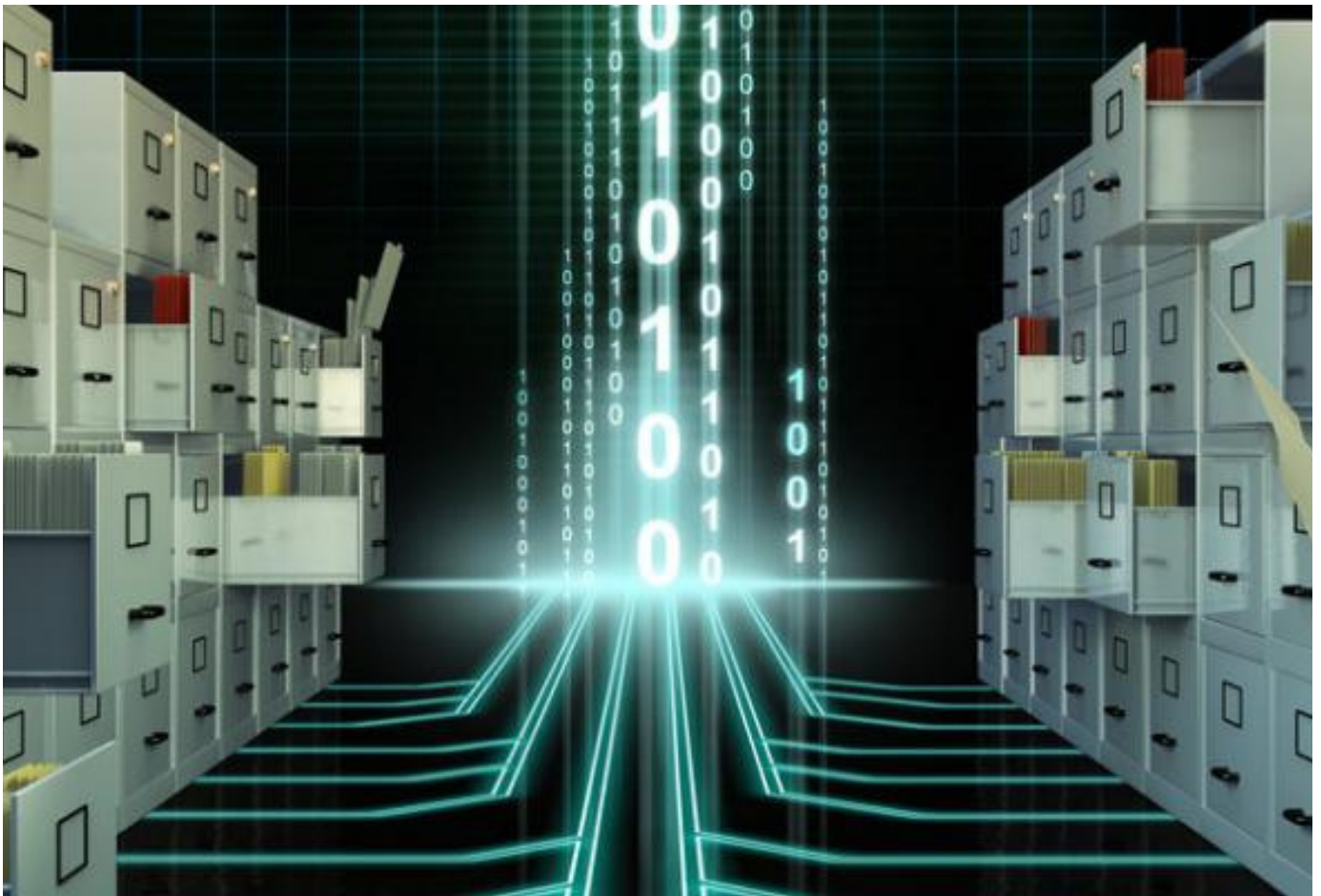


QUARTER 1 – DRAFT PROGRESS REPORT OF  
"CROSS GOVERNMENT DIGITAL DOCUMENT  
MANAGEMENT SYSTEM (DDMS)"

**ASSISTING THE ICTA – M&E UNIT TO  
CARRY OUT FIELD BASED MONITORING AND  
EVALUATION ACTIVITIES**

ICTA/GOSL/CON/QCBS/2019/N02



**Skills International Pvt Ltd**

No. 18, Poorwarama Road, Nugegoda, Sri Lanka.

Tel: 94 11 285 6385, 471 2555

Fax: 94 11 462 8548

Email: [info@skillsinternational.lk](mailto:info@skillsinternational.lk)

Web: [www.skillsinternational.lk](http://www.skillsinternational.lk)

# **Assessment of the Cross Government Digital Document Management System (DDMS)**

Assist the ICTA Monitoring and Evaluation Unit to carry out  
Field Based Monitoring & Evaluation Activities  
(ICTA/GOSL/CON/QCBS/2019/N02)

## **Skills International (Pvt) Ltd**

No 18, Poorwarama Road, Nugegoda, Sri Lanka.  
Tel: 94 11 474 0334, 471255, 285 3531, 285 6385  
Fax: 94 11 462 8548  
Email: [info@skillsinternational.lk](mailto:info@skillsinternational.lk)  
Web: [www.skills.lk](http://www.skills.lk)

October 2020



## Table of Contents

Executive summary.....	1
Introduction .....	3
Scope of the Study .....	4
1.0 Study Methodology.....	5
2.0 Limitations and Assumption of the study.....	7
3.0 Analysis and Major Findings .....	8
3.1 Specific problems to be addressed by the project.....	8
3.2 Proposed solutions to the identified problems .....	8
3.3 Expected Project outputs and outcomes .....	9
3.4 Project Implementation .....	9
3.5. Type of documents selected for Digital Document Management System.....	10
3.6 Scanning and uploading of Personal documents .....	11
3.7 Adequacy of the feasibility carried out before the selection of organisations and installing the systems.....	12
3.8 Capacity of the staff to undertake this additional workload.....	12
3.9 Awareness among the participating organisations .....	13
3.10 Training and Change management.....	13
3.11 Infrastructure constraints to remove confidential documents for scanning.....	13
3.12 Attitudes and Perceptions of the staff.....	14
3.13 Internal leadership given by the top management to implement the project.....	14
3.14 Lack of IT Administrative support to non- IT staff .....	15
3.15 Verification of uploaded Documents .....	15
3.16 Administrative disruptions due to elections and COVID 19 pandemic situation.....	15
3.17 Human resource availability at ICTA for project implementation and monitoring.....	15
3.18 Support services by Vendor.....	16
3.19 Monitoring and Evaluation system .....	16
3.20 Project ownership.....	16
4.0 Conclusions.....	17
5.0 Recommendations .....	18
6.0 Annexures.....	19

## Tables and Figures

Table 1: List of Government Organizations under Phase 1 and number of staff interviewed- .....	6
Table 2: Type of documents selected for Digital Document Management System by the organizations .....	10

## Executive summary

The purpose of this study is to assess the current status of the first phase of the Cross Government Digital Document Management System (DDMS) implemented in 20 government organizations. Information was collected using mix method of both qualitative quantitative techniques. Study has been captured the view point of three main stakeholders namely Implementing Government Organizations, ICTA project team and service provider (vender) of the project and triangulate for validation and to build credible evidences.

Hence this provides credible and useful information that enables the incorporation of recommendations and lessons learned into the decision-making process of all key stakeholders. Main findings of the study are

1. Non implementation of ‘Scanning and Digitizing of existing Government Documents” project
2. Lack of human resource availability at ICTA for project implementation and monitoring
3. No feasibility Studies done to understand implementing constraints at organizational level
4. Training, awareness creation and change management activities not implemented as planned.
5. Lack of a proper internal monitoring system in the implementing organizations.
6. Lack of suitable Infrastructure constraints to remove confidential documents for scanning
7. Lack of IT administrative support to non- IT staff
8. Inability of the staff to do the scanning and uploading of personal documents with their current workload
9. Only 17 organizations have completed OAT, three organizations have requested for additional requirements

Above finding are discussed in detail in the finding section. Future it is evident that completion of scanning and digitizing is a pre- requisite to achieve the outcomes and overall objectives of the DDMS project. According to the findings, its only 2% of the documents are scanned, whereas only 1% of the documents are currently uploaded in the system.

However, the organisations are at different levels of implementation and the project itself is in its ‘infant’ stage, the conclusions may not be applicable to all the organisations equally. Some important conclusions are:

1. Non-implementation of the second project, Scanning and Digitizing of Government Documents, has severely impacted the implementation progress of the project especially in organization where human and infrastructure resource are limited. Hence it is recommended to Implementation of the second project, so that uploading could be completed and proper evaluation of the system performance and related outcomes to be studied.
2. A proper feasibility study has not been conducted before implementing the project to understand the availability of required resources such as working space, IT competencies and constraints of individual organisations that can affect the project implementations. It is recommended a feasibility study is undertaken before implementing the second round.
3. Scanning and uploading of documents in the personal files is an exhausting and time consuming exercise that need dedicated and trained staff. It is not practical in some

organisations to get this done through the existing cadre who are already loaded with work. This problems needs to be addresses in organisations where implementing capacities are weak.

4. Training, awareness building and Change management programmes were important and relevant activities of the project. The results of non-implementation of these vital activities are clearly visible during the implementation of the project. It is recommended that these programmes are undertaken on a priority basis.

5. Sufficient IT skills and additional IT support for these operators to implement the project are important prerequisites for successful implementation of this type of digital transformations. Theses capacities have to be improved in some organisations.

6. ICTA plays a pivotal role in the implementation of the project initiated by them. Lack of human resources for the project implementation and monitoring has immensely contributed for its poor progress. Proper cadre has to be provided based on the actual requirements of the project implementation.

7. There is no internal monitoring or performance management system to record the implementation progress or identify constraints and create shared understanding about the project implementation. It is recommended proper M&E system is established to implement the project successfully.

## Introduction

Information and Communication Technology Agency of Sri Lanka (ICTA) is the apex government institution, responsible for formulating policies and implementing projects towards digital transformation in the country. The Government of Sri Lanka (GoSL) has recognized the critical role that ICT can play in fostering social integration, peace, growth, and poverty reduction. The Government intends to use digital technologies effectively to improve the reach and responsiveness of public services, reduce transaction costs to business, make government more transparent and accountable, and especially address the needs of the poor communities and citizens in geographically isolated regions.

With the objective of fully leveraging the benefit of digital technologies in every sector of the country, ICTA commenced the implementation of many initiative aimed at building required digital infrastructure to provide the benefits of the Information and Communication Technologies to every government organization, citizenry and businesses in the country so that the entire nation could share the digital dividends. Towards this objective, ICTA has commenced number of initiatives to make the government services efficient, effective, convenient, user-friendly, transparent and cost effective.

One of the notable facts within the government sector is the high use of papers and maintenance of paper-based documents for years consuming valuable office space for storage, otherwise could be used effectively for productive use. There are documents such as letters, circulars, budgets, maps and reports which are stored for years as mountains of paper files in these organisations. Most of the government organizations are also faced with maintaining decaying important documents and difficulties of retrieving such documents in an efficient manner. ICTA has received requests from several government organisations to find solutions using ICT strategically to manage these ever increasing paper-based documents. In this regard, ICTA initiated Cross Government Digital Document Management System (DDMS) in 80 key government organisations.

The Cross Government Digital Document Management System consists of two projects, namely:

- 1) Implementation of Cross Government Digital Document Management System
- 2) Scanning and Digitizing of existing Government documents

These two projects were in fact two phases of the same initiative, but considering the technical complexities, it has been decided to take them as two separate projects. By adopting an innovative cloud-based digital document management system these organizations could eliminate the time lost in searching a document and provides better security to those documents. It could also reduce the physical file storage space and facilitate document sharing among multiple users as well. This initiative is expected to provide an efficient, timely, cost effective and secure information management system for these organisations.

Initially the project was planned to implement in 80 paper-intensive government organisations, and the first phase implementation was carried out in 20 locations, more or less as a 'pilot' project. However, due to financial constraints the second project; Scanning and Digitizing of existing Government documents have not been implemented yet. One of the major benefits of this initiative is to provide an efficient, timely, cost effective and secure information management system.

## Scope of the Study

Having completed the first phase of the Cross Government Digital Document Management System in 20 government organisations, ICTA is planning to roll out the second phase of the initiative to other government organizations. Before that, ICTA is keen to determine and validate what intended results had been achieved in the first phase and how and why they were or were not achieved.

This study investigated the implementation process, analysed the results achieved and determined the current status of the project achievements in relation to outputs and outcomes. The study also examined the institutional and staff constraints and other impediments that had contributed to results of Cross Government Digital Document Management System in these 20 government organisations. In this regard the Study focused on the following specific aspects of the project implementation.

- 1) Determine the current status of implementation of Cross Government Digital Document Management System installed in 20 government institutions.
- 2) Understand the viewpoints of implementing organizations in terms of identify the challenges faced during the implementation

## 1.0 Study Methodology

The purpose of the study was to assess progress made by Cross Government Digital Document Management & Internal Workflow System implemented by ICTA for 20 Government institutions (Phase I) and identify the constraints and gaps that need addressed when implementing the second Phase of the project. The implemented system consisted of software and hardware components, digital document management system, internal workflow system, cloud storage, hardware, and required licensing. The solution also comprise of training of staff and continuous support. The project was expected to scan and digitize relevant documents at these government institutions, systematically store to be retrieved for processing and/or future references. These documents will be encrypted and systematically stored in digital form. The solutions are hosted on the Lanka Government Cloud (LGC) which provides Infrastructure as a Service (IaaS) facility for the project.

The study focused on adopting the mixed method approach by combining both quantitative and qualitative methods and using rapid appraisal techniques for data/information gathering through following methods.

1. Review of all relevant documents related to the establishment of Cross Government Digital Document Management system in 20 government organisations.
2. Conducting in-depth one-on-one interviews with key stakeholders.
3. Conducting focus group discussions with users and uploading staff.
4. Direct observation of the operational environment by visiting of the implementing offices.

Table 1 provides the full list of 20 government organisations that were provided with Cross Government Digital Document Management & Internal Workflow System under the Phase 1 of the project. It is observed that 45% organisations were Zonal education offices and 35% were Government Ministries. Since majority of these offices were located closer to Colombo, consultant's original plan was to visit all these sites and gather required information from relevant sources for this assessment.

However, due to the sudden surge of the pandemic situation and ensuing visit restriction imposed by the organisations for outsiders only nine organisations were visited. Wherever possible, most of the other organisations were contacted over the phone to get the basic information regarding the progress of implementation and various issues that affected the implementation process.



*Table 1: List of Government Organizations under Phase 1 and number of staff interviewed-*

	Name of the Organization	Type of Document to be Digitized and Uploaded	Sites Visited and Number of Staff Interviewed	
			FGD	KII
1	Presidential Secretariat	Incoming Mails	Not visited	
2	Ministry of Foreign Affairs	Diplomatic Documents	Not visited	
3	Ministry of Petroleum	Supplier Documents	0	3
4	Ministry of Ports & Shipping	Personnel Documents	4	1
5	Ministry of Skills Development	Personnel Documents	5	1
6	Ministry of Higher Education	New Registrations	12	1
7	Rubber Development Department	Personnel Documents	2	0
8	Ministry of Plantation	Personnel Documents	Not visited	
9	Ministry of Education	Personnel Documents	Not visited	
10	Public Service Commission	Recruitment/Services Requests	Not visited	
11	Zonal Education Office- Bandarawela	Personnel Documents	Not visited	
12	Western Province Education Department	Personnel Documents	2	1
13	Zonal Education Office- Sri Jayawardenapura	Personnel Documents	Not visited	
14	Zonal Education Office-Piliyandala	Personnel Documents	4	1
15	Zonal Education Office-Homagama	Personnel Documents	4	1
16	Zonal Education Office-Gampaha	Personnel Documents	Not visited	
17	Zonal Education Office-Minuwangoda	Personnel Documents	Not visited	
18	Zonal Education Office-Kelaniya	Personnel Documents	Not visited	
19	Zonal Education Office-Colombo	Personnel Documents	5	1
20	Zonal Education Office-Negombo	Personnel Documents	Not visited	
Total no of staff interviewed			38	10

Total number of 48 staff interviewed representing 9 organizations and their views have been captured. Furthermore view point of other two main stakeholders namely, ICTA project team and service provider (vender) of the project have been taken and triangulate for validation and to build credible evidences.

## 2.0 Limitations and Assumption of the study

The study was severely impacted by the sudden surge of pandemic situation in the Western Province of the country, followed by travel restrictions and visitor limitations enforced by the government and individual organisations.

Majority of findings are based on information gathered from discussions and interviews held Heads of Organizations, Heads of Departments, System Operators, Vendor and ICTA project Staff and the consultants did not have means of verification to confirm the accuracy of these statements. However, by adopting a mixed method consultant were able to minimize those biased expected from interviews.

Also, the consultants assumed that ICTA has identified all their requirements for the digital document management system and acquired the most optimal solutions and systems for the project. Hence, the consultants did not study in depth the operational aspects of the system and the assessment was restricted to understand the usage related issues and shortcoming mentioned by the users/operators of the system.

In certain instances the scheduled individuals were not available and alternative officials who were not well conversant with all the aspects of the project implementation were interviewed, since there wasn't a proper monitoring system at organisational level, gathering numbers were not easy.

### **3.0 Analysis and Major Findings**

Analytical findings summarize the information and knowledge gained during the study especially from the one-on-one interviews held with key informants and discussions conducted with the focus groups who are directly involved with the implementation of the project. Given differences in perceptions and experiences of different key informants and stakeholders some information is disputed by different groups or individuals. Triangulation has been used to minimize these individual biases and identify the major areas of agreement and disagreement using the available evidences. Since generalisation is not the objective of the study, the number of organisations used is sufficient to understand the present status of the implementation and problems encountered during the implementation of the project.

#### **3.1 Specific problems to be addressed by the project**

As mentioned in the project proposal, currently many government organisations are facing difficulties in managing ever increasing paper-based documents, especially when it comes to allocating valuable office space for storing them for long periods of time in a disorganised and insecure manner. This has made searching and retrieving a required document in a hurry difficult and time-consuming. Further, organisations incur additional administrative costs in maintaining storage spaces and also the risks the decaying and destroying of important documents under these conditions.

#### **3.2 Proposed solutions to the identified problems**

ICTA has been requested to find ICT based, technologically sound solution to manage these increasing paper-based documents in a securely and efficient manner. ICTA, having studied the problem, proposed two projects, to overcome this problem, namely:

1. Implementation of Cross Government Digital Document Management system and
2. Scanning and digitizing of existing government documents.

Though proposed as two projects, they were in fact two phases of the same initiatives but taken as two separate projects because of the technical complexities involved. ICTA, has proposed the projects to Department of National Planning through the Ministry of Telecommunication and Digital Infrastructure in January 2016 and was approved for its implementation in March 2106. Though ICTA requested funds to implement the project in 80 selected government organisations, considering the needs of a such system to improve the efficiency and effectiveness government service delivery, the Department of National Planning had given the approval to implement the system initially in 20 government organisations on a 'pilot' basis and to expand of the project to others organisations based on the success of the pilot project.

### 3.3 Expected Project outputs and outcomes

The project, Cross Government Digital Document Management System consisted of following key components and activities:

- Software system of manage the digitized documents
- Computers and scanners for user organisations.
- Application hosing facility at Lanka Government Cloud.
- Training for users at all levels.
- Change management and Awareness programmes for the stakeholders.
- Support service and software maintenance for three years.

The expected project outcomes were:

- Established higher efficiency and productivity of the organisation in document management
- A more satisfied business community.
- Eliminated unnecessary expenditure.
- Eliminated misuse of government funds
- Lowered corruption in transaction
- Satisfied citizenry

### 3.4 Project Implementation

The project has implemented only the Cross Government Digital Document Management System in the 20 selected organisations and had put on hold the second project-Scanning and Digitizing of existing Government Document, due to financial issues.

As a result, though the digital document management system is in place, scanning and digitizing of documents has not taken place as expected in all the 20 organisations. Staff of these organisations was expected to do the scanning and uploading of documents to the system with the existing staff.

### 3.5. Type of documents selected for Digital Document Management System

The type of documents and the target number of personal files to be scanned are shown in below table. Accordingly, all most all organization visited are prioritised to digitized the personal documents

*Table 2: Type of documents selected for Digital Document Management System by the organizations*

	Organization	Type of Document	No. of Staff in the Division	Total No. of Personal Files	Avg. No. of Files per Staff Member
1	Ministry of Petroleum Resources Development	Procurement and personal Documents	3	80	30
2	Ministry of Ports & Shipping	Personnel Documents	5	90	50
3	Ministry of Skills Development and vocational Training	Personnel Documents	5	435	90
4	Rubber Development Department	Personnel Documents	4	85	22
5	Ministry of Education	Personnel Documents	10	900	90
6	Western Province Education Department	Personnel Documents	5	200	60
7	Zonal Education Office-Piliyandala	Personnel Documents	13	4000	300
8	Zonal Education Office-Homagama	Personnel Documents	9	3800	400
9	Zonal Education Office-Colombo	Personnel Documents	24	9100	370

As observed from the table, majority of these organisations had requested for their personal to be included in the DDMS. However, before finalising individual requirements of the organisations Vendor has discussed this in detained and signed an agreement before customizing the system for individual organisations.

A tripartite agreement, System Requirements Specification, had been signed between the government organisation, the vendor (Sanje (pvt) Limited) and ICTA before implementing the DDMS in the organisation. This document describes and specifies the user functional requirements and expected solutions needed for the organisation and types of reports to be generated, access security/permission levels to various end users and various other features of the system. The proposed solution was expected to provide relevant officials access to view, edit, approve, share and to perform other activities using the internal work flow.

After signing System Requirements Specifications (SRS) vendor customizes the system and provided the system to the organisation to be tested at least for a period of one month before Operations Acceptance Test (OAT) is completed before going live.

Though 17 organisations have completed OAT, three organisations have requested for additional requirements after signing the SRS. The vendor is in the process of effecting required changes to the system and once completed they will sign the OAT.

Hence, it is evident that there had been a clear understanding and agreement amongst the parties about the system requirements and vendor as provided the specify requirements of each organisation.

In most case organisations, request had been to upload personal documents to the system. Consultants were unable to find any specific reasons for selecting personal files for using in the DDM system, thought organisations were aware that these paper-files cannot be destroyed to save storage space.

### **3.6 Scanning and uploading of Personal documents**

As observed during the study, number of files maintained by an organisation can vary from 500 to 9000 depending on the size of the employees they manage. Also, the documents in a single file can also vary widely depending on the number of years of service of put up by the employee. For example, number of documents in a new recruit's file may be as low as 25-30 while the same may even go up to 700-800 for an employee who has put up 30 years of service. Another critical factor observed was the condition of these documents to be scanned. It is easy to scan documents of a new recruit since all the documents are new but in case of older employees, some documents are extremely old and fragile and even difficult to remove from the bottom of these files and scan. In some organisation officers had to paste old documents on a new sheet of paper before scanning. Also, the documents comes in different sizes and has to be treated individually and carefully since they are extremely important, confidential and sometimes irreplaceable if they are lost or damaged. Further, the officer concern is fully responsible for all the documents in the file which are numbered in a chronological order from the bottom. When queried about the difficulty of scanning old documents, vendor mentioned about a special pouch to be used in such instances but no organisation the consultants visited had received it.

Another difficulty the officers faced is that before scanning a file the documents have to separate into seven different categories such as Certificates, Letters, Salary documents, Pension documents, Leave documents, Disciplinary reports and Others. All this has to be done on the small working tables given to them and also while attending to their all other normal work. These documents have to be treated carefully since any missing document can cause severe inconvenience when apply for pension after retirement. Therefore, the officers who maintain these files reluctant to open up these files for scanning within their limited space while attending to their other work. For example, if the head of the organisation wants some other urgent work to be done, they have to put the documents back correctly and securely before attending to the other work. This is a cumbersome and frustrating process for the staff.

However, with all above challenges each and every organization has attempt to complete the scanning and uploading of documents. It revealed that average of 2% of documents scanned and the 1% of documents uploaded in to the system in visited organizations (Annexure 2)

### **3.7 Adequacy of the feasibility carried out before the selection of organisations and installing the systems**

The consultants failed to find evidence to indicate that a proper feasibility study was carried out prior to implementing the project to understand the practical problems of implementation, skill gaps, awareness of users especially in organisations that maintained large number of personal files with limited resources and capabilities. For example, the Zonal Education office, Colombo, maintains 9100 personal files of teachers and principals of 22 private and public schools, 21 national schools, 104 provincial schools, and 11 pirivenas.

All these files are handled by 24 officers (Management Assistants and Development Assistants) where each is responsible for 350-400 files containing 50 (minimum) to 1000 documents attached to each of them. They are expected to attend to various other needs of the teachers and principals who call over at the office. Further, they also have to maintain and give priority to another online database information system of the Ministry of Education-National Education Management Information System (NEMIS) which is used extensively for generating various reports by the management. The officials feel DMMS is a duplication of work and the system it belongs to ICTA. If proper feasibility was carried out prior to implementation, they opined, that this duplication could have been avoided, at least to a certain extent. As such each government organization has its unique context, expectations and requirements to be understood through proper feasibility before the project implantation

### **3.8 Capacity of the staff to undertake this additional workload**

It is clear that the process of scanning and uploading of personal files were undertaken with the agreement of all three parties, namely, ICTA, vendor and the organisation. They had also signed a tripartite agreement with System Specification Requirements. However, it is not clear whether the parties assessed the capacities of the existing staff to handle this addition work while attending to their usual workload. Also taking into consideration the sensitivity nature of these documents, they were not ready to dismantle and open the files to categorise them for scanning. They were also not willing to handover this operation to a casual person since the responsibility and safely of this document fall on the officers concern. It was also observed that in some organisations temporary recruits or trainees had been engaged to do the scanning work by the administration to facilitate the process. Further, according to some heads of organizations/departments, staff is already compelled to handle more files than one could handle comfortably because of staff shortages implying the practical difficulty of handling this additional work. Some heads were under the impressions that Scanning and digitizing of existing documents will be done by ICTA under its second project and therefore they had started scanning new documents leaving the past documents to be scanned later under the second project.

Another reason the officers of Zonal education offices pointed out was their limited IT knowledge and non-availability of a System administrator or IT assistant in the office to get help if they get stuck with a problem. As a result, some Zonal Education offices have not uploaded any document for this year. In certain other places they have uploaded documents only on the day they had in-house training.

### **3.9 Awareness among the participating organisations**

Consultants felt that users/system operators are not fully aware how the DDM system works in an organisation and how it benefits the organisation to improve its efficiency and minimize the workload of its staff. Most of them consider it as a provision of a duplicate digitalized file that can be useful in case something happens to the existing papers-based file or any document contained in the file.

They also do not anticipate any reduction in storage space since paper-based files will anyway have been maintained along with the digitalized files.

### **3.10 Training and Change management**

The project has appropriately provided funds for user training, awareness creation and change management activities under the project budget but these activities had not taken place due to financial restrictions.

Further, a comprehensive user training with hands-on-training at their offices to different levels of users were expected to be provided by the vendor to ensure required competencies are gained by the staff for smooth operation of the project. Change management, is also important for the organisations' staff to understand why the changes are needed and accept them in their current working environment. This is more important and relevant when a government organisation uses digital technology to transform work processes. However, these activities had not taken place due to budgetary constraint. The vendor has also provided only a basic training to staff, particularly for system operators to show them how to scan and upload the digitized document into the system. They have provided group training and 3-hour in house session to show operators how to index and upload a scanned document. Also, the basic 10-page user training guide doesn't create adequately to create awareness or sufficient guidance and motivation needed to implement a new project of this nature. This training has not created sufficient knowledge, skills and confidence to use the system and resolve the minor issues they encounter. It is therefore important to take adequate time to train them to gain required confidence and competence to operate a new system of this nature, especially when the operators' ICT skills are low. This becomes even more critical when the offices do not have a System Administrators or IT assistants (e.g. Zonal Education Offices) to assist them. Also, in some organisations most of the originally trained staff has got transferred and new staff is incapable of handling the processes.

### **3.11 Infrastructure constraints to remove confidential documents for scanning.**

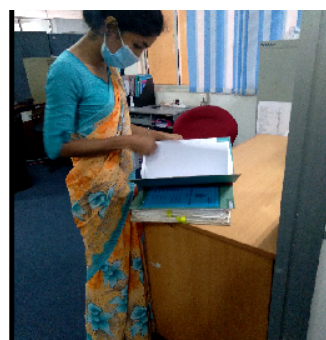
The consultants observed that in all the Zonal Education offices visited, the officers who handle these personal files are operating in open office environment where huge files are kept on their tables. There is hardly any working space for them to remove the documents from these files, categorize them and scanning.





However, the consultant observed in a Ministry, a small, dedicated, lockable cubical has been constructed to do the scanning process in a secure manner.

This has helped the operators to attend to scanning without any difficulty and whenever they need to attend to any other work, they could lock the room leaving the documents as it is. Since only one could operate at a time and they work on a roster to attend to their files.



### 3.12 Attitudes and Perceptions of the staff

Most of the officers interviewed held a positive attitude towards the digital transformation initiative which they think is essential if the country is to move forward and achieve higher efficiencies in work processes. However, this positive aspect has not been properly used towards achieving implementation success due to other constraints already mentioned. If proper awareness and change management programmes were conducted and solutions were found for other shortcomings better results could have been achieved from the project implementation by now.

### 3.13 Internal leadership given by the top management to implement the project.

Effective and pro-active leadership within the organization was seen as a key contributing factor for the successful implementation of the project in one organisation (ministry).

The impact would be more when the leading officers understand and competent in ICT processes. Such a leadership could help the organization by reducing resistance to change by resolving any bottlenecks and constraints that can arise during implementation the stage. This was at least

observed in one organization where Assistant Director ICT leading the operating officers to achieve their targets.

### **3.14 Lack of IT Administrative support to non- IT staff**

The consultant observed that Zonal Education offices lacked IT capabilities when compared to Ministries. There was no System Administrator or IT Assistants in these offices that could provide required help for these operators to implement the project. The vendor was expected to train a System Administrator so that he could train others especially when a new person takes over the operation. However, this has not happened as satisfactorily as expected. In organisations where ICT capacities were available (e.g. Ministries) implementation was progressing well.

### **3.15 Verification of uploaded Documents**

Once the documents are scanned and uploaded into the system, it is essential that some higher officer rechecks and verify that all the documents are correctly scanned, indexed and uploaded to the system. This seems to have not happened in most of the organisations.

### **3.16 Administrative disruptions due to elections and COVID 19 pandemic situation.**

The consultants also understood that where systems have gone live after mid-2019, staff had been involved in two major elections related duties especially the Zonal Education offices where teachers are involved in election duty and needed relevant documents from their Administrative offices to apply for election duties. Also, the pandemic related lockdown and work disruptions had also negatively impacted the scanning and uploading activities in most Zonal offices. As such some organisations had failed to upload even a single document.

### **3.17 Human resource availability at ICTA for project implementation and monitoring**

The proposal indicates that a Senior Project Manager is to be assigned to handle the project and he will be assisted by several Project Managers and Project Officers. The consultants understood that due to financial constraints and internal restructuring that had happened during the implantation, the expected full cadre was not available to visit implementing agencies regularly and attend to emerging issues with the help of the vendor.

Initially ICTA has allocated a dedicated manager and three project managers to support project implementation process by visiting the organisations and coordinating with the vendor to sorting out emerging issues. This had helped the implementation process immensely and kept the organisations focused on the project. However, during the latter stages, due to resignations, budgetary constraints and restructuring of cadres the implementation momentum has fallen.

As at now, Programme Head who is also involved with other projects is responsible for the implementation of the project. The implementing organisations depend heavily on ICTA support for the implementation process and to address and resolve emerging issues with the vendor.

### **3.18 Support services by Vendor**

The vendor was expected to provide on-site and help desk support to implementing agencies, in addition to the provision of comprehensive user training and user manual that caters to different levels of users. However, consultant understood from the users that some organisations had stopped using the system because of encountered problems.

### **3.19 Monitoring and Evaluation system**

The consultants did not find a proper internal monitoring system for recording the implementation progress or constraints affecting the implementation. There were no accurate data to measure implementation success in most organisations visited by the consultant.

### **3.20 Project ownership**

The consultants also found some doubts among the staff of the implementing organisation about the project ownership. Most of them considered this as a project of ICTA implemented by them. This was mostly in organisation where the heads have changed subsequently. This perception has affected the implementation process.

## 4.0 Conclusions

The conclusions are derived based on the findings of the study. Since the organisations are at different levels of implementation and the project itself is in its 'infant' stage, the conclusions may not be applicable to all the organisations equally. Of the 20 organisation only 17 have completed OAT, and three organisations have requested for additional requirements after signing the SRS. The vendor is in the process of effecting required changes to the system and once completed they will sign the OAT. Some important conclusions are:

- Non-implementation of the second project, Scanning and Digitizing of Government Documents, has severely impacted the implementation progress of the project especially in organization where human and infrastructure resource are limited.
- Though a major objective of the initiative is to reduce the storage of paper-based files, it was observed that even after digitizing and uploading all the personal files to the system, these paper files cannot be discarded to save storage space.
- A proper feasibility study has not been conducted before implementing the project to understand the availability of required resources such as working space, IT competencies and constraints of individual organisations that can affect the project implementations. It is not clear whether the assumptions made at the time of project preparations were still valid.
- Scanning and uploading of documents in the personal files is an exhausting and time consuming exercise that needs dedicated and trained staff. It is not practical in some organisations to get this done through the existing cadre who are already loaded with work.
- Training, awareness building and Change management programmes were important and relevant activities of the project. The results of non-implementation of these vital activities are clearly visible during the implementation of the project.
- Lack of sufficient facilities to implement the project activities at operator level have negatively impacted the implementation process.
- Effective and pro-active leadership within the organization has helped an organisation to overcome emerging constraints and take the project forward.
- Sufficient IT skills and additional IT support for these operators to implement the project are important prerequisites for successful implementation of this type of digital transformations. In some organisation this was lacking and has affected the implementation process.
- ICTA plays a pivotal role in the implementation of the project initiated by them. Lack of human resources for the project implementation and monitoring has immensely contributed for its poor progress.

- There is no internal monitoring or performance management system to record the implementation progress or identify constraints and create shared understanding about the project implementation.

## 5.0 Recommendations

Implementation of the second project, Scanning and Digitizing of Government Documents has to happen if proper evaluation of the project outcomes to be studied. It is recommended that due consideration is given to implement this project before expanding to initiative to other organisations.

- Undertake proper training, awareness building and change management programmes and relevant activities for the project implementing staff.
- Organise required infrastructure facilities such as dedicated and lockable room for the staff to implement the scanning work.
- Arrange required IT support service to back up the operating staff.
- Enhance the human resource requirements of ICTA to lead the project implementation with regular visits to these organisations and interact with the vendor to resolve emerging issues.
- Establish an effective monitoring system to record the progress, identify performance gaps, and generate shared understanding about implementation among the stakeholders.

## 6.0 Annexures

### Annexure 1: Name list of the staff interviewed

No	Organization/ Institution	Participant Name	Designation/ Position
1	Information and Communication Technology Agency of Sri Lanka ( ICTA )	Mr. Jagath Senavirathna	Head of Monitoring & Evaluation
		Mr. Gavashkar Subramaniam	Program Head
		Mr. Ashok Cananathan	Project Manager
2	Sanje (Pvt.) Ltd.	Mr. Ruwan Amarasekara	Project Head – Enterprise Solutions
		Mr. Dilum Fernando	Head of Business Innovation
3	Ministry of Petroleum	Mrs. K G T Vihanga	ICT Assistant
		Mrs.S.Chathurika	Management Service Officer
		Mrs. J A Yapa	Management Service Officer
4	Ministry of Ports & Shipping	D.N. Mrs. Hettiarachchi	Senior Assistant Secretary
		Mrs. Erani Jayawardana	Management Service Officer
		Mrs. K.N. Wickramaarachchi	Assistant Secretary
		Mrs.Udeni Kularathna	Management Assistant
		Miss.L. Dilrukshi	Development Officer
5	Ministry of Skills Development & Vocational Training	Mr.Thilina Panduka	Assistant Director ICT
		Miss.G.G.N.Harshani Miss.Wathsala Jayalath Miss.Pavithra Perera	Management Service officer
		Mr.S.M.D.L.Bandara	ICT Assistant
6	Rubber Development Department	Mrs. H.H.D.A.W. Damayanthi	Head of Organization
		Mr.Sadunpriya Senavirathne	Management Service Officer
7	Ministry of Education	Mrs.Jeewani Priyadarshani	Assistant Secretary
		Mr.Jaminda Kumara	Senior Assistant Secretary
		Mr.Pahan Bandara Mrs.N.L.C.S.Warnakulasooriya	ICT Assistant
		Mrs.Wanigasooriya Manike	Development Officer
		Mrs.Surangi Jayaweera	Administrative Officer
		Mrs.A.Parasilda Mrs.N.L.C.S.Jayathilaka Mrs.P.A.S.P.Kumari Mrs.S.Herath Mrs.K.A.N.Lakmali Mrs.B.U.D.Perera Mrs.S.H.Kumudi Mrs.W.N.Prasadini	Management Service Officer
8	Western Province Education Department Ranmaga Paya	Mr.P.Srilal Nonis	Zonal Educational Director
		Mrs.Kushanthi Kumari Mrs.Upuli	Zonal Educational Director Development Officer

<b>9</b>	Zonal Educational Office - Piliyandala	Mrs. P. K. D. U. D. S. Goonasekara	Zonal Educational Director
		Ms.R.Eramudugolla	Diputy Zonal Educational Director Administration
		Mrs.S.Lakmini Mrs.T.S.Jayadi	Administrative Officer
		Mr.P.P.G.L.Piris	Teacher - Administrative Officer
		Mrs.D.Deepika	Development Officer
<b>10</b>	Zonal Educational Office - Homagama	Mrs.Jayantha Rupasinghe	Diputy Director
		Mrs.H.G.Pushpa Mrs.M.H.D.Perera Mrs.Gayani Wathsala Mr.Dushntha Athukorala	Diputy Director Assistant Development Officer Management Assistant Clark
<b>11</b>	Zonal Educational Office - Colombo	Mr.G.W.Silva	Zonal Director
		Mrs. W.A. Neelika Perera	Deputy Director Assistant
		Mrs. W.A. Neelika Perera	Deputy Director Assistant
		Mrs. A.Rangani	Subject Director

## Annexure 2: No of documents scanned and uploaded

Organization	Type of Document	No. of Staff in the Division	Total No. of files	No. of files per staff member	Average. size of PF (Pages)	Average no of files Scanned	Average no of files Uploaded
Ministry of Petroleum	Supplier Documents	3	80	30	50-400	6	0
Ministry of Ports & Shipping	Personnel Document	5	90	50	60-1000	20	20
Ministry of Skills Development	Personnel Documents	5	435	90	30-1000	170	10
Rubber Development Department	Personnel Documents	4	85	22	50-1000	60	60
Ministry of Education	Personnel Documents	10	900	90	10-1000	100	100
Western Province Education Department	Personnel Documents	5	200	60	20-1000	10	0
Zonal Education Office-Piliyandala	Personnel Documents	13	4000	300	35-3000	0	0
Zonal Education Office-Homagama	Personnel Documents	9	3800	400	50-1000	15	0
Zonal Education Office-Colombo	Personnel Documents	24	9100	370	50-600	0	0
<b>Total</b>		<b>78</b>	<b>18690</b>			<b>360</b>	<b>190</b>