

The Ghana Scan-ICT Phase 1 Process

The Challenges and the Lessons

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The Scan-ICT Initiative

- An outcome of the 1st ADF organized by the ECA in 1999 on the theme: ‘Addressing the Challenges of the Information Age’
- **Objective and Goals:**
 - To develop Africa’s capacity in the development and the collection of data on suitable ICT4D Indicators
 - Develop a scalable methodology for use in the ICT4D indicators space
- **Pilot Phase Countries (Completed 2001: www.scan-ict.org):**
 - Ghana, Senegal, Morocco, Ethiopia, Uganda, Mozambique
- Others who adopted and used the Pilot Phase Deliverables: Methodology and Process
 - Nigeria, Ethiopia, Rwanda
 - Development Partners
- **Next Phase Countries (Scan-ICT Phase 2 Pilot)**
 - Ghana, Senegal, Ethiopia, Cameroun, Gambia
 - Rwanda, Mauritius

The Goal

- The Scan-ICT Initiative is designed to build support for the phased development of a comprehensive African capability to collect and manage information on key IS/ICT4D-related indicators to:
 - support the growing investment that African countries are making into ICT infrastructure development deployment and usage and usage
 - to support the ICT4D process in African countries aimed at facilitating their transition into the information society.

The Rationale for Scan-ICT

The original rationale for Scan-ICT is based on 3 inter-related notions:

- First the fact that ICTs have taken on a preponderant role in the globalised economy and that Africa must be able to integrate into the “new and emerging information economy” or risk being further marginalised;
- Second, there is growing evidence that ICTs can play an effective role in ensuring Africa’s sustainable socio-economic development;
- Third, if African decision makers are to undertake effective ICT policies, in order to harness ICTs as effective development tools, there is a need for relevant data and information to (i) formulate those policies (ii) support the monitoring and evaluation of their implementation and (iii) analyse the socio-economic impact of the implementation;

The Broad Objectives of Scan-ICT Phase 1 (Pilot)

- To determine ICT4D status and continuously scan basic ICT4D activity in each African country.
- To develop and continually refine a set of IS/ICT4D indicators that can be used to measure ICT4D activities and progress in Africa and guide investments.
- To develop a continuous benchmarking strategy that can be implemented to improve performance of ICTs in Africa.
- To develop sets of case studies to demonstrate best practices and share lessons learned in the innovative application ICTs in different countries

- To carry-out focused ICT4D research and development in order to strengthen the strategic management capacities of ICT4D policy development and investment in Africa.
- To maintain a capacity development strategy and plan for the sustainable collection, maintenance and provision of quality information on ICT4D activity in Africa.
- To maintain an international technology watch and to follow the evolution of ICT4D process to the benefit of Africa countries .
- To foster the development of publicly accessible information and knowledge bases.
- To develop and maintain regionally distributed data collection and management nodes in contributing organizations throughout Africa.

Components under Scan-ICT Phase 1

Developing Indicators and Benchmarks:

To track progress toward an information society, it is necessary to establish indicators, set benchmarks, and measure progress in meeting targets.

Support ICT4D Policy and Plan Development Process:

Achieving maximum benefit from ICTs requires policies to facilitate access and effective utilisation.

Scan-ICT is to assist African nations to develop, implement and monitor ICT4D policies and Plans that will facilitate access and utilization.

Human Resource Development and Impact Assessment:

- To participate in the global digital economy, African nations will need to develop the requisite human resources and skills necessary for the development and participation in the emerging information and knowledge economy.
- Scan-ICT is targeted at monitoring the human resource based of African countries and assessing measuring its impact on the development of the information society in these countries

ICT Systems Exploitation and Development

- African countries will not only need to effectively exploit and use ICTs within their societies and economies but also target the production and the provision of ICT-related goods and services if they are to made progress towards the development of their information economy and society.
- Scan-ICT is designed to assess and measure, the extent of ICT exploitation, deployment and the production of ICTs in African countries as part of efforts towards assessing and measuring impact on the economic and other social and economic outcomes on households and businesses.

The Scan-ICT Pilot Phase Process: The Case of Ghana

- The Ghana pilot project which was implemented by INIIT in collaboration with other key partners was based on a comprehensive methodology, developed to guide the data gathering and analysis exercise
- The premise underlying the development of this methodology is that: given the long-term nature of the Scan-ICT project, it is necessary to develop a detailed design of the underlying processes, procedures and the required tools to facilitate the implementation process
- The outputs of the detailed design phase serves as means for facilitating the implementation process and as a key output of the Ghana Scan-ICT project which implemented in two stages
 - the *design stage* involving the design of the details of the methodology and
 - the *implementation stage* involving data collection/gathering and analysis.

Elements of the Methodology

For each of the specific indicators under each of the Scan-ICT theme --- the methodology provided specific details in relation to:

- (i) the relevant information to be collected/gathered;
- (ii) the possible sources of the relevant information to be gathered;
- (iii) the methods to be used for obtaining or gathering the required information;
- (iv) the relevant types of questionnaire to be used in cases where a postal survey or a face-to-face interview is required and
- (v) the format in which the information gathered as per each indicator is to be presented or summarized.

Types of Questionnaires Developed and Used

- graphical-based questionnaire, these are used for face-to-face interviews;
- standard (text-based) questionnaires, which were used for both face-to-face interviews and postal questionnaires and
- electronic-based questionnaires which are transmitted to target samples via e-mail

The Target Populations

- **public sector institutions and establishments** (Government Ministries, Agencies and Departments; Public Sector Organizations, Local, Regional and District organizations and institutions etc)
- **private sector establishments and institutions**; (small and medium scale enterprises [SMEs], large private enterprises etc)
- **schools** (public and private primary and secondary schools)
- **universities, colleges and polytechnics**
- **ICT companies, institutions and establishments**: including
 - computer equipment vendor, retailers and distributors, software vendors, retailers and distributors;
 - computer training centers and institutions, computer systems development and support companies and establishments, communications centers and Telecenters;
 - ISPs, Telecom Operators, Gateway/Broadband Service Providers and other Internet-based Service Providers
- **Hospitals, Clinics and Health Centers.**

Outcomes of Phase I (the Pilot Phase)

- The pilot phase yielded a methodology which provided a framework for identifying a ‘basket of indicators’ which were to be compiled from either primary or secondary sources by each of the participating institutions of the pilot country.
- Given that the methodology identified the ranges of suitable indicators on which data is to be compiled and analyzed, the emphasis of the pilot phase was therefore on the data collection and analyses exercise.
- The Pilot phase also supported the ICT4D Policy development and implementation process in a number of countries.
- For example: Rwanda, Ghana, Ethiopia, Nigeria, Malawi supported their policy process with baseline studies which was based on the Scan-ICT methodology and basket of indicators

- **The SCAN-ICT Research Network: [Data Collection and Research]**
 - To facilitate the data collection and research work, a Scan-ICT Research Network was set-up with members from the Universities, Polytechnics and Research Institutions spread all over the country including.
 - International Institute for Information Technology (INIIT)
 - University of Ghana
 - University of Cape Coast
 - Kwame Nkrumah University of Science and Technology
 - Valley View University
 - Council for Scientific and Industrial Research (CSIR)
 - Sunyani Polytechnic
 - Takoradi Polytechnic
- **The SCAN-ICT Respondent Network**
 - The Pilot project also involved the setting up of the Scan-ICT Respondents Network made of the respondents of most of the face-to-face survey and the postal survey. A database of respondents' details was set-up -- this will be used in the future for follow-up Scan-ICT surveys

The Scan-ICT Phase 1 Implementational Challenges

- **Data Collection Exercise – Major area of Challenge**
- ***Postal Questionnaire – Limited Success***
[Data Gathering –Limited, Setting up Respondent Network – Successful]
- ***Face-to-face Data Collection Exercise – Successful***
[Data Gathering, Setting Up Research Network and Building Capacity, Setting-up the Respondents Network]

The Scan-ICT Phase 1: Lessons

- Methodological framework (pilot phase) developed served the intended purpose.
- The Scan-ICT Phase 2 Methodology was developed based on the Pilot phase methodology...lessons learnt from the pilot phase
- Linkage with various ICT initiatives is needed to sustain the Scan-ICT process and increase its responsiveness to strategic planning and ICT investments
- Crucial to continuously monitor and capture ICT4D indicators to facilitate informed decisions

Other Key Lessons

- African countries are at different levels and stages of development in term of their level/stage of socio-economic development; the development of their respective ICT sector/industry; and the stage of their respective ICT4D process
- African countries differ in terms of the availability of resources that each could deploy to facilitate the IS/ICT4D indicators development and data collection process. There is lack of resources in some countries compare to others
- For each African country, the relevance of some specific set of indicators will be determined by country's development priorities and other circumstances. What is relevant to one country may not be relevant to another.

- African countries are at different levels/stages of the development of the capacity of their national statistical data collection systems and organization (NSO). While some have a well-developed statistical system others have systems that is yet to be developed
- Statistical legislations, laws and regulations guiding the activities of national statistical organizations (NSOs) as well as those relating to data protection and obligations of citizens and business entities to provide data do vary from country to country
- African countries are at different stages of the development of key sectors of their economies. For example, the private sector is less developed in Rwanda if compared to that of Nigeria or Kenya. Hence some of the private sector related indicators that may be of interest to Nigeria or Kenya may not be of interest to Rwanda
- Finally since no two African countries are the same given the above factors, it is not realistic to as is the case in the Phase 1 process to insist that they should all target the same basket of indicators. The Phase process took this into account in the development of the Tool Kit

**THANKS FOR YOUR
ATTENTION**

.... AND PATIENCE

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