



POLICY INFLUENCE ON DIGITALIZATION AND ECONOMIC DEVELOPMENT – THE CASE OF GHANA

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Overview

Introduction

Digitalization in Ghana

Policy Interventions

Policy Derivatives and Impact

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Implications for future policy development

A call for collaborations

Introduction

Like many developing countries, Ghana, continues to enjoy appreciable levels of benefits from the advent of Information Technology (IT) and Information Communication Technology (ICT). This has brought with it the digitization of work processes, transactions and production of goods and services.

Ghana has developed policies to drive activities in the IT/ICT sector in acknowledgement of the impact IT/ICT is having on socio-economic development and the potential it has to improve the standard of living of Ghanaians and create efficiencies.

Digitalization in Ghana

Since 2000, Ghana has experienced favourable growth in the use of ICT, primarily due to mobile internet penetration. Increasing access to technology has supported innovative ways of doing business, increased competitiveness, introduced creative business models, and inadvertently widened the economy. The government believes that digitization is a great equalizer, and will galvanize the 'New World'. As a result of this government within the past two decades are increasing their interest in the ICT space.

- Due to the welcoming atmosphere of digitalisation, many digital enterprises have sprung up increasingly especially in the private sector.
- Government business processes and transactions are being digitalized.
- The revolution begun after the adoption of ICT4AD Policy.

Major Policy Intervention-ICT4AD – 14 Pillars

- Promoting ICTs in Education
- Electronic Government/Governance
- Facilitating Development of Private Sector
- Accelerated Human Resource development
- Deployment and Spread of ICTs in the Community
- Promotion of National Health
- Rapid ICT and Enabling Physical Infrastructure Development
- Developing Global Competitive Value-added Services Sector
- Developing an Export-Oriented ICT Product and Services Industry
- Modernization of Agriculture and the Development of an Agro-Business Industry
- R&D, Science and Industrial Research Capacity Development
- Legal, Regulatory and Institutional Framework Provisions
- Promoting Local and Foreign Direct Investment Drive in ICTs
- Facilitating National Security and Law and Order

The Trajectory....

Blue Print – ICT4D

E-Ghana Project

E-Transform Project

Institutions

Human Resource

Infrastructure

Legislations

Policy Interventions – Institutional creation

E-GHANA PROJECT



The objective of the e-Ghana Project is to assist the Government in generating growth and employment, by leveraging ICT and public-private partnerships to

- (a) develop the IT Enabled Services industry, and,
- (b) contribute to improved efficiency and transparency of selected government functions, through e-government applications.

E-TRANSFORM PROJECT

The objective of the e-Transform Project for Ghana is to improve the efficiency and coverage of government service delivery using information and communication technologies

Policy Interventions - Institutions

NATIONAL INFORMATION TECHNOLOGY AGENCY – NITA

Agency responsible for Ghana's IT/ICT Infrastructure and to ensure interoperability of Government systems and software deployed.

- Regulation of the ICT sector
- E-Government initiatives
- Hosts and manage National Data Center
- National fibre optic deployment
- Internet service to government agencies

NATIONAL COMMUNICATION AUTHORITY – NCA

A central body to license and regulate communications activities and services

- Telecommunication
- Frequency spectrum
- Broadcasting authorization
- Standards and clearance

Institutional creation

IT ENABLED SERVICES – ITES SECRETARIAT

Established under the E-Ghana Project to develop the IT Enabled Service sector – creating enabling environment.

- Infrastructure: Accra Digital Centre & Technology Park
- Coordinate the establishment of Digital Enterprises by the private sector
 - Promote Ghana as a preferred destination for offshore
- ITES/BPO business opportunities

KOFI ANNAN CENTRE FOR EXCELLENCE

- Established to develop Human Resource in ICT:
- Ghana's first advanced Information Technology Institute
- Trains highly qualified personnel for the ICT/Digital sector

Policy Interventions - Institutions

GHANA INVESTMENT FUND FOR ELECTRONIC COMMUNICATION – GIFEC

Established to bridge the digital divide between the served and unserved/underserved communities of Ghana

Universal access to ICT services countrywide

- Community Information Centers (CICs) provide internet/digital services for communities
- School connectivity Project
- Security connectivity Project
- Digital Community Mobile Libraries
- National Emergency Call Centers

Policy Interventions - Institutions

GHANA MULTIMEDIA INCUBATOR CENTRE – GMIC

- Promote ICT Entrepreneurship and Technology Commercialization through the incubation of innovative ICT ideas as business start-ups.

To develop ICT skills and build capacity in the area of Business Process Outsourcing (BPO) to create the skill pool needed to attract world-class BPO operators.

- Creation of entrepreneurs in ICT sector
- Creating a pool of skilled agents to take advantage of the BPO opportunities

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Institutions

DATA PROTECTION COMMISSION

The Data Protection Commission (DPC) is an independent statutory body established under the Data Protection Act, 2012 (Act 843) to protect the privacy of the individual and personal data by regulating the processing of personal information.

NATIONAL IDENTIFICATION SCHEME

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Enabling Legislations

National Information Technology Agency Act, 2008 (Act 771)

National Communication Authority Act, 2008 (Act 769)

Electronic Communications Act, 2008 (Act 775)

Electronic Transactions Act, 2008 (Act 772)

Communication Service Act, 2008 (Act 754)

Data Protection Act, 2012 (Act 845)

Policy Derivatives & Impact

A Vibrant Mobile Telecommunications Industry

Mobile telecommunications penetration driving digital usage – responsible for creating about 500,000 jobs through its value chain including Dealers, Distributors, Canvassers, Media, entertainment etc

Mobile Money services

Mobile Commerce

E – Learning

Mobile Health - BISA

Mobile Agric – checking weather/early warning

Vehicle Tracking devices



Policy Derivatives & Impact – Mobile Penetration

7. Mobile Money²

Indicators	2012	2013	2014	2015	2016	Jan -Jun 2016	Jan -Jun 2017	2017 % Growth
Total number of mobile voice subscription ³	25,618,427	28,026,482	30,360,771	35,008,387	38,305,078	36,613,987	35,984,280*	(1.72)
Registered mobile money customers (Cumulative)	3,778,374	4,393,721	7,167,542	13,120,367	19,735,098	16,428,391	21,360,023	30.02
Active mobile money customers ⁴	345,434	991,780	2,526,588	4,868,569	8,313,283	7,138,069	9,492,190	32.98
Registered Agents (Cumulative)	8,660	17,492	26,889	79,747	136,769	108,531	153,827	41.74
Active Agents ⁵	5,900	10,404	20,722	56,270	107,415	82,212	122,587	49.11
Total volume of transactions	18,042,241	40,853,559	113,179,738	266,246,537	550,218,427	222,422,989	428,486,473	92.64
Total value of transactions (GH¢'million)	594.12	2,652.47	12,123.89	35,444.38	78,508.90	30,785.97	68,230.67	121.63
Balance on Float (GH¢'million)	19.59	62.82	223.33	547.96	1,257.40	679.17	1,801.78	165.29

* Total mobile voice subscription figure is as at April, 2017 (NCA)

Mobile telecommunications driving digital financial inclusion:

- Largely providing banking services for the unbanked
- Insurance services
- Digital payments: school fees, remittances, services etc.

Robust Infrastructure

Apart from Government's interventions with policies and laws, the private sector players have invested massively into the digital economy.

- Government was first to deploy the LTE technology in the country in November 2013
- Five (5) Marine cables
- 65% Fibre Optic prevalence rate
- Accra Digital Centre – expected to provide 10,000 direct & indirect jobs



Massive improvement due to automation of government businesses

- GIFMIS - the use of Enterprise Resource Planning (ERP) to improve public financial management in the Ghana.
- Improvement in revenue generation/collection by GRA
- Ghana Single Window – One-stop shop for all trade information, exchange and clearances
- Company Registration turnaround time reduced – 3days
- Police background check/clearance within one day
- Birth Certificate in 48hrs
- E-Services: online tax payments

Policies & Projects Pending - Way Forward

NATIONAL IDENTIFICATION SCHEME – (Game changer)

Rollout of a comprehensive National Identification Scheme to fast track the digitalization of the economy:

- Law enforcement
- Digital property address system
- As a transactional tool

DEPLOYMENT OF INTEGRATED DATA WAREHOUSE

The Convergence of all data from state institutions at a single data warehouse

INTER-PLATFORM MOBILE TRANSACTION

Interoperability of Mobile Telecom companies for mobile financial services

Policies & Projects Pending – Way Forward

IMPLEMENTATION OF CYBER SECURITY POLICY & STRATEGY

National Cyber Security Policy and Strategy and established the National CERT

ESTABLISHING ICT PARKS

To attract renowned technology companies

IMPLEMENTING E-APPLICATIONS IN PUBLIC INSTITUTIONS

e-Immigration system;

e-Cabinet system;

e-Justice system;

e-Parliament;

e-Procurement

SMART COMMUNITIES PROGRAMME by GIFEC

Wifi, Hotspots, Computers & Accessories

Policy/Legislation Gaps

- Public Key Infrastructure (PKI):- On the drawing board
- Electronic Consumers Act
- The National Telecom Policy, 2005:- Policy targets obsolete since 2010
- The Electronic Communications Act:- Unified Licenses to enable all telecom companies deploy all technologies and offer services to the home
- Unavailability of Broadcasting Act and Digital Terrestrial TV Policy:- Project being worked on

A call for Collaborations

- Collaborate to all understand policy position – Policy makers, Academia, Industry and Consumers of digital product/services
- Ownership of policy – consultation among all stakeholders needed
- Helps implementation of policies

Policy Continuity Challenges

Based largely on common knowledge

- Lack of prioritization
- Government in power's inability to continue with plans and programs of past governments
- Funding challenges
- Slow adoption of policy initiatives on the part of some public institutions

Research Gaps

- No known official data on level of digitalization in Ghana
- How do we measure the levels of digital activities
- Difficult to measure the impact of digitalization on GDP

Gap Identified for Research Consideration

GSS: Gross Domestic Product (GDP) at Current Market Prices by Economic Activity (Gh¢ Million)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. SERVICES	8,690	10,922	13,935	17,543	22,184	27,423	35,837	44,964	56,248	72,428
Trade; Repair Of Vehicles, Household Goods	1,141	1,335	1,710	2,109	2,701	3,282	4,060	5,222	6,085	7,776
Hotels and Restaurants	894	1,210	1,716	2,196	2,593	3,007	3,517	5,256	6,099	7,020
Transport and Storage	2,357	2,849	3,262	3,758	4,578	5,997	8,041	10,149	13,351	15,517
Information and Communication	483	511	622	657	831	989	1,590	1,572	2,441	3,178
Financial and Insurance activities	473	739	1,089	1,547	2,240	2,466	3,452	5,885	9,115	13,772
Real Estate, Professional, Administrative & Support Service activities	914	1,018	1,185	1,462	1,945	2,591	3,502	3,485	3,894	5,066
Public Administration & Defence; Social Security	862	1,289	1,799	2,479	3,024	3,897	4,952	5,305	5,843	7,803
Education	655	856	1,132	1,506	1,877	2,307	3,101	3,248	3,883	5,266
Health and Social Work	250	308	381	513	674	728	921	956	1,091	1,501
Community, Social & Personal Service Activities	662	807	1,039	1,318	1,722	2,159	2,701	3,886	4,445	5,529
FISIM (Financial Intermediation Services Indirectly Measured)***	407	503	689	1,192	1,512	1,458	2,317	2,919	4,354	7,014



Thank you