E-Powering Jamaica

Draft Master Implementation Plan

NICT Strategy 2012

Government of Jamaica

Draft Master Implementation Plan for
E-Powering Jamaica 2012
National ICT Strategy 2007 - 2012

Executive Summary

The Central Information Technology office has been mandated to develop and implement the National Information, Communications and Technology Strategy. The E-Powering Strategy 2007 – 2012 has been developed and widely circulated. The vision and the 7 dimensions of the E-Powering Strategy have been adopted within the Vision 2030 Jamaica National Development Plan.

With the wide acceptance of the E-Powering Strategy, the next step has been to develop an Implementation Plan. The wide scope of the strategy requires that priority to be given to areas that are
> supportive of the Vision and the 7 dimensions of the Strategy,
> geared to improve Jamaica's International ICT status and ranking,
> and is aligned with the Vision 2030 Jamaica National Development Plan

Based on these factors the implementation plan we will focus for the first three (3) years on these six areas of the E-Powering Strategy
> e-Inclusion
> Education and Training
> Network Readiness and Infrastructure Development
> e-Business and Industry Structure
> e-Government
> Policy and Legal Framework

It is envisioned that the successful projects of this three year plan will be the spring board for the success of the remaining two dimensions of the E-Powering Strategy 2007-2012.

This initial 3 year plan will seek to have an improvement of Jamaica's standing on international ICT indices. The main indices to be monitored are the Digital Opportunity Index (ITU), Technology Achievement Index (UNDP), and Network Readiness Index (WEF). The NICT Implementation plan will also be supportive of the Vision 2030 Jamaica National Development Plan.

Undertaking a country wide implementation of an ICT strategy requires an approach that will ensure that the projects and programs deliver what they envisioned: improved government service, value-for money, reduction in the cost of service and maximising benefits to be achieved. An approach to achieve this has been touted by John Thorp in his book "The Information Paradox: Realizing the Business Benefits of Information Technology". In his book he outlines the Benefits Realization Approach model.

We have seen where countries, who have heavily invested in IT, fail in getting the results that they have hoped for. We do not need to follow in their footsteps but to learn from them.

The Benefits Realization Approach model is based on three assumptions:

- Benefits do not automatically occur with the introduction of new technology

- Forecasted results are not gained by a static plan but more from a plan that is dynamic and proactive to changes in the environment.

- Results from a project must be managed as they do not end with the project.

Based on these assumptions the key to realizing the benefits from our NICT Implementation Plan to have Program Management, Proactive Management of Change, Activist Accountability and Relevant Measurement

In the Benefits Realization Approach model – **Project Management**, it is shown that just putting or using technology to solve a business process or problem is not enough. Whether it is new desktop hardware, groupware or enterprise resource planning (ERP) software, it will not deliver the value hoped for if it is not implemented properly. In other words, installing the software and reengineering the process is one thing, but training and motivating the workers in the organization to use it wisely to deliver business value and services is another.

This requires that CITO ensures that all stake holders are involved in the process and the change is supported by their ministry or agency management team. Although the task of implementing a NICT strategy are IT centric, it cannot be seen as CITO's project; it must be endorsed and actively supported by the highest government officials. This would be fulfilling the 2nd key to success – **Activist Accountability**.

Using the Benefits Realization Approach model, will assist the Government of Jamaica to achieve its target. The model calls for measurement of goals achieved and performance - **Relevant Measurement**. This is a change from just measuring the amount of money used on the project. In this model we would measure the goal of delivering a service to clients within a specified period, along side the usual financial measurements of budget versus actual. However the foremost success factor would be the achievement of the goal. The goals defined in this implementation plan will take into account risk factors, metrics for performance milestones that will be objective.

The implementation plan as outlined will bring about some changes to our modus operandi, Government of Jamaica policy and how we interface with the public. Change can be unsettling and confusing, which may cause negative reactions to the NICT Implementation plan and those who advocate it. It is therefore vital for all affected Ministers, Permanent Secretaries and divisional heads be prepared to manage the change and be change agents. In the model, this management is called **Proactive Management of Change**. The implementation of this plan will require a strong leadership that is focused on our ultimate goal, be willing to listen to all diverse views and to steer their team through this plan to its end. This plan is not only about systems, processes and technology; it is about the people who make up the government service and the people who they serve.

It is highly recommended that this Benefits Realisation Approach is used to undertake the projects in this Implementation plan.

The Master Plan is not an exhaustive listing of the initiatives, strategies and interventions that will take place over the next 3 years, what is envisioned that this Master Plan will be updated as consultations are had with government stakeholders.

E-Inclusion: Universal and Open Access to ICTs and Participation in a Knowledge Based Society

Major Policy Goals	NICT Strategy Ref.	Strategies	Milestones And Targets	Planned Completion Date	**Lead Mobilizer** and Stakeholder Entities
Establish a widely dispersed ICT infrastructure and deepen broadband penetration into rural Jamaica and inner cities with the deployment of Community Access Points (CAPs)	Page 18	Form strategic alliance with MOE, IDB and private sector sponsors	Establish two CAPs every month. 30 new CAPs	December 2010	**MEMT**- IDB Project, MOE, CITO, Private Sector
Promote greater use of Free and Open source Software (FOSS) all sectors of the society	Page 18	Ensure the completion of the pilot FOSS project. The output of the pilot will determine the strategic direction for the promotion and use of open source technologies, firstly in the public sector, an the wider society.	FOSS pilot completed. Strategic outlook and implementation plan for open source defined	June 2008	**CITO**, MEMT
Improve the penetration of computers throughout homes and businesses	Page 18	Establish baseline for computer penetration by doing an island wide survey with STATIN	Survey completed. Findings disseminated.	November 2008	**CITO**, STATIN, PIOJ
		Establish baseline for computer penetration by government workers by doing a government wide survey	Survey completed. Findings as input for Gov computer project.	April 2008	**CITO**, all Gov Mins and Agencies, Private Survey Team
		Expand the current government computer loan scheme to include all categories of workers with 3 years service and lend at 0% interest rate for 1 year	Loan scheme in place. 70% of qualified applicants satisfied.	December 2008	**MOF**, CITO, Services Commission
		Encourage credit unions to offer attractive loan schemes for computer purchase at a low interest rate (2% – 5%)	Loan scheme in place for 50% of credit unions, including 3 of the top 5 unions	March 2009	**MIIC,** CITO, Unions, Ja. Association of CU

Education and Training: An Educated and Trained Workforce and Citizenry, Possessing the required Attitudes, Knowledge and Skill Sets to Function Optimally in a Knowledge Society.

Major Policy Goals	NICT Strategy Ref.	Strategies	Milestones And Targets	Planned Completion Date	**Lead Mobilizer** and Stakeholder Entities
Facilitate the human and technical resources for technology assisted lifelong education at all levels of the education system.	Page 20	Encourage a strategic alliance between CITO, MOE, E-Learning Jamaica, Jamaica for Life Long Learning, HEART and UNESCO to bring about the achievement of the overall goal	The organisations have coordinated work plans with minimal overlapping. Programs developed for persons in & outside the formal education system trained to use ICTs	March 2008	**MOE,** CITO, E-Learning Jamaica, JFLL, HEART, UNESCO
		Increase the number of schools with internet connection.	2 primary & 1 secondary school per month 100% secondary covered 60% primary covered	December 2010	**MOE**, CITO, UAF, Telecoms, Private Sector
		Increase the number of primary and basic schools with a computer lab.	One school every six months. 6 schools	December 2010	**MOE**, CITO, UNESCO, Private Sector
		Develop inter university competition to solve Government's issues using ICT, focusing on service to the public.	Competition established with premium recognition	September 2010	**CITO**, MOE, University Council, Private Sector
Facilitate quality education and training opportunities to facilitate the expansion of highly educated and trained Jamaicans	Page 20	Develop a secondary school competition that will use IT to solve issues related to their school life, such as homework assistance, discipline and personal security	Competition established with premium recognition	September 2009	**CITO**, MOE
		Develop and institutionalize a teacher education system that provides a technology integrated learning environment and graduates who are equipped to prepare students with the requisite skill sets mandated by local and global requirements	Trained teachers who are equipped to use technology to deliver syllabus	September 2011	**MOE**, CITO

Network Readiness and Infrastructure Development: Widely available and accessible ICT Networks which meet the dynamic requirements of business institutions, individuals and communities

Major Policy Goals	NICT Strategy Ref.	Strategies	Milestones and Targets	Planned Completion Date	**Lead Mobilizer** and Stakeholder Entities
Enhance the ICT infrastructure to ensure the support and security of the nation's information assets	Page 22	Gather baseline information about government agencies on the number of institutions/ buildings that have a LAN and Ministries/Agencies that have WANs	Documented Network Topology for all Government entities	November 2008	**CITO**, all GOJ Ministries and Agencies
		Align all MIS/ICT strategies for government ministries and agencies to encompass the NICT Strategy and Vision 2030 Jamaica Plan	Singular focus for ICT strategy in Government entities	December 2008	**PIOJ**, CITO, all GOJ Ministries and Agencies
		Include ICT risk as a portfolio consideration of the ODPEM and incorporate ICT support for recovery from natural disasters into ODPEM plans	Mitigation strategies engaged for natural disasters	December 2009	**ODPEM**, CITO
		Promote national awareness of threats to information security from malware, cybercrimes and disasters and their impact on business continuity	Public aware of cyber threats	December 2010	**MEMT,** CITO
		Invest in reliable and consistent electrical power supply from renewable and non renewable sources	Electrical power not a barrier to ICT usage	December 2011	**MEMT**, JPS, OUR, CITO
Promote multiple modes of information delivery systems and networks including new wireless and wired technologies	Page 22	Encourage private sector to expand and diversify wired and wireless ICT networks with specific emphasis on last mile connectivity at affordable rates.	Connectivity for broadband available island wide	December 2012	**Telecoms Sector,** OUR, CITO
		Create a regulatory environment conducive to investments in ICT and governed by an independent regulatory institution			
		Establish industry consultative body to gain consensus on common issues, study and recommend infrastructure policy			
		Accelerate cross-platform competition in the provision of converged services between PSTN-xDSL, Cable TV and Wireless			
		Develop efficient resource (DNS, NXX, etc) address allocation administration system			

E-Government: Greater Adoption of e-government Services by the Government and those Whom it Serves

Major Policy Goals	NICT Strategy Ref.	Strategies	Milestones and Targets	Planned Completion Date	**Lead Mobilizer** and Stakeholder Entities
Actively leverage ICTs in the reform of the public service; in relation to the Public Sector Reform Unit's Ministry paper 56	Page 24	Monitor the implementation of the recommendations of the PSRU Paper 56	Targets regarding e-services and e-government are achieved	To be determined by newly revised plan	**PSRU**, CITO
Proliferate the deliver of first class easily accessible and secure e-government service	Page 24	Establish a single, secure identification for Jamaicans from birth	Single Id accepted by private and public sector	November 2009	**NRU**, MOH, RGD, CITO
		Create a listing of all government services, documenting expected turnaround, estimated number of users and high level work flow.	Project plans for the delivery of additional government services on line	September 2008	**CITO**
		Order the listing of government services and prioritise in order of greatest impact for conversion to be offered online.		September 2009	**CITO**
Harmonize ICT infrastructure and systems across the public sector ensuring fully integrated, interoperable, efficient and effective service delivery	Page 24	Leverage resources for the establishment of GovNet and facilitation of infrastructure upgrades for LANs in government institutions.	Establishment of NOC for Government WANs	December 2009	**CITO**
Promote multiple modes of information delivery systems and networks	Page 25	Source funding and/or make strategic alliances to establish LANs and WANs for Government agencies.	The establishment of stable and secure LANs in all government entities and WANs that reaches all outlying stations	December 2008	**CITO**, MOF, MFAFT
		Establish stable and secure Government LANs		December 2009	**Gov Agencies**, CITO, MOF
		Establish stable & secure Government WANs		December 2010	**NWA**, CITO, MOF
		Ensure all government institutions standardized websites, Internet and email access	Website and Email standardization with reduced cost	December 2009	**CITO**

E-Business and Industry Development: Create an environment and reputation where the use and development of ICTs substantially enhances national productivity, efficiency and wealth

Major Policy Goals	NICT Strategy Ref.	Strategies	Milestones and Targets	Planned Completion Date	Lead Mobilizer and Stakeholder Entities
Encourage the increased use of online business to business and business to consumer operations	Page 34	Establish baseline for number of businesses with websites and active e-commerce operations.	Baseline Created	November 2007	**CITO**, Private Survey Services
		Encourage businesses to incorporate a e-commerce website	A 10 percentage point increase in businesses with e-commerce websites	December 2010	**CITO**, ExIm Bank, JT&I, Bankers Assoc.
		Present ideas to PSOJ, Young Entrepreneurs of Jamaica and other like organisations			
Build an effective indigenous ICT industry	Page 34	Establish database of registered/certified website designers who are capable of and has experience with developing secure e-commerce sites	CITO's database of website designers, preferred choice for businesses.	December 2008	**CITO**, All private sector organisations.
		Establish a framework for exchange of ideas between business groups and developers of e-commerce practitioners	Database of 15 competent website developers	June 2008	**CITO**, All private sector organisations, web developers
Support Small and Medium Enterprises and NGOs in taking greater advantage of ICTs for strategic and operational effectiveness	Page 34	Form strategic alliances with SME preferred partners	2 in 5 new start up businesses, plan for or has e-commerce site	Ongoing Start date July 2009	**JT&I**, CITO, All private sector organisations, , Development banks
Measure the contribution of the use of ICTs and the ICT industry to the national economy	Page 34	Form strategic alliance with Planning Institute of Jamaica for measurement and planning of ICT contribution using the Threshold 21 (T21) integrated development model, STATIN and national financial data	CITO implementation plan incorporated into Vision 2030 Jamaica action plans	February 2008	**CITO**, PIOJ, STATIN, MOF

Legislative and Policy Framework: A National ICT Policy and Legal Framework which Encourages Investment in the ICT Sector and Promotes the use of ICTs for the Benefit of the Entire Society

Major Policy Goals	NICT Strategy Ref.	Strategies	Milestones and Targets	Planned Completion Date	**Lead Mobilizer** and Stakeholder Entities
Create user confidence through an enabling and equitable legal and policy framework	Page 40	Form task force of legal minds and law students to examine the laws, regulations, standards or orders to locate legislations/ordinances which will impede the use of ICT in businesses, government services and the legal system.	No legal impediment for e-government, e-transactions, e-commerce or for any electronic transaction	January 2009	**CITO**, MOJ, UWI-Law School, Private law firms, Auditor General Office, Judiciary, National Contracts Commission, Auditing Firms
		Partner to ensure the implementation of the recommendations contained in Jamaican Justice System Reform Task Force - Summary of Recommendations namely sections 4.2, 4.6, 4.7, 4.8, 4.18, 4.19, 4.33,4.34, 6.1, 6.25, 8.7, 8.21	Recommendations related to ICT implemented	January 2010	**MOJ**, CITO, MNS, Attorney General
		Develop a program to build capacity in the judiciary and legal fraternity to effectively handle matters related to e-legislations	Training program implemented	January 2011	**MOJ**, MNS, Attorney General
			ICT and e-legislation impact on law developed as a subject area	January 2012	**UWI-Law School, MOJ**, MNS, Attorney General
Legal and regulatory framework which protects ICT users and creators of ICT-Related products and service and encourages ICT-related business	Page 41	Create the National ICT Advisory Council, of private and public sector interests, to recommend ICT policy adjustments and monitor implementation	Singular focus for Jamaica's ICT sector	January 2010	**CITO,** MEMT
		Update the Evidence Act, and pass the Cyber Crimes and Data Protection Act, that will ensure the criminalization of computer hacking, phishing and other cyber and ICT related offences	The three acts passed in parliament		**MOJ, MEMT**
		Establish and fully implement policy for tele-work	Legal regulation		**MLS**, CITO