

## 15. DIGITAL GOVERNMENT TRANSFORMATION

- 15.1 Throughout its successive Reports, the Bureau has been advocating for an optimum harnessing of Information and Communication Technology (ICT) in modern civil administration, which is considered as one of the key strategies for successful public sector reforms. Further to rapid advances in the dynamic field of ICT coupled with the strong commitment of Government to give a major boost to this sector, we have subsequently shifted our focus on provisions that could ultimately contribute in achieving the principles of e-Government in the public sector.
- 15.2 Until recently, e-Government constituted mostly of the automation and computerisation of processes of Government agencies, which encompass modernising legacy systems and increasing the number of services available online. Government adopted the e-Government Strategy 2013–2017 formulated by the Central Informatics Bureau to re-engineer the e-Government agenda and to rethink delivery of its services and operations where citizens are given pride of place. Policies and projects in areas of data sharing (InfoHighway), open source (Strategy and Policy), open data (National Open Data Portal), e-Participation (Citizen Support Portal), online payment (e-Payment and SMS Gateway), digital signatures, document management system, e-Procurement, mobile apps (Smart Mobile Apps Platform), project framework (Project Management Manual for ICT Projects), among many others, have reformed how Government transacts with its stakeholders while improving international digital indices.
- 15.3 In our last Report, we stressed on the importance of digitalisation, given that the adoption of new digital technologies brings a significant change in the way Government operates and interacts with its stakeholders. This digital transformation is expected to enhance public sector effectiveness through an improved service delivery, cost minimisation and optimal use of limited resources. In a bid to enable Mauritius to adapt to this digital disruption and anticipate how expectations and demands from digitally engaged citizens would likely grow in the future, Government adopted the Digital Government Transformation Strategy (DGTS) 2018 -2022, formulated by the Central Informatics Bureau. The DGTS aims, among others, at facilitating the transition from e-Government to the next level of digital Government and advocates a greater use of digital technologies. It is equally worth highlighting that the various e-Government strategies adopted played a major role in the winning of international as well as national awards. Alongside, Mauritius has been consolidated as the leader in the African region in digital Government and fourth among Small Island Development States in the United Nations e-Government Development Index 2020 Report.
- 15.4 The advent of the COVID-19 Pandemic has called for an accelerated digital transformation as it exacerbated the need and urgency for Government agencies to shift their daily operations to a smarter model which embraces digital technologies in order to ensure resilience, operational continuity as well as uninterrupted service delivery. The value of contactless digital channels, mobile payment, self-service,

remotely managed operations, online communication, learning and collaboration has become immediately obvious. In this context, a few schemes/initiatives were elaborated/implemented namely: a national state-of-the-art Laboratory Information Management System (LIMS) at the Central Health and SSR International Airport laboratories for better management of COVID-19 tests; an electronic queue management system using interactive digital kiosks "MoRendezVous"; the MoKloud which offers a secure, flexible and easy-to-use platform for sharing, issuance and verification for documents and certificates in digital mode; and MauPass which provides a single, convenient, trusted and secure entry for citizens to access Government services along with that of MauSign which allows citizens to digitally sign documents online.

- 15.5 In addition, the forthcoming Artificial Intelligence (AI)-based Intelligent Virtual Assistant (Chatbot) "MoRoBot" aims at offering a one-stop platform for all customer needs related to information, troubleshooting, and guidance on various Government services thereby transforming the citizen experience. In the new normal, accelerated digitalisation efforts in the machinery of Government will enable the workforce to remain productive, achieve socio-economic targets and as a result sustain Gross Domestic Product (GDP) growth during the crisis. Technologies evolving at disruptive pace such as AI, Cloud computing, Blockchain, among others, should not only be understood, but harnessed for a more efficient Public Service.
- 15.6 In the context of this review, we did not receive any submission from Unions/Federations on e-Government issues. The Ministry of Public Service, Administrative and Institutional Reforms (MPSAIR) on its side requested the Bureau, among others, to: review the institutional arrangements of Government Bodies responsible to advance the e-Government agenda as a matter of priority; ensure top-level commitment of public bodies in their digital transformation agenda; recommend a Digital Transformation Index as a key performance indicator in each public body; ensure the re-engineering of business processes with clear documentation prior to embarking in any e-Government project; make mandatory the adoption of "horizontal" digital transformation solutions, such as Electronic Document Management System; and ensure that Government Bodies embark on Sandbox Procurement Initiatives for Innovative Technology.
- 15.7 Additional proposals made by the MPSAIR on the desired Digital Transformation comprise, *interalia*,: to implement a holistic and comprehensive Digital Transformation Strategy with focus on the citizen as well as on smart processes, re-engineering, connectedness and promotion of a "Whole-of-Government" approach; to revamp the institutions falling under the Ministry of Information Technology, Communication and Innovation (MITCI) with a view to implementing an impactful Digital Transformation Strategy in Government; making online systems (e-Services) mandatory; and Ministries and Departments should have a fully functional Digital Transformation department with the necessary resources, to be headed by a Chief Information Officer, thereby addressing the problem of ownership and accountability for e-Government projects. The MPSAIR also commented on the remarks made by the National Audit Office in its past Reports about the adoption of

certain e-Government projects which encountered limited success owing to insufficient planning, cost overruns, projects not delivered on time and lack of ownership issues.

- 15.8 In the light of the various proposals made by the MPSAIR, we observed that many of the issues have already been catered for in the DGTS or other strategic plans elaborated by the MITCI. As regards the proposed position of Chief Information Officer to spearhead this digital transformation at the level of Ministries and Departments, such a concept was introduced earlier and did not prove to be workable in practice. Moreover, certain issues do not fall within the ambit of the Bureau and should be dealt with by the relevant authorities, while a few others have repeatedly been highlighted in our past Reports.
- 15.9 The Bureau has equally been apprised of the various impediments being encountered by the different stakeholders in bringing the shift from e-Government to a digitalised Government. The main ones comprise:
- (i) shortage of ICT staff, coupled with inadequate funds thereby leading to delays in conceiving and implementing projects;
  - (ii) failure from top management to take responsibility for change management or engage in project leadership/participate actively in digital projects;
  - (iii) lack of authority from MITCI staff, who are expected to act as change agents;
  - (iv) non-provision of relevant training to IT staff on new technologies such as AI, Blockchain, IoT, Analytics, Digital Marketing ultimately resulting in a slow movement towards the conception and implementation of projects employing these emerging technologies, and
  - (v) no proper mechanism set up at organisational level to ensure follow up or to take ownership of ICT projects.
- 15.10 It has also been reported that in Parastatal Bodies/State-Owned Companies and Local Authorities, the importance of building an appropriate digital workforce is highly and rightly recognised. However, notwithstanding the abovementioned difficulties being encountered, a number of e-Government initiatives geared towards citizen convenience, Government efficiency and business facilitation, have been completed and successfully implemented in the Civil Service, while many others are in the pipeline or to be completed.
- 15.11 The Bureau took on board the views of all stakeholders and the fact that Governments across the world have ushered in an age of digital transformation, triggered by a fast change in technology, a more vocal society and an acceleration in digitalisation brought about by the COVID-19 Pandemic. We also bore in mind that investment in ICT improves economic competitiveness, quality of life, business potential, public service delivery and productivity, which resultantly may generate a higher level of GDP. Against this backdrop, we consider that the public sector has no other choice than to move from a successful e-Government to a digitalised

Government. In this regard, we are providing for a set of guidelines which may be adopted by the MITCI in spearheading the digital transformation of Government, while revisiting the provision regarding the Steering Committee responsible to bring the desired change. We are additionally maintaining a few recommendations made in our last Report.

### **Recommendation 1**

**15.12 We recommend that the Ministry of Information Technology, Communication and Innovation, in collaboration with the MPSAIR, should consider the following guidelines for a proper hauling of the digital transformation of Government:**

- (i) complement its digital government strategy action plan with an appropriate impact assessment instrument;**
- (ii) prepare and implement a clear governance framework for digital Government;**
- (iii) continue to invest in the development of important key digital enablers;**
- (iv) establish a Digital Library for more efficiency with the collaboration of Management of Ministries/Departments/Organisations thereby enabling public sector employees to access relevant information and databases as well as both local and international e-libraries depending on their specific requirements;**
- (v) promote and enforce the adoption of digital standards and guidelines;**
- (vi) develop an overarching policy to support the development of a data-driven public sector; and**
- (vii) develop appropriate regulatory and ethical frameworks to assist organisations in the usage of AI in a responsible manner.**

**15.13 We also recommend that the Ministry of Information Technology, Communication and Innovation should:**

- (i) carry out a Human Resource Planning exercise to identify and address issues of shortage of staff and develop a comprehensive human resource development plan to cater for skills upliftment of its technical staff for more efficiency to prevail; and**
- (ii) ensure a prompt rethink of its institutional set up/reorganisation exercise, which is expected to bring efficiency gains through a seamless integration of activities in the realisation of digital government projects and their operations.**

## Recommendation 2

- 15.14 We additionally recommend that the Ministry of Public Service, Administrative and Institutional Reforms with the collaboration of the Ministry of Information Technology, Communication and Innovation, should ensure the adoption of horizontal applications in all Ministries/Departments/ Organisations in the Public Sector.**

### Enabling the Digital Transformation of Government

- 15.15 In our last Report, we provided for the setting up of a dedicated E-Government and Computerisation Steering Committee as a mechanism to spearhead e-Government initiatives and foster an e-Culture in the whole public sector. In the context of this review exercise, we have been informed that the Committee was effectively established and later rebranded as the Digital Government Computerisation Committee, to provide a platform for following up on digitalisation projects in Ministries/Departments and come up with appropriate policies for ICTs.
- 15.16 We have also been apprised that this mechanism proved to be more than 60% effective given the various problems encountered, as mentioned earlier and the non-obtention of the full collaboration of the parties concerned. Against this backdrop, coupled with Government's emphasis on digital transformation, as enunciated in its programme and last two budget speeches, we view that such a mechanism should continue to exist in order to give a further boost to the digitalisation initiatives in Government and allow a greater take up of digital government projects.
- 15.17 Moreover, as per existing provision, the Digital Government Computerisation Committee is required to submit a progress report to the Steering Committee on Public Sector Reforms. We have been apprised that the latter has been replaced by the National Planning and Results Committee, under the Chairmanship of the Secretary for Public Service. In this regard, we are revisiting the existing provision, the moreso the National Planning and Results Committee is mandated, among others, to oversee and monitor the implementation of the Public Sector Business Transformation Strategy wherein digital transformation of Government ranks high on the agenda.
- 15.18 In addition, given the importance of harnessing the potentials of AI, in terms of innovations that have a deep transformative effect on public service delivery and betterment of the quality of life of citizens, we are providing for the MITCI and the Digital Government Computerisation Committee to look into this issue for its prompt spearheading and adoption in the Public Sector.

## Recommendation 3

- 15.19 We recommend that the Digital Government Computerisation Committee, set up at the level of the Ministry of Information Technology, Communication and Innovation, under the Chairmanship of the Chief Technical Officer and comprising representatives of the relevant divisions/departments of the Ministry as well as the Ministry of Public Service, Administrative and**

**Institutional Reforms, Prime Minister's Office and Ministry of Finance, Economic Planning and Development, among others, should:**

- (i) continue to formulate relevant policies that will bring about this desired digital transformation in each Ministry/Department/Organisation;**
- (ii) conduct a study in Public Sector Organisations to identify areas where actual usage of AI can improve public services, policy making and internal operations; and**
- (iii) submit a progress report on a bi-annual basis to the National Planning and Results Committee.**

## **Training**

15.20 The Bureau has laid much emphasis in this Report also on the continual need for training, which is a *sine qua non*, particularly in the field of ICT, given its rapid pace of evolution/development. We additionally view that officers of the MITCI need to get the relevant training in the new spheres of ICT as they are primarily responsible to advise, write technical specifications, monitor project implementation on these technologies and understand as well as implement new systems/concepts. We further believe that Management should ensure that their employees should be given the proper training in IT. We are recommending in that direction.

## **Recommendation 4**

**15.21 We recommend that the Ministry of Information Technology, Communication and Innovation in collaboration with relevant institutions should make the necessary arrangements for the continual training of its IT personnel so that they are properly equipped with the relevant knowledge and skills to cope with the recent advancements/new technologies in the field of ICT, such as Artificial Intelligence, Blockchain, Internet of Things (IoT), Analytics, Digital Marketing, among others.**

**15.22 We further recommend that the MPSAIR, in collaboration with relevant stakeholders and Management of Ministries/Departments/Organisations, should:**

- (i) continue to provide training in IT to their employees, wherever and whenever required to enable an effective use of IT systems at the workplace; and**
- (ii) identify and arrange for proper training for the public sector employees to ensure a smooth transition towards AI.**

## **Optimal Use of Infrastructural Technologies**

15.23 With the shift from e-Government to a digitalised Government, coupled with the impact of the pandemic and its resulting lockdowns, the effective use of ICTs for official use whether at the workplace or from home, has proved to be more than

ever imperative. In this regard, we consider that the appropriate ICT equipment, tools and facilities should be put at the disposal of employees.

**Recommendation 5**

**15.24 We recommend that Management of Ministries/Departments/Organisations, in collaboration with the Ministry of Information Technology, Communication and Innovation should:**

- (i) provide the necessary updated ICT equipment/upgraded systems and applications, as well as video conferencing facilities to their staff, based on organisational needs and feasibility, to enable a smooth running of activities;**
- (ii) ensure an optimum and judicious use of the abovementioned equipment/facilities; and**
- (iii) continue to provide IT equipment, along with access to the internet to employees operating at lower levels, wherever there is need, based on operational requirements.**

\*\*\*\*\*