SRI LANKA GOVERNMENT FOSS ADOPTION

Information and Communication Technology of Sri Lanka (ICTA)

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Contents

Revision History

DATE	VERSION	AUTHOR	DESCRIPTION
01/04/2022	V 1.0	ICTA Technology Team	First Version

Sri Lanka Government FOSS Adoption

1.0 Introduction

Information and Communication Agency of Sri Lanka (ICTA) as the apex body of Information and Communication Technology institution in Sri Lanka, has been engaged in implementing and driving the Sri Lanka Government Digital Road map (Figure 01).
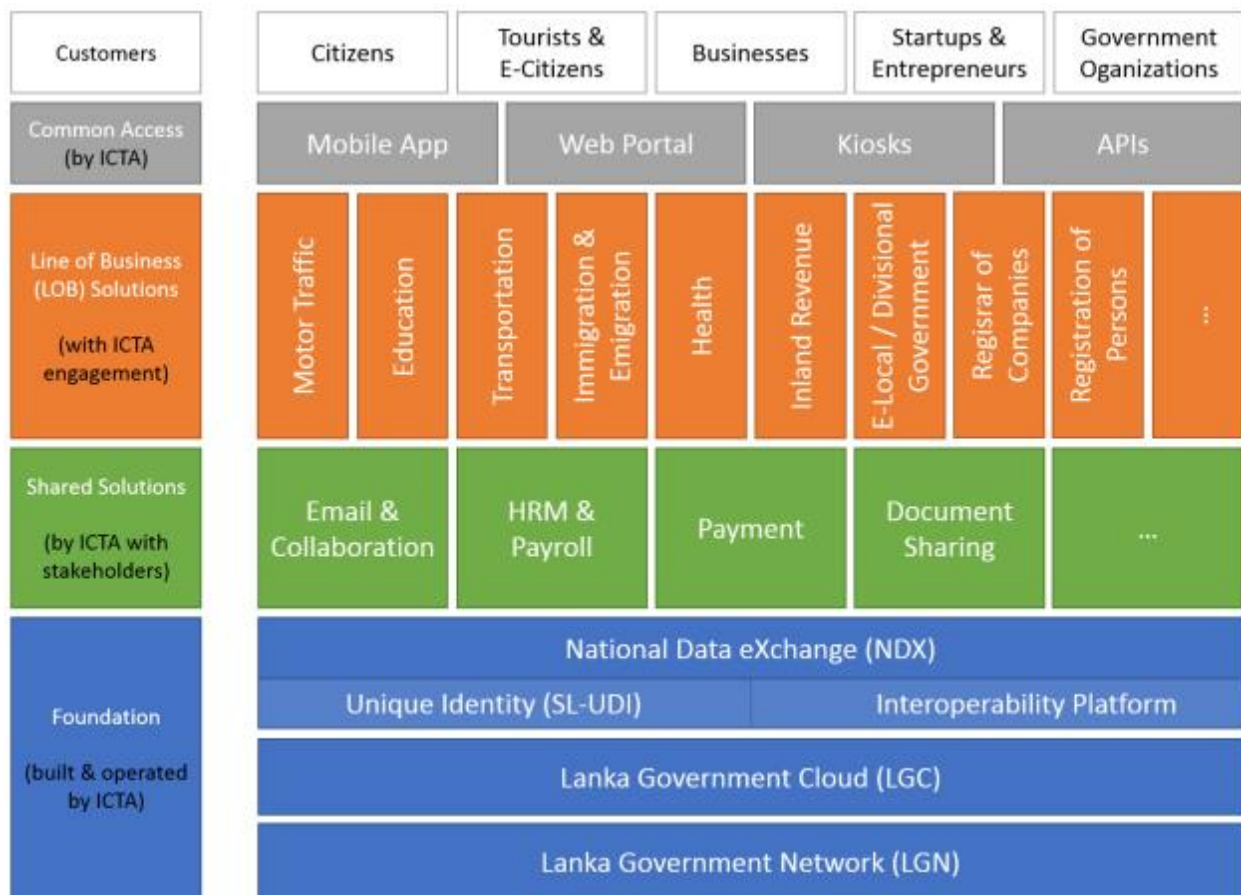

Figure 01 - Digital Government Strategy Blueprint [1]

Over the years ICTA managed to build a solid Information Technology (IT) infrastructure by designing and implementing key projects such as Lanka Government Network (LGN), Lanka Government Cloud (LGC), Lanka Government Middleware Platform (Lanka Gate), Lanka Government Payment Service (LGPS), Lanka Government SMS Service (GovSMS), Lanka Government Open Data Portal, Lanka Government API Store and many e-Government back-end services.

Currently ICTA is engaged with Department of Registration of Persons (DRP) to build the Sri Lanka Government Unique Digital Identity (SL-UDI) project to build a unique identity platform for all Sri Lanka citizens.

2.0 FOSS Usage

Out of the mentioned projects in section 1.0, almost all software projects were leveraging free and open-source platforms maintaining a complete open eco system. Some of the key projects, which used FOSS solutions are:

1. Lanka Government Middleware Platform (Completed)
2. Lanka Government Open Data Portal (Completed)
3. Lanka Government Payment Service (Completed)
4. GovSMS Platform (Completed)
5. Sri Lanka Unique Digital Identity (In Progress)
6. C19 Applications (Completed)
7. E-Revenue License Platform (Completed)
8. E-Local Government Platform (Completed)
9. Other e-Government Line of Business (LOBs) (In Progress)
10. Shared Solutions (In Progress)

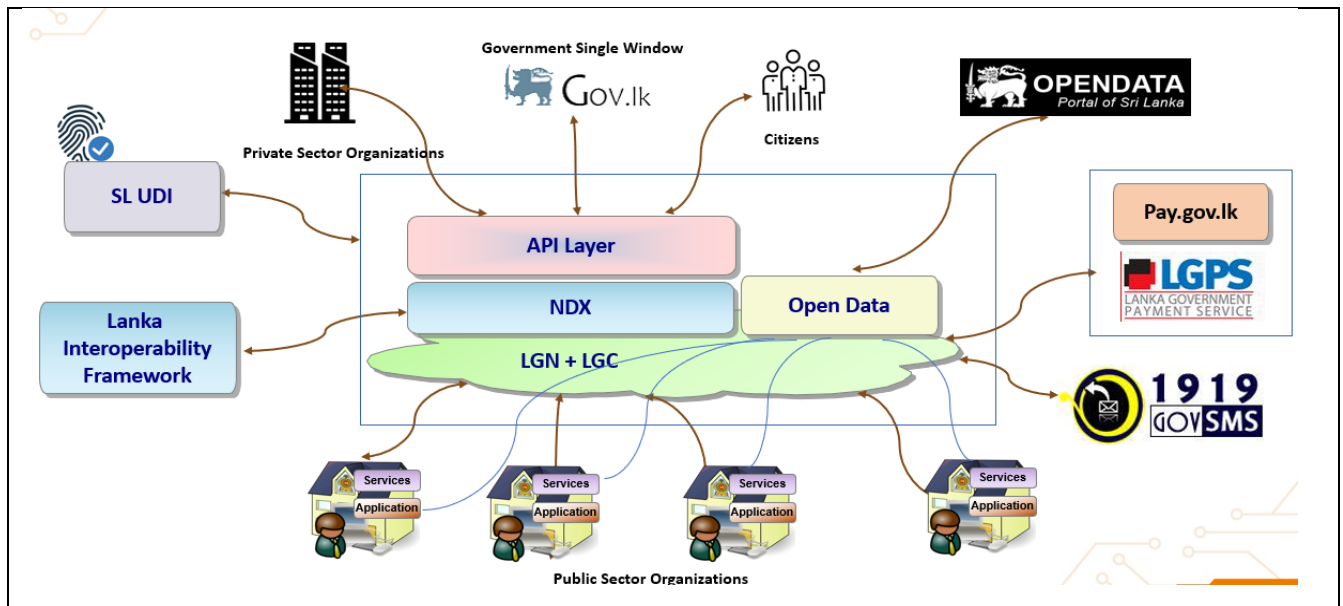## 3.0 Lanka Government Middleware Platform

Figure 02 – Sri Lanka Government Middleware Platform

Formerly known as *Lanka Gate*, the government middleware platform (See Figure 2), does message mediation across all government entities allowing to have a whole of government single window approach [2].

This platform consists of an API Gateway and a Service Bus to expose government level APIs and to carry out any information / technology level mediations. Both these components are run by open-source frameworks.

In addition to that, to handle government level authorizations, an open-source Identity Management Service is also deployed in the same setup.

4.0 Lanka Government Open Data Platform

Lanka Government Open Data portal is again built on popular open-source data platform in the market. This portal can expose any data set in many formats with greater security [3].

5.0 Lanka Government Payment Service

Lanka Government Payment Service is an open-source custom-built application, which works as a façade to many payment backends in Sri Lanka. Having such an abstract layer allows government entities to do their payment integrations in a quick time.

6.0 GovSMS Platform

The GovSMS platform was completely developed using an open-source platform and it won an Asian e-Government award (FutureGov) along with the *Lanka Gate* project for its simple architecture and the effectiveness in a government setup [4].

6.0 Sri Lanka Government Unique Digital Identification Platform

This is the latest key project ICTA is handling, and it produces a unique digital identity to all Sri Lankans. This is also based on a popular open-source national foundational identity platform [5].

7.0 C19 Applications

ICTA in collaboration with the Ministry of Health implemented many C19 applications in a quick time to cater to rapid demand. This was only possible due to free and open-source applications, which were heavily used by these applications [6] [7].

8.0 e-Revenue License Application

The e-Revenue Application became a significant milestone to Sri Lankan e-Government setup since it was the first ever government online payment application. It was developed in a very short period leveraging the *Lanka Gate* mediation framework for message mediations across different government entities and some other open-source platforms including some of the open-source application servers and database management systems.

9.0 e-Local Government Application

This again an application developed completely leveraging open-source products with flexible business rule engine. This application allows citizens to pay tax and other statutory payments for several local government entities on-line.

10.0 Other Line of Business (LOB) Applications

There are multiple LOB applications are being developed currently leveraging open-source technologies.

1. ETF (Employee Trust Fund) Application
2. E-Land Application
3. E-ROC (Register of Companies) Application
4. E-Procurement Application
5. Payroll Application

11.0 Shared Solutions

There are multiple shared solutions are also in development leveraging open-source technologies.

1. Forms.gov.lk (Government level Forms Application)
2. Pay.gov.lk (Government level Payment Platform – LGPS v2.0)
3. Government Tracker Application – To track government correspondence at department level

12.0 References

1. The Digital Government Strategy (2020-2024): https://www.icta.lk/icta-assets/uploads/2021/06/01.-Digital-Government-Strategy.pdf
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