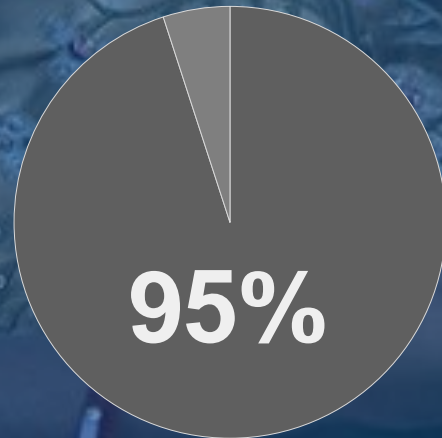
“Mobile phones help more and more people connect to the jobs, business opportunities, and services they need to escape poverty.”

Leora Klapper



Africa +28%
Asia +27%

Population with Access to a Mobile Network



PROVIDING ACCESS & IDENTIFICATION



Provide access, especially for people in remote areas

- Only 11 % of the world's population have fixed broadband internet access
- 88 % in rural areas are covered by a broadband network
- Even those without a phone can connect through facilitators



Provide access for people with disabilities or limited literacy

- Speech-to-text-communication for deaf, text-to-speech for blind
- Voice controls for people with limited mobility
- Intuitive apps for people with limited (digital) literacy



Provide ID for people without identification documents

- Potential to construct a proxy for ID from mobile data
- Empower citizens to register themselves and their children as a basis for welfare
- Secure identification for advanced interactions, transactions and digital ID documents

ENHANCING FINANCIAL INCLUSION

- 1.9 billion of the adult world population remain unbanked
- 2/3 of them do have a mobile phone and 57 percent make or receive digital payments
- Having an ID and a mobile phone boosts the chances of financial inclusion by nearly five times

**Mobile money or
vouchers to pay
subsidies**

**Immediate cash
support for urgent
need**



REDUCING COSTS & IMPROVING EFFICIENCY

... for Governments



eGov:
reaching
potential 7%
citizens

mGov:
reaching
potential 74%
citizens

Increased
Return on
Investment

Increased Data Quality
Increased Process Quality
Increased Automation Potential

Efficient Public Service Delivery
Reduced Costs



... for Citizens, Economy & Climate



Travel

↓ Pollution
↓ Costs
↓ Time ↑ GDP



Forms

↓ Waste
↓ Resources
↓ Logistics

ENHANCING QUALITY, UX & DIGITAL PORTFOLIO

- 1 Introduction
- 2 Opportunities & Challenges
- 3 Potential Use Cases
- 3 Holistic User-Centered Approach
- 4 Technology, Architecture & Security
- 5 Specific Recommendations

- Exploit mobile phone sensors to enhance functionality of digital solutions
- Use secure authentication of identity as a basis to personalize and contextualize services
- Easily scale to a potential higher number of use cases
- Provide intuitive services, that are convenient, flexible, and integrated
- Use mobile data to improve public services and processes to fit the citizen's needs



CHALLENGES

- 1 Introduction
- 2 Opportunities & Challenges
- 3 Potential Use Cases
- 3 Holistic User-Centered Approach
- 4 Technology, Architecture & Security
- 5 Specific Recommendations




Price and Affordability

- Network Subscriptions
- Mobile Devices

Trust & Information Security

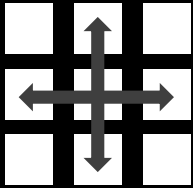


User-friendly Design



Digital Foundations

- **Shared Digital Services:** Integrated Backend Systems, Secure Identification, Mobile Financial Services
- **High-Quality Network Infrastructure**
- **Digital Skills**



Fragmentation of Administration

- **Whole-of-government strategy**
- **Cohesive approach**
- **Legal framework**
- **Central coordination**

USE CASE AREAS



Core Government Operations

- Support daily operative work of public officials in the field: inspections of schools and building sites, automated translation, crime-scene reports, verification of documents, emergency management, etc.
- Make back-office tasks more efficient: access to knowledge bases and digital filing systems (approve acts), secure messaging and decision-making, administrative tasks (approve time records, leaves, ...), etc.
- Improve efficiency and accountability of government operations: real-time and predictive analytics (road conditions, disaster prediction and management), feedback and monitoring of officials, etc.



Public Service Delivery

- Provide information to citizens: existing information from web-portals, order copies of official documents
- Carry out binding transactions and payments: identification and registration (child, address, unemployment), applications (social benefits, food coupons), simple tax declarations, mobile payments to and from citizens
- Offer mobile one stop shops: integration of all public and relevant private services, official documents, etc.
- Support sectors with basic low-tech and advanced solutions: health, agriculture, education, etc.



Citizen Engagement Services

- Broadcast information: push- or pull-oriented messaging services (disaster warnings, terrorism alerts), reminders (tax duties, passport renewals), etc.
- Gather citizen feedback: problem, incident, and complaint reporting enriched with geo-location, photos, videos (road damages, pollution, illicit products, public service delivery, violent behaviour, bribery, etc.)
- Support participation processes: obtain citizen views and opinions in surveys (e.g., to optimize public services and policies), support voting processes by mobile registration and ballot monitoring

TECHNOLOGY AND ARCHITECTURE

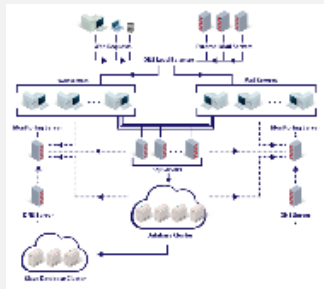
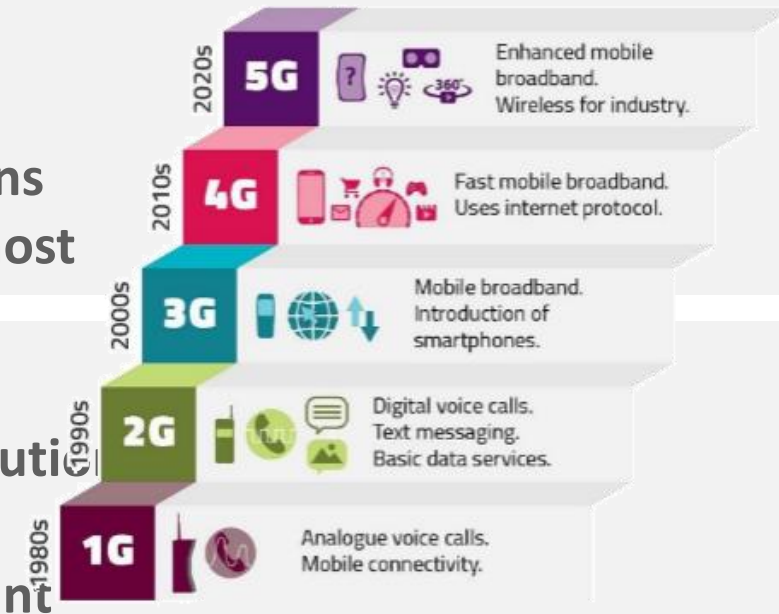
- 1 Introduction
- 2 Opportunities & Challenges
- 3 Potential Use Cases
- 3 Holistic User-Centered Approach
- 4 **Technology, Architecture & Security**
- 5 Specific Recommendations

Multichannel Communication

- A wide range of communication channels is available
- Backward compatibility ensures sustainability of simple solutions
- A multichannel strategy focusing on predominant channels is most promising

Phone Features & Form Factor

- Smartphones provide the most extensive features for mGov solutions
- Dumb phones or smart feature phones need to be considered
- Specific screen size and input types need to be taken into account



Architectural Considerations

- A holistic cross-agency architecture and central backend service are key for efficient mGov
- Areas of specific relevance are interoperability, compatibility, scalability, integration, usability, privacy, and security.

ADVANCED DIGITAL DEVELOPMENT

Advanced Level



- Broad availability of 3G or more, also in rural areas and high number of citizens with own mobile phones
- Good digital literacy among government employees & citizens
- Good architectural and implementation skills in the government



- Cross-agency strategy, roadmap, and policy framework developed with main
- One Stop Shop initiatives including first end-to-end services in selected user-centered projects
- Cross-agency design and accessibility standards



- Central Data Management and interoperability between digital services
- Advanced digital identification and signature solutions
- Basic accessibility standards
- Up-to-date Information security standards



1-6 months



6-12 months



12+ months

Strategy and Policy

Enforce a whole-of government coordination, digital strategy, roadmap, and policy framework

Time



Emphasize efforts to implement shared IT services and advanced digital identification, one-stop shop or e-wallet initiatives, a once-only principle as well as a mobile first strategy



Expand high-quality broadband access and constantly advance digital skills



Include stakeholders in the design of subject-specific policies



Approach

Establish a “Design for All” approach in all projects



Extend user-centered design principles to all relevant initiatives



Technology, Architecture, and Security

Closely take into account information security standards



Exploit potential smartphone or smart feature phone capabilities



Continue considering low-end phones



Carry out comprehensive information security risk assessments



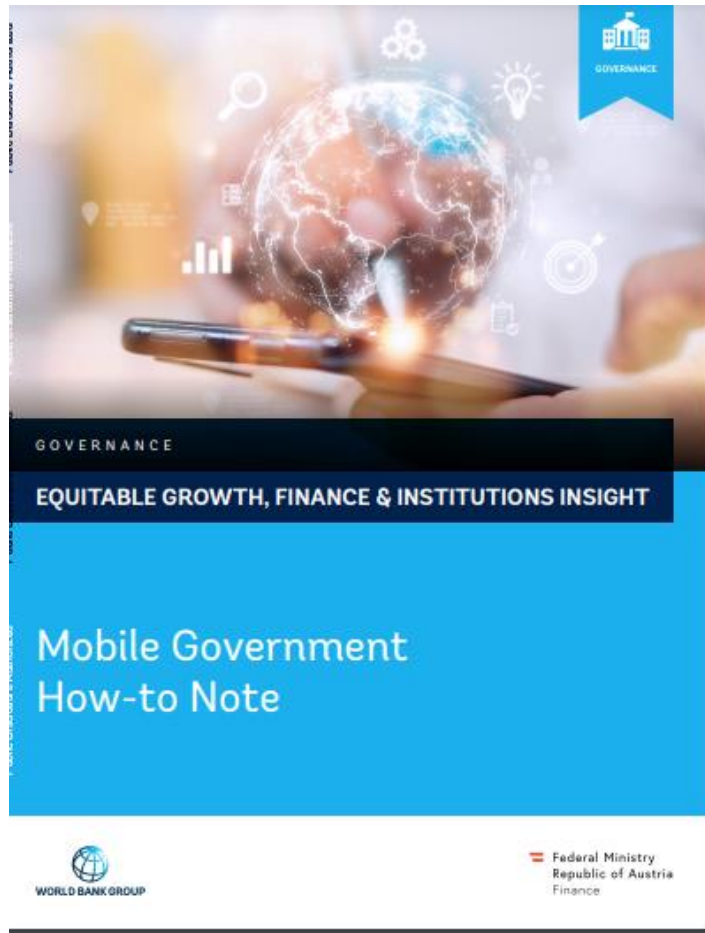
Look out for up-to-date standards regarding digital identification



Consolidate existing digital government and mGov solutions



MOBILE GOVERNMENT HOW-TO-NOTE



Offers policy-implementing approaches for making the most of the digital transition through mobile government.

Available at:

www.worldbank.org/govtech

Launched on March 2023

GOVTECH WORKING GROUPS

What are the GovTech Work Groups?

The GovTech Technical Working Groups remotely and regularly bring together experts from the ecosystem of stakeholders around specific workstreams.

Core Objectives

- Community Building
- Co-developed deliverables

Approach

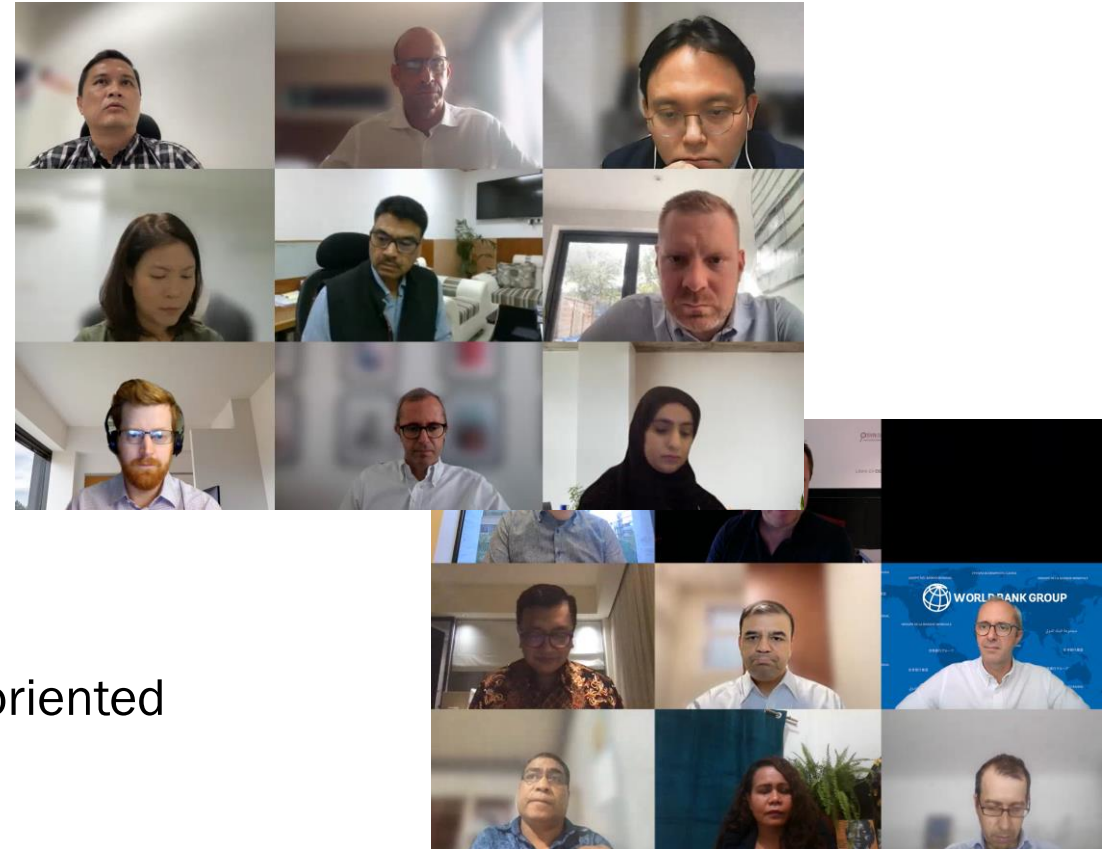
- Country-Driven
- Agile and mission-oriented

Groups Underway

m-Gov

Interoperability

Cloud Computing



MOBILE GOVERNMENT WORKING GROUP



Objectives

Advised and provided inputs on the mGov How-To Note produced by the World Bank GovTech Team. New deliverables being discussed.

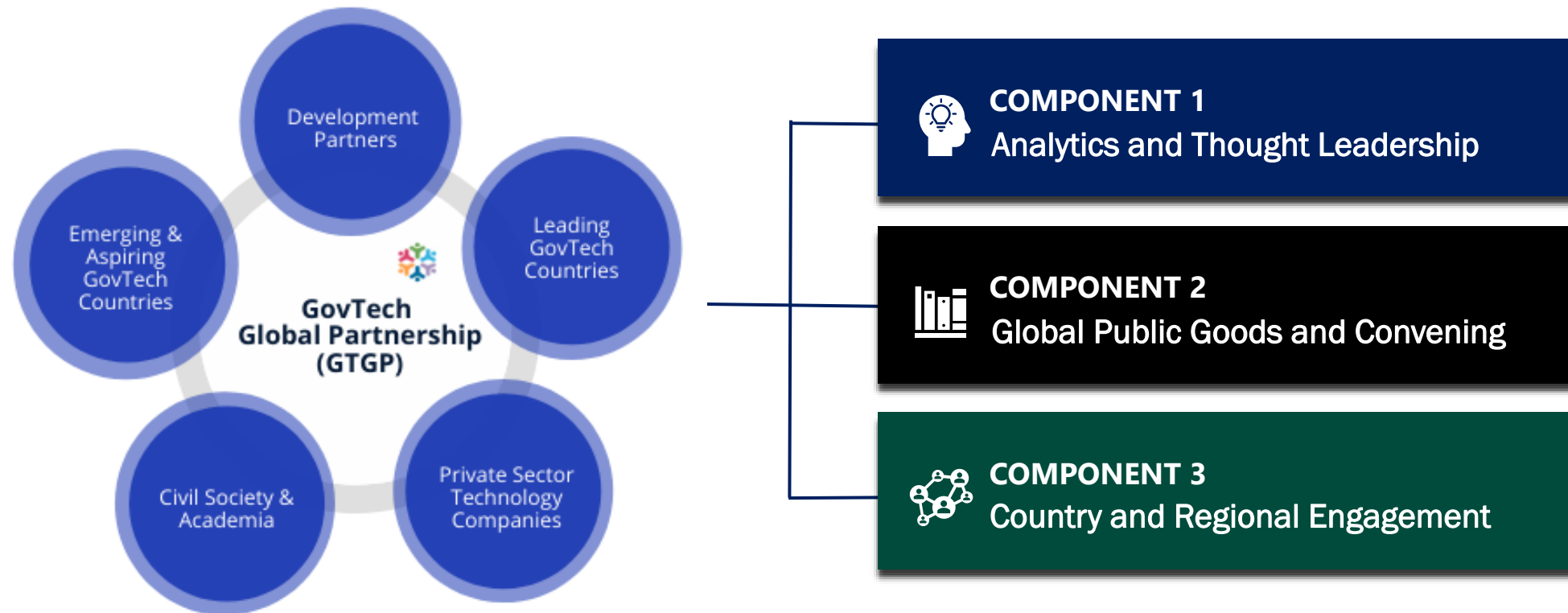
Country-Driven

Chaired jointly by **Austria** and **Brazil**, with the assistance of the GovTech Global Team of the World Bank.

22 member countries: Austria (co-chair), Brazil (co-chair), Bangladesh, Belgium, Estonia, **Greece**, Indonesia, Italy, Japan, Korea, Moldova, Morocco, Mozambique, Portugal, Panama, Peru, Qatar, Switzerland, Tunisia, UAE, Ukraine and Uruguay.

GOVTECH GLOBAL PARTNERSHIP

Multi-stakeholder initiative that supports beneficiary countries through a range of activities and works in 3 components:



GOVTECH GLOBAL PARTNERSHIP



Thank you!

Khuram Farooq
kfarooq@worldbank.org

João Ricardo Vasconcelos
jvasconcelos@worldbank.org

www.worldbank.org/govtech

Supported by the GovTech Global Partnership: www.worldbank.org/govtech