Electronic/Mobile Government in Africa: Building Capacity in Knowledge Management Through Partnership

GHANA COUNTRY PRESENTATION

http://www.unpan.org/emgkr_africa

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Ghana Information and Communications Technology Directorate (GICTeD)
Ghana Country Profile

- Population - 23M
- Population density - 101 per sq km
- Literacy rate – 75% (2003 est.)
- Average per capita income - $661
- GDP growth rate – 6.5%
- Currency - Ghana Cedis approx. 1US$: 1.3470 GH
- Political System – Multi-party democracy
Contents

- Background
- E-Government
- E-Government Strategies
- E-Government Developments in Ghana
- Challenges
- Next Step
Background - Ghana ICT4AD

- A policy statement for the realization of the vision to transform Ghana into an information-rich knowledge-based society and Economy through the development, deployment and exploitation of ICTs within the economy and society.

- It takes into account provisions of key socio-economic development framework documents including:
  - Vision 2020 –Achievement of middle income status
# Focus Areas of Policy

<table>
<thead>
<tr>
<th><strong>14 Pillars of ICT4AD</strong></th>
<th><strong>Promotions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerated Human development</td>
<td>Promoting ICT’s in Education</td>
</tr>
<tr>
<td>Developing a globally competitive value-added services sector</td>
<td>Rapid ICT and enabling physical infrastructure Development</td>
</tr>
<tr>
<td><strong>Promoting E-Government and Governance</strong></td>
<td>Promotion of National Health</td>
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<tr>
<td>Facilitating the development of the Private Sector</td>
<td>Promoting local and foreign direct investment drive in ICTs</td>
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<td>Developing an Export-Oriented ICT products and Services Industry</td>
<td>Facilitating National security and law and order</td>
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<tr>
<td>Modernization of Agriculture and the Development of an Agro-business Industry</td>
<td>Research and Development, Science and Industrial Capacity Research Development</td>
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<td>Legal, Regulatory and Institutional Framework provisions</td>
<td>Development and spread of ICTs in the Community</td>
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</table>
E-Government (Defined)

E-Government means the use by Government of web-based Internet applications and other information technologies, combined with processes that implement these technologies, to enhance the access to and delivery of Government information and services to the public, other agencies, and other Government entities; or

E-Government is a convergence of government and technology that has the potential to transform public administration and the citizen’s experience of it. Requires major administrative reform and sharing of common processes and information.
E-Government Strategies - Strategic Goals

- **Strategic Goal 1**: Establish Institutional Framework to oversee the implementation of E-Government.
- **Strategic Goal 2**: Establish a component-based Ghana Government Enterprise Architecture to facilitate efficient and effective citizen to government, government to government, and government to business interaction.
- **Strategic Goal 3**: Implement a secure, robust, and interoperable E-Government Infrastructure.
- **Strategic Goal 4**: Ensure the Legal and Regulatory Framework that supports the adoption and implementation of E-Government.
- **Strategic Goal 5**: Leverage the use of ICT, within an effective E-Government Environment, to meet vital socio-economic development goals (e-Services).
- **Strategic Goal 6**: Seek active and direct participation of the private sector in the implementation of E-Government.
E-Government Implementation Timeline

- **Establish Enterprise Architecture**
- **Establish Interoperability Framework**
- **Government Portal, MDA Websites, Web Standard Guidelines**
- **Governance and Legal framework Council**
- **Change Management and Capacity Building**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
<th>Phase 5</th>
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</thead>
<tbody>
<tr>
<td>Establish Enterprise Architecture</td>
<td>2 Years</td>
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<td>Identify Service integration possibilities and Develop Business Process</td>
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<td>Techniques</td>
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<td>Deploy Common and Specific Applications</td>
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<td>Create Disaster Recovery Sites</td>
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<td>Deploy Electronic Procurement</td>
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<td>Create a Metadata Repository and a Data Warehouse</td>
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<td>Build Data Center, Infrastructure for Communications, Server, VPN,</td>
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<td>Middleware, Security, Knowledge,</td>
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<td>Enable MDA Independent Single Point of Contact for Access to Information</td>
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<td>and Services</td>
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<td>Integrate Service Delivery and Governmental Processes</td>
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<tr>
<td>Customize Information and Services to needs of individuals and</td>
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<td>businesses</td>
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**Phase Notes:**
- Phase 1: 2 Years
- Phase 2: 3 Years
- Phase 3: 4 Years
- Phase 4: 3 Years
- Phase 5: 3 Years
Governance and Legal Framework

- GICTeD was established in 2006 to be transformed to NITA. The NITA bill was passed in December 2008, establishing an agency to regulate the provision of Information Communications Technology under the Electronic Transactions Act.
- Electronic Transaction Bill passed in December 2008, covering Digital Signature, Consumer protection and Protected Computers and Critical Database.
Ghana Information & Communication Technology Directorate

- Established as a result of the ICT4AD policy
- Operational arm of the Ministry of Communications
- Develop, implement and maintain a coordinated National plan for information technology
- Develop innovative technologies, standards, guidelines, and practices, among government agencies within the national and local governments and the private sector.
e-Ghana Project

• Goal - Leverage ICT for accelerated growth and poverty reduction.
• Objectives - Improved service delivery, Development of ICT industry and Development of conducive environment for ICT investments
• Three Components
  Component 1 – Enabling Environment (US$9.6m)
  Component 2 – Support to Local ICT Businesses and ITES (US$9.5m)
  Component 3- e-Government Applications and Communications (US$ 22.6m)
e-Government Applications and Communications

- Program Deliverables
  - Enterprise Architecture
  - Government Interoperability Framework
  - Government Wide Area Network
  - Government Portal/Gateway
  - National Data Center
  - ICT Training and Capacity Building
  - e-Government Applications
e-Government Applications and Communications

- **Enterprise Architecture**
  
  Framework for the implementation of the different architecture perspectives (business, applications, data and technical) across government to improve technology decision making.

  Six (6) working groups formed comprising of public sector and private consultants reviewing the documents.
e-Government Applications and Communications

- **Government Interoperability Framework**
  A set of policies, technical standards, as well as guidelines covering ways to achieve interoperability among MDAs and other Government organizations.
Government Wide Area Network

Establishment of a shared government-wide network connecting key MDAs. This will help MDAs to better secure their databases and provide them with high speed connectivity for sharing information and applications.
e-Government Applications and Communications

• Government Portal

The portal becomes a key interface between the government and its citizens, media and civil society, thereby promoting transparency and encouraging feedback on public policy programmes.
National Data Center
Serve as the main source of information storage for the MDAs. This will include a Network Operating Centre, Security Operating Centre and a Storage Area Network
e-Government Applications and Communications

**ICT Training and Capacity Building**

- CIO training
- Training the ICT technical staff
- Training for legislators and judicial officers
Applications identified

- PPP (Public Private Partnership) arrangement in developing electronic applications and services includes Internal Revenue Service, Revenue Agencies Governing Board, Value Added Tax Agency, Large Tax Payers Unit and the Registrar General Department.

- This would be a bundled application solution and the bundling of the IRS, RAGB, VAT, LTU and RGD has been decided because of the synergistic relationship of each of their missions.
Portal and Applications

GovNET

National Data Center

GGEA & eGIF

Capacity Building
e-Government Applications

- **Shared GIS Services** – A Web service used by applications for mapping of geospatial data.
e-Government Applications

- **Messaging and Collaboration**
  Messaging facility introduced to enhance the communication between the various MDAs and will facilitate dissemination of information and improve the efficiency within the MDAs
e-Government Applications

Appointment and Scheduling
This application will track and manage the scheduling and appointments between the Government agencies and citizens
e-Government Applications

• IT Scheme of Service

With the e-Government project rolling out, more skilled IT personnel will be needed to maintain the system of MDAs. An IT scheme of service is developed to attract and maintain the best brains in the IT industry.
Automation of Revenue Generating Agencies

- Telephone
- Email
- Fax
- Personal Visit
- Mail

Revenue Generating Agency Offices
Citizen-centred OneStop Service Provision

IRS, VATS, RGD, LTU, RAGB

Business Registration
Marriage Registration
Income Tax Payment
VAT Payment
Tax Filing

Offices
Services
Citizen
<table>
<thead>
<tr>
<th>Programme</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>50% complete</td>
</tr>
<tr>
<td>E-GIF</td>
<td>50% complete</td>
</tr>
<tr>
<td>Data Center</td>
<td>Contract has been awarded</td>
</tr>
<tr>
<td>GovNet</td>
<td>Contract has been awarded</td>
</tr>
<tr>
<td>Shared Portal</td>
<td>Pilot implementation contract has been awarded</td>
</tr>
<tr>
<td>Capacity Building</td>
<td>Contract to be awarded</td>
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## Project Status

<table>
<thead>
<tr>
<th>Application Solutions</th>
<th>Status</th>
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<tbody>
<tr>
<td>PPP for Revenue Generating Agencies</td>
<td>Rebidding to select Private partner by end of year</td>
</tr>
<tr>
<td>Shared GIS Services</td>
<td>Contract to be awarded by end of year</td>
</tr>
<tr>
<td>Appointment and Scheduling</td>
<td>Contract to be awarded by end of year</td>
</tr>
<tr>
<td>Messaging and Collaboration</td>
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</tr>
<tr>
<td>Document Workflow</td>
<td>Contract to be awarded next year</td>
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e-Government Successful Initiatives

School Selection and Placement System

GCNET

Automation of National Health Insurance
Features of Selection System

- Raw Scores of Candidates used
- Selection based on Six(6) Subjects
- Placement is in Order of Merit
- Choice of Schools from a Combination of Regions is allowed
- Results sent to all JSS and SSS
Benefits of CSSPS

- Cost Effectiveness
- Removal of Regional Restrictions on Candidates
- Efficient, Transparent T& Speed
- Promote Fairness, Equity and Access
- Reduction in Human Errors and Manipulation
Benefits of CSSPS

Placement results checked via SMS Text Message from the comfort of your home or office
Ghana Trade-Net And Customs Management System
Networking all parties to a common platform to facilitate processing and reporting of trade and customs related transactions ...
Freight Station

Customs Regime Managed by GCMS

- Home Consumption
- Bonded Warehouse
- Transit
- Free Zone
- Export
Benefits of the GCNet System

• Accurate “Real-Time” Revenue Accounting and Reconciliation Among all Stakeholders
• Systematic Monitoring and Tracking of Consignments From Port to Destination
• Enable regulatory Agencies to access a Common Database Required for Regulatory Functions
• Improved Trade Facilitation And Quick Clearances
GCNet System: Acknowledged By World Bank
National Health Insurance Scheme

In line with the GPRS of delivering accessible, affordable and acceptable quality health care system to all Ghanaians, especially the poor and most vulnerable in society.

Aim is to enable the government achieve its set health goal within the context of the GPRS and the health Sector Year Programme of Work, 2002-2006.
## Issues and Challenges before Automation

### Challenges

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<thead>
<tr>
<th>Issue</th>
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</thead>
<tbody>
<tr>
<td>Highly susceptible to Fraud</td>
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<tr>
<td>Late payments of Claims</td>
</tr>
<tr>
<td>Not portable</td>
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<tr>
<td>Slow ID Card Processing</td>
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### Causes

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<tr>
<td>Inadequate Standards &amp; Controls</td>
</tr>
<tr>
<td>Lack of appropriate Monitoring mechanisms</td>
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<tr>
<td>Insufficient verification mechanism</td>
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<td>Fragmented ICT Solutions</td>
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</table>
Benefits of NHIS Automation

- Instant Issuance of ID Cards
- Fraud Control
- Efficient Claims Administration
- Portability
- Effective control of Gatekeeper System
- Enhanced Monitoring and control capabilities
- Effective Audit Process
- Improved Claim Process
- Increase Revenue
- Secured Premium Collection
Challenges Implementing e-Government

- Political Will
- Governance
- Trust
- Funding
- Agency Capability and Participation
- Inadequate ICT expertise
- Emerging Opportunities
- Measuring Success
## Next Steps

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THANK YOU