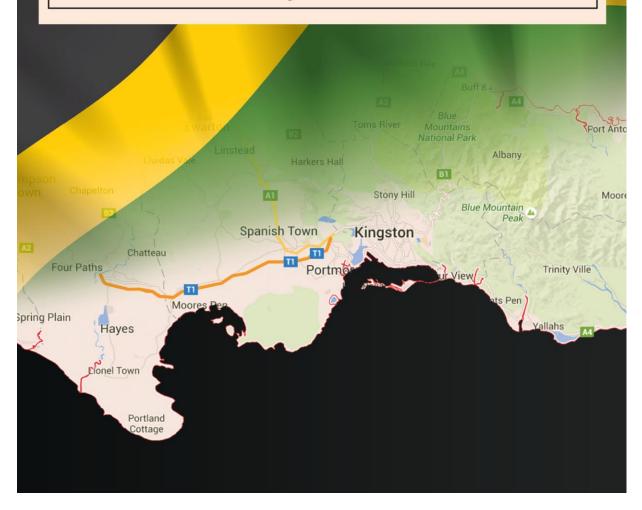
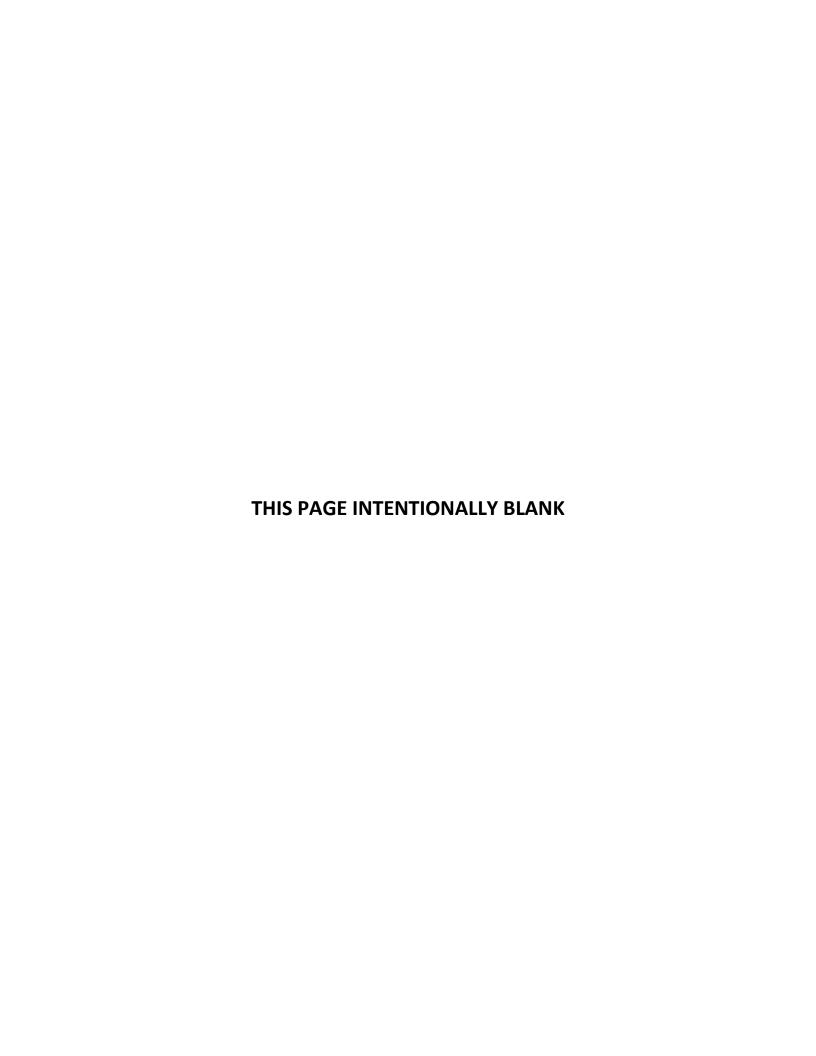


The Blueprint Report

A Road Map and Action Plan For ICT Transformation in the GoJ

Executive Summary and Recommendations







ICT Transformation Programme

Executive Summary and

Recommendations

THE BLUEPRINT REPORT A Road Map and an Action Plan For ICT Transformation in the GoJ

Prepared by

The Office of the CIO – Jamaica

Ministry of Science, Energy and Technology

Government of Jamaica

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EXECUTIVE SUMMARY

Overview

The Government of Jamaica (GoJ) is experiencing significant internal and external pressures on its business practices which need to be effectively supported by information and communication technologies (ICT). Internal pressures are managerial, operational and resource based (especially funding). The GoJ executive and management are making efforts to change how the GoJ does business to achieve greater operational efficiencies. Simultaneously, the GoJ wants to improve service and performance levels with existing or fewer human resources within the existing budget and fiscal constraints. These efforts are being made within an environment of decentralized resources.

These efforts, however, are unlikely to bear fruit due to the fact that the entire government structure of Jamaica is highly decentralized. The culture of the Government of Jamaica is highly predicated to the notion of separating the policy function in ministries from the operational function in the agencies and departments. Support services functions and particularly ICT play very poorly in an environment of decentralization such as the case in the Government of Jamaica.

Outside the Government of Jamaica, there are also significant external pressures which of course include both the increasing *demand* for services and also the demand for improving the *quality* of services by citizens, businesses, tourists and visitors and within the GoJ itself. In addition, there are significant regulatory changes contemplated (some imposed by the IMF and as conditions by the Multilaterals) to the way that the Government of Jamaica carries out its business, particularly in the deployment of technology and these in turn place tremendous strains on the existing resources that deliver the government Services. There is a never ending expectation that somehow information and communication technology would be the cure and the answer to these issues and demands. For the Government of Jamaica to meet the challenges that these pressures exhort, it needs to ensure that its business processes, and in turn, its overall management structure is such that it is ready to be supported by an effective information and communication technology.

In developing the ICT Transformation Process for the GoJ, several significant factors were considered to ensure the process is action-oriented, adaptable and flexible to the outcomes in light of the following GoJ realities:

- *GoJ Governance* This is characterized by a clear separation of the Policy function at the ministries from the Operational function at the departments and agencies;
- *The Overall Public Sector Transformation Imperative* Political and governance considerations particularly those related to the public sector transformation and modernization agenda;
- External pressures These are brought about by events affecting Jamaica such as the need for a logistics hub commensurate with the Panama Canal expansion;

- **Legacy considerations** This is reflected in the history of the information and communication technology within the Government of Jamaica over the past decade or more;
- Finance and Human Services Review There are highly demanding steps taken by the Ministry of Finance and the Public Service with numerous ICT investments aimed at eliminating its old financial and human resources management systems and replacing them with new alternatives. These appear to represent a majority of the ICT Capital Investment in the Government of Jamaica;
- *IMF and Multilaterals* —. The Government of Jamaica expenditures are extremely tied to the international monetary fund (IMF) regulations and restrictions as well as to its ability to secure favourable funding from multilaterals to improve its services; and
- *ICT Funding of Recurrent Budget* currently ICT funding is fairly fragmented among the ministries, departments and agencies (MDAs) across the Government of Jamaica as well as with eGovJa.

The Blueprint Report is aimed at highlighting the ICT transformation imperatives and the associated recommendations relating to the development of a five-year ICT action plan to support the needs of the GoJ as it enters the third decade of the new millennium and to accomplish its national outcomes highlighted in Vision 2030. The transformation imperatives and recommendations were formulated as a result of an extensive multilevel consultation process involving the decision makers, the executives, the MIS officers and the non-governmental organizations including the private sector and the academic sector. These were accomplished rapidly during the period from May 2015 to February 2016.

The Current Situation (As Is)

In recognition of the challenges and opportunities that ICT present to the GoJ, Cabinet, by Decision No. 2/13 dated 12 January, 2013 gave approval for the implementation of an ICT Governance model involving the:

- winding-up of the Central Information and Technology Office (CITO) and incorporating its policy functions into the Ministry of Science, Technology, Energy and Mining (MSTEM);
- repositioning the Fiscal Services Limited (FSL), as eGov Jamaica Limited (eGovJa), with primary responsibility for the implementation of GOJ wide ICT projects;
- contracting of a Chief Information Officer (CIO) to provide overarching technology vision and leadership; and
- establishment of a National Information and Communications Technology Advisory Council (NICTAC) to provide advice to the Minister with responsibility for Technology.

Prior to its dissolution, CITO was tasked with the responsibility to develop an effective National ICT Strategic Plan to facilitate, among others, the development of an efficient and integrated public sector. In addition, CITO was to disseminate ICT standards for adoption by Ministries, Departments and Agencies (MDAs) and to provide policy advice and support for MDAs in the execution of their ICT projects.

With the establishment of the Office of the CIO in April 2015, the tasks previously assigned to CITO as outlined above, became the mandate of the said Office which was created to provide:

- technology vision and leadership in the development and implementation of the GOJ ICT strategies, policies, initiatives, projects and programmes; and
- definition and oversight of Information Management practices, uses and outcomes for the management of GOJ's ICT infrastructure, systems, platforms and service delivery.

Shortly after the Office of the CIO was established in the government of Jamaica and attached to the Ministry of Science, Technology, Energy and Mining MSTEM, it became evident to the CIO that he could not possibly "boil the ocean". It was necessary to reframe the CIO terms of reference in the context of a transformational process to bring about desired changes to the information and communication technologies of the government of Jamaica. To accomplish its mandate, the Office of the CIO embarked on a rapid agile methodology that builds on the culture of the government as well as on the active participation of key stakeholders and particularly the Management Information Systems (MIS) Officers.

From the outset, the CIO was well aware that such transformation process must be **made in Jamaica** and must stem from the rank and file (the employees) as well as the executives of the government. Furthermore, the transformation process must reflect the political aspirations of the government.

Based on an extensive review of all the documents prepared over the past 5 to 10 years, it became evident that the Government of Jamaica has expended significant effort and resources to develop highly credible vision and strategy documents. For this reason, the transformation process was built not to repeat this extensive visionary work by the government. Instead it focused on a transformation agenda that identified specific areas that the government wanted to act upon to improve ICT in the country. The transformation agenda started with the vision statement already produced in Vision 2030 as a given.

The consultation process:

Within the first month of the establishment of the Office of the CIO, an **inception report** was produced which developed an outline for this transformation process. Given the short term mandate of the CIO, it was necessary to pursue **three** specific dimensions: A comprehensive consultation process; an MDA Engagement Process requiring the formation of a Steering Committee and a Project Team as well as a methodology for MDA engagement involving about 60 MIS and MDA business representatives from across the government of Jamaica; and finally, an attempt to focus on low hanging fruits that would aid the other two dimensions.

Thanks to the close relationship between the Office of the CIO and the then Ministry of Science, Technology, Energy and Mining MSTEM, it was decided to involve the ministers of the Government of Jamaica in the consultation process. Over 50% of the ministers (and permanent secretaries) were consulted along with their top executives. Similarly, over 50% of the MIS officers and some of their staff were also consulted using different means including surveys, MIS Forums as well as during the MDA Engagement process. A specific effort was expended to reach out to the private sector, the academic sector, associations and other non-government organizations. It was essential to develop a template that was consistently used throughout these consultations. Major discussion topic areas were explored during these consultations covering important aspects that would influence ICT transformation in the GoJ.

Overview of Core Issues

The ICT Transformation Process through its comprehensive consultation and MDA engagement, uncovered some key issues with significant systemic implications across the GoJ. These issues must be dealt with if the road map to ICT transformation is to have any degree of success.

<u>Core Issue #1:</u> Lack of a single entity to speak to ICT issues in the GoJ. Currently there are many ICT units in the organization but there is no unified voice, no unified authority, no unified accountability and responsibility for ICT notwithstanding the interim Office of the CIO which was created for this purpose.

<u>Core Issue 2:</u> Fragmented proactive ICT support to MDA business customers. The ICT organizational units and particularly eGovJa are primarily focused on supporting the "day-to-day" operations of their customers. There is no concerted pool of resources available to assist MDA customers in understanding the full potential of existing and emerging information & communication technologies to enable more efficient and effective service delivery. This lack of "customer focused" function within ICT is causing two things, first, MDA customers rely heavily on their own capability or when faced with an urgent need, they will opt for an outside product/service provider to meet their business requirements. Second, negative perception of the performance and thus the value of internal ICT resources. This is compounded by the lack of an integrated ICT Transformation and planning processes.

<u>Core Issue # 3:</u> Lack of GoJ-wide ICT governance framework that would enable the prioritization of corporate ICT investments. Until Cabinet decided to approve the new ICT Governance Framework on January 25th, 2016, this was a major hurdle for the effective deployment and management of ICT in the GoJ. The approval by Cabinet is just the first step because the framework must now be institutionalized and operationalized so that it becomes the *de facto* means to assess and proceed with GoJ core, shared/common and important MDA specific priorities in ICT.

<u>Core Issue #4:</u> There is no formal system of incentives to encourage the cooperative use of ICT within the GoJ. Currently, decisions for ICT initiatives are predominantly made based on MDAs internal efficiency measures but do not translate well into overall impact on the national priorities and outcomes.

<u>Core Issue 5:</u> There is a lack of alignment of the ICT service delivery model to both Corporate (GoJ) and MDA business needs. The GoJ lacks a comprehensive corporate-wide ICT process model that would provide the framework for selective ICT process improvements. The creation of the PPM Committee should assist in pursuing this issue.

<u>Core Issue #6:</u> There is a lack of performance measurement for the ICT function in the GoJ. This is obvious and evident and was magnified significantly during the ICT Transformation Process when data and information requested to measure performance were simply not available.

<u>Core Issue #7:</u> The ICT human resource model is not well aligned with the ICT business model. Although significant effort has been made to retain and develop ICT staff (constrained by the above issues), there is no evidence of an ICT competency framework that maps out the required competencies of ICT staff by category (e.g., technology architect, business architect, network support specialist) to existing skill set and subsequent development plans to meet GoJ short and long term needs.

Recommendations

This section outlines the key recommendations and strategies to address the aforementioned core issues and to ensure that the ICT team is prepared to support the business needs of the GoJ as it enters the third decade of the new millennium. The approximate timing for initiating the implementation of these recommendations is also indicated. For clarity, **Immediate** implies soon after Cabinet decision, **short term** implies 1 to 2 year horizon while **long term** implies 3 to 5 year horizon. The timing clearly reflects as well the **priorities** for action.

The Transformation Road Map to the "To Be" State

It is essential that the transformation road map developed in this report be a living document that will be reviewed continuously as decisions are implemented and as more work is done on the ICT Transformation Process through various consulting assignments described elsewhere in the Blueprint Report.

Recommendation #1: That the GoJ use this Blueprint road map as a reference document for the purpose of aligning MDAs operational and strategic ICT plans and to update it on a regular basis. **Timing**: Ongoing.

Institutionalizing the ICT Governance Framework

Following Cabinet approval of the ICT Governance Framework on Jan 25, 2016, it is important to look at the ramifications of the governance structure and detail how individual projects would progress both within individual MDA's as well as among numerous MDA's and their interaction with the Programme Portfolio Management (PPM) Committee and the ICT Council. Furthermore, **it is** essential that the incoming CIO participate on an as needed basis on Permanent Secretaries Board meetings whenever there is any item that has ICT implication and / or to report on major developments from the ICT Council. More often than not, many items addressed by the Permanent Secretaries Board would have ICT implications and they would benefit from the presence of the CIO in their meetings. The incoming CIO could also play an important role in developing annual capital and recurrent budgets and defining GoJ priorities for ICT.

The ICT Council and the PPM Committee should urge the MDAs to endorse a best practices standardized project delivery structure in accordance with the ICT governance framework to be used for GoJ projects and initiatives lasting 90 days or more and /or having a value in excess of J \$10 Million.

In addition, the ICT Governance Framework should deal with the 12 priority initiatives for the GoJ that were arrived at during the MDA engagement process. The ICT Council will be urged to support these priorities. It is essential for the GoJ to recognize that five of these initiatives form a solid **foundation**

upon which rests the seven core services provided by GoJ to its citizens, businesses and visitors. Focusing on these priority initiatives will provide cost avoidance, corporate standardization, improved ICT support, and better reporting to the ICT Council, the Permanent Secretaries' Board and Cabinet on GoJ priorities and initiatives.

<u>Recommendation #2:</u> Delineate operational relationship of MDA projects to the approved ICT Governance Framework for Core, Shared and Local initiatives and specifically develop an *intake process* for delineating this relationship. **Timing**: Immediate.

Recommendation #3: That the CIO Jamaica, as Chair of the ICT Council, be a non-voting invited member of the PS Board. **Timing**: Short Term.

ICT Organization and ICT Human Resources

The formation of the proposed new ICT organization would be a multi-phased process. The first phase involves the consolidation of eGovJa and the Office of the CIO into an **authority** headed by the Corporate CIO of GoJ and reporting to MSET. This first phase will minimize disruption at the departure of the current CIO. A process to retain a new CIO is already underway. It should be delinated that the notion of a *Corporate* CIO for the new Authority would be needed to distinguish the position from other CIO title positions in the GoJ. The Service Delivery Model proposed in the Blueprint Report has gone only as far as detailing the need for *three centralized components* of ICT services: the first dealing with "ICT Security", the second with "ICT Infrastructure", and the third with innovation. Three executives will head the centralized parts of the proposed ICT Authority: a Chief Security Officer CSO, a Chief Technology Officer CTO who will oversee the ICT infrastructure and a Chief Management Officer CMO who will oversee the program management function through innovation. The *Clusters component* of the Service Delivery Model will deal with serving the MDAs through a set of ICT organizational clusters headed by Cluster Executives who will transform these clusters to become centres of ICT expertise and centres of excellence.

The incoming CIO must review the distribution of the ICT Resources and come up with an organization structure that will reflect the transformation and the integration principles. Integration is the overriding principle for the new ICT organization's design. Integration does not necessarily mean physical integration, it can indeed mean virtual connection, i.e. "centrally managed, physically distributed.". Another principle of the new ICT Authority will be to increase staff with the appropriate skill sets in the clusters to provide additional resources (particularly in security) to enable MDAs to better perform their functions innovatively and consistently. On the other hand, there are certain needs to minimize using ICT staff resources to do software development work, and to outsource some of the work, to entities outside the government.

To ensure the continuity of the ICT transformation process, it is highly advisable to immediately create an ICT Technology Transformation Unit (TTU) reporting directly to the incoming CIO that will include staff who have already participated in the process. This Unit will also oversee the IDB funded consultancies

contemplated in the ICT Transformation Programme and for which terms of references have already been developed.

<u>Recommendation #4:</u> Approve the formation of the new ICT Authority reporting to the CIO in accordance with the proposed organizational structure in the Blueprint Report and initiate a comprehensive organizational review consultancy to detail the structure. **Timing**: Immediate.

Recommendation #5: Approve the formation of an ICT Transformation Unit in the new ICT Authority with responsibility for continuing the transformation road map through IDB funded consultancies. **Timing:** Immediate.

<u>Recommendation #6:</u> Review and assess the scope of ICT in both the new ICT Authority and in the MDAs using the Service Delivery Model described in the proposed organizational structure. **Timing**: Short Term.

Recommendation #7: Review annually the five-year business action plan provided as an agenda for transformation and change in the GoJ. This would be an evergreen plan and subject to continuous update. **Timing:** Ongoing.

Cyber Security

It is essential that special attention be given to the importance of cyber security for the daily operations of the GoJ. The CIRT (Cyber Incident Response Team) was created for this purpose to help the rather fragmented cyber security functions and the organisation as a whole. Clearly, this important function requires an authoritative control and for that reason the organisational structure included a Chief Security Officer CSO as noted above.

<u>Recommendation #8:</u> That the cyber security function including CIRT be brought under the direct responsibility of the Chief Security Officer in the new ICT Authority. **Timing**: Short Term.

Funding the New ICT Authority

The GoJ must recognize that the ICT function comprises two specific components, namely the *staff* component, and the *infrastructure* component, which are funded through subvention. There are, of course, other models for funding the infrastructure. The recommendation below would eliminate the need and requirement for the current eGovJa entity (and the future ICT Authority) to seek funding arrangements and relationships with the MDAs as a prerequisite for recurrent engagement and collaboration. This is is certainly not a best practice and also not the best model for funding ICT. The CIO Jamaica believes that ICT funding models similar to other developed countries must be applied to the GoJ if ICT is to play its foundation and enabling role.

Recommendation #9: That ICT be considered a fundamental service for the GoJ that will be fully funded in recurrent budgets to cover both staff and infrastructure through subvention subject to fiscal constraints

and affordable service levels. Furthermore, that all maintenance and support costs be centrally managed by the new ICT Authority. **Timing**: Short Term.

ICT Support Process

<u>Recommendation #10:</u> Augment the Programme Portfolio Management Committee by having a centralized Program and Project Management Office as part of the Innovation Division of the ICTAuthority to provide permanent technical and professional support. **Timing:** Short Term.

Recommendation #11: Create Service Level Agreements (SLAs) with MDAs with support timeframes and communicate these along with appropriate on-call and escalation procedures throughout the GoJ. **Timing:** Long Term.

ICT Performance Management

Upon its inception, the new ICT Authority must communicate its mission, goal and objectives for the ICT function within the GoJ. It must also develop a performance management framework for ICT to track its progress vs. its stated objectives. As an outcome of the Organizational Review consultancy, it is anticipated that an ICT performance management framework will be created to ensure linkages to MDA business objectives from executive ICT business units to operational ICT business units down to individual ICT staff.

The following recommendations are made with respect to ICT performance management:

Recommendation #12: Confirm, communicate and validate mission, goals and objectives of the new ICT Authority with managers and staff from within ICT and from MDAs. **Timing**: Short Term.

<u>Recommendation #13:</u> Develop an ICT performance management and measurement framework describing roles and responsibilities aligned with the corporate GoJ performance measurement framework. **Timing:** Long Term.

Information Management

Currently, there is no integrated approach for the information management as a GoJ resource although there are efforts to develop records management information systems, processes and policies.

Recommendation #14: The new ICT Authority work with the Cabinet Office and other GoJ units to ensure that the information management function would be guided by the following principles:

- aligned with functional MDA business requirements;
- be flexible, accessible and easy to use;
- use consistent data and reporting standards;
- include information about the structure of existing data;
- be implemented by multidisciplinary teams working on small, well-focused projects; and include structured and unstructured information. **Timing**: Long Term.

Recommendation #15: Review current information management reporting (referred to as business intelligence in ICT industry) and develop standards for future projects, especially in implementation, team composition, major procedural steps and documentation. **Timing:** Long Term.

E-Government Framework

Currently, many e-government initiatives in the GoJ are focused on "web publishing," i.e., the delivery of information through Internet technologies to external and internal stakeholders. There is no GoJ employee corporate intranet, a fundamental and important communications vehicle that must be used throughout the GoJ. Furthermore, each agency wants to build their own portal for their specific purposes. But these must be channelled to develop ONE GoJ portal while maintaining an individual presence. Such portal must be business case driven and include prioritized portal applications, an execution time table, costs and ongoing support considerations. Both intranet and internet portals are in scope for this action plan.

Recommendation #16: Develop an e-government action plan targeted to launch a GoJ portal as a high priority to enhance service delivery to the public and to business partners. **Timing**: Immediate.

Enterprise Content Management

The GoJ currently maintains multiple data bases with multiple formats for both internal stakeholders (e.g. employees) and external ones (e.g. businesses, suppliers, partners, citizens). Hence, the following recommendation applies:

Recommendation #17: Assess potential requirements and feasibility of data base content standardization to minimize the proliferation of various content management systems in the MDAs. **Timing**: Short Term.

Shared ICT Services

Last, but certainly not least, there is no doubt that the fragmentation of the operational functions of the GoJ to hundreds of agencies and departments and the associated small and large ICT shops in each of these have created hundreds of islands of technology. The GoJ needs to strengthen and to improve its internal operations by delivering a common approach for key internal administrative and ICT services in the MDAs. This includes simplifying business processes, re-using information to avoid duplicate collection, and standardizing common applications, to name a few. If there ever was an area where the GoJ needs to act it is in shared services, and especially ICT shared services.

Recommendation #18: Strengthen the sharing of data, information, standards, staffing, ICT infrastructure (with **GovNet** as the highest priority) and funding resources across the GoJ by promoting the concept of Shared ICT Services in policy *and also* requiring any MDA that will not subscribe to provide a comprehensive business case why it needs to retain autonomous control on these resources. **Timing:** Short Term.

Recommendation #19: That the rate of compensation and salaries of ICT staff be reviewed in terms of pay equity, fairness, competition and to reduce attrition and improve retention. **Timing:** Short Term.

The Action Plan

The Government of Jamaica is blessed with a number of visionary and strategic ICT documents that were produced over the past 10 to 15 years. Many of these documents did not go much beyond defining the strategic directions and the reasons why these directions should be pursued. On the other hand, prescriptive description of how these strategic directions would be put in place was generally omitted. In other words, past efforts have not gone as far as proposing specific actions and how to implement them.

In the Blueprint Report, five action streams are proposed that could fulfil the requirements of the ICT transformation imperative and provide clear directions to continue the journey.

Action Stream 1 ICT Governance

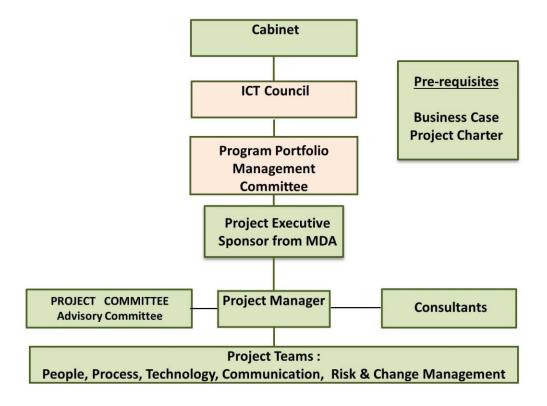
The absence of a clear ICT Governance Framework in the GoJ has resulted in a variegated approach to the government's ICT strategy, becoming a deterrent to the intended cohesive and business oriented approach to ICT acquisition and investment.

A proposal for a simple ICT Governance Reporting Structure, designed to be easy to explain to decision makers notwithstanding the complexity of GOJ operations, was formulated, discussed extensively within the Office of the CIO and presented at numerous meetings. In all instances the reception was favourable. A submission on was placed in front of the Cabinet, and was subsequently approved on Jan 25, 2016.

The Framework calls for the creation of two entities as shown below: an ICT Council which, once created, will in turn create the second entity, the Program Portfolio Management (PPM) Committee. The ICT Council will have a broad mandate to oversee the entire ICT function of the GOJ and in particular will be responsible for, among other things, reviewing and assessing all significant ICT investments, both existing and future, for strategic alignment with the GOJ's policies and goals, as well as, the availability of adequate human and financial resources; leadership support for proposed projects; the readiness of organization(s) to deploy and/or adopt the new technology; and the proposed change management plan.

The primary role of the PPM Committee will include, ensuring that a coordinated and coherent approach exists to the acquisition and deployment of ICT assets across the GOJ; establishing criteria for ICT project reporting by MDAs; and receiving presentations and project details from ICT project owners/sponsors or managers in support of proposed ICT projects and investment. This would be accomplished through an effective project intake process with the aid of a consultant retained for this purpose.

The approved ICT Governance Framework is shown below.



Action Stream 2 The New ICT Authority

MDAs currently have their own ICT budgets and ICT units which work in autonomy to deliver services in isolation. As each MDA effects its own ICT procurements, the end result is often duplication of acquisition of ICT solutions, non-integrated or inadequate solutions being put in place, costly

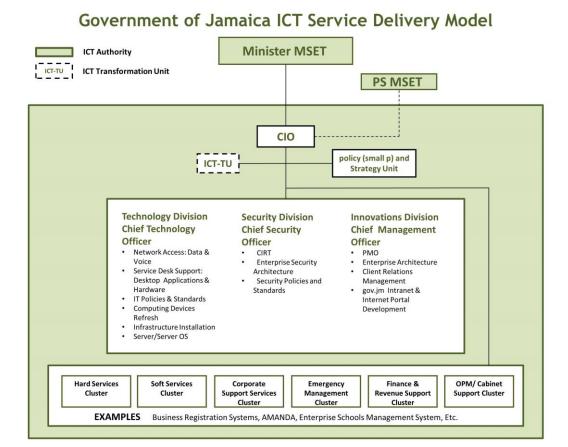
procurements, slow response times and inefficiency within GOJ ICT. Further, the variable amounts of budget funding available to MDAs causes ICT movements to progress within them at different paces, resulting in some entities having more modern ICT capabilities, while others lag behind severely, creating a disparity in the MDAs' delivery capability. The fragmented, costly and inefficient manner in which implementation of solutions is carried out largely results from there not being an overarching presence and authoritative voice of ICT across all of GOJ; as such, there exists no structure within which a comprehensive and cohesive approach to solution acquisition, utilizing economies of scale, can be applied.

The total decentralized and siloed approach is one that is seen globally as inefficient, and many countries have made the move to a more centralized approach to providing ICT services primarily because efficiency is seen as an indicator of competitiveness.

It is proposed that a new structure for ICT within the GOJ be implemented. The adoption of a new ICT service delivery model along with the new ICT governance structure, the pursuit of a new funding model and the cultural changes recommended will form the new Transformation agenda for ICT for the GOJ.

The requirement for the MDAs to work with the newly established ICT Organization will necessitate establishing a customer support model for all ICT services. Service Level Agreements (SLAs) will have to be created between the MDAs and the ICT Organization.

A graphical representation of the concept for the new ICT Authority and its service delivery model is shown below.



Action Stream 3 Priority Initiatives

A fundamental outcome of the MDAs engagement process was the development of a priority list of initiatives for the Government of Jamaica. A comprehensive process starting with hundreds of projects yielded a set of initiatives which in turn were subjected to voting during the MDA's engagement process that resulted in twelve recommended initiatives as shown below. Two initiatives in particular we considered the highest priority: ICT Infrastructure (*GovNet*) to reduce costs and *the Portal* to improve GoJ ranking.

12 GoJ ICT Transformation Initiatives Security (National & Local)/Cybercrime **Education Management Human Resource Management** Business Financial Management Initiatives Health & Case Management Justice Management Public Safety & Emergency Management **Portal** Foundation Disaster Recovery & Business Continuity Plan Initiatives **Enterprise Architecture ICT** Infrastructure Staff Training and Development

Action Stream 4 Funding Model

A new funding model should be developed in conjunction with the new ICT Organization; essential to this funding model is the recognition that ICT is a **mandatory requirement** for the Government of Jamaica. As such, it is <u>not appropriate</u> that funding be on an *ad hoc* basis, or provided *only where funds are made available to accomplish a specified project* even though this project may not be on the top priority list for the GOJ. Three *funding models* for ICT in the GOJ were identified and evaluated as described in point format below.

1. Decentralized

- This is the model that is currently applied (as is now)
- With this model, there are sometimes *multiple acquisitions of same products* and *no economies of scale*; this is proving to be unsustainable and expensive.

2. Cost Allocation and Recovery

- This model is based on a cost recovery mechanism recognising the value of the service.
- It is very difficult to implement as stakeholders tend to be parochial in their interests, resulting in disagreements.

3. Centralized

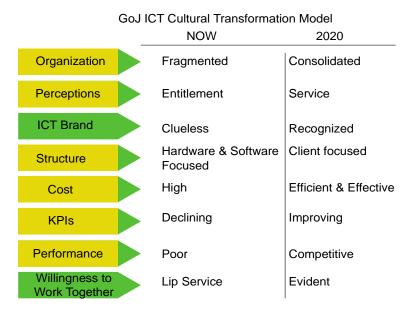
- This is *recommended* funding model.
- This model supports the ICT Governance Framework, and there is a greater likelihood of more
 efficient and sustained maintenance of Infrastructure; there would be whole-of-life (full life-the
 ycle) management of assets.
- Less costly operations leveraging economies of scale.
- More objective approach to decision making re spend and promoting realignment with investment prioritization where necessary.
- Options such as Infrastructure and Software as a service could be pursued.
- The model centralizes support of maintenance budgets in the new ICT Authority.

Action Stream 5 ICT Cultural Transformation

There are three possible options for ICT transformation in the GoJ. The first is through a breakthrough. Somehow, by some "discovery," ICT takes a quantum leap. The second is through incremental modifications and adjustment of the policies, procedures and initiatives of the GoJ, which is the main purpose of the Blueprint Report. The third is through cultural transformation, a difficult but rewarding task for any nation.

The Blueprint Report puts a specific emphasis on the need for Cultural Transformation. It goes further by proposing an illustrative Model for ICT Cultural Transformation to be used as a guideline to indicate what elements need to be transformed.

The Model proposed is self-explanatory and it is shown graphically below.



Critical Success Factors

In a few words, the critical factors to ensure success for the Road Map and the Action Plan include:

- Leadership support at the political level
- PS Board support and commitment
- Funding as proposed in this report
- Effective implementation of the ICT Governance Framework
- Communication, Communication
- Change Management and Change Leadership
- Effective Vendor relations
- Rationalization of use of existing ICT resources
- Adoption of best practices
- Leveraging collaboration between ICT and MDAs
- Creating a Culture of innovation inside government and
- Engagement of the wider ICT Community and Businesses