

Proposed E-Government and Information Security Strategies for NIFS

1.Introduction

As nominated by Director/ NIFS, Mrs. Chandrika Tilakaratne and Mr. Viraj Ekanayake was participated for **“SEMINAR ON e-GOVERNMENT, CYBER SECURITY AND SOCIAL MEDIA”** on 16/10/2018 at National Library and Documentation Services Board, Colombo 07. The following topics was discussed in the workshop.

1. e-Government Policy by Prof. Rohan Samarajiva, Chairman, Information and Communication Technology Agency of Sri Lanka.
2. e-Government Challenges and Future by Mr. Wasantha Deshapriya, Former Secretary, Ministry of Telecommunication and Digital Infrastructure.
3. The Role of Social Media, Democratic Governance and Development by Mr. Nalaka Gunawardene, Journalist and Science Writer.
4. Cyberspace and Cyber Security Policy Issues, Risks, Strategies and best Practices by Dr. Kanishka Karunasena, Research and Policy Development Specialist, Sri Lanka Computer Emergency Readiness Team | Coordination Centre (Sri Lanka CERT).

We were able to gather novel information regarding above topics while aware of the practical issues. So, this document is mainly based on workshop outcomes and our experience on working at NIFS.

2. Objectives

The objectives of this document are as follows

- Prepare NIFS to comply with proposed E-Government policy of Sri Lanka.
- Increase the efficiency of the day to day tasks of the institute.
- Reduce the operational cost.
- Increase the accountability and transparency.
- Secure the digital information and IT infrastructure of the Institute.

Therefore, We would like to suggest the following suggestions to implement at the NIFS.

3. Suggestions

1. **Recruit Chief Innovation Officer(CIO)/ IT Manager position**

NIFS don't have a employee who purely work on developing IT strategies and services for the Institute with higher level of authority. Due to that, we couldn't able to implement and improve cutting edge IT service on NIFS. In order to successfully implement those things, we need this position. NIFS won't be able to fulfill the IT requirements in long run without an expertise in this field.

2. **Implement the NIFS ERP System**

We need to implement the NIFS ERP system ASAP in order to increase the performance of the day to day operations and reduce the operational cost. It is required that we need to develop a strategy to calculate the return of investment and improve the ERP system to meet institutional requirements.

3. **Implement Google G-Suite**

By implementing G-Suite at NIFS, we can increase the productivity of the

institute while reducing the maintenance cost. Please refer the '**NIFS gone Cloud**' documentation(will handover as a separate document) for more details.

4. Design and implement an IT Policy for NIFS

Due to lack of a IT policy, most of IT resources are not fully utilized effectively and some resources are misused. So we need an IT policy to fully utilized the IT infrastructure, guide the employees and prevent possible risks.

5. NIFS website

We need to launch the new redesigned website of the NIFS which increases our online presence. Within next 2 years, we need to link all our information systems with the website since Government is going to interlink all government organizations through a separated network. So, we should prepare our systems for that.

Also, we need to secure our website by moving to secure protocol.

Therefore, we need to use Hyper Text Transfer Protocol

(<https://www.nifs.ac.lk>) which reduce the security risk.

6. Implement online payment option

NIFS employees use online services which only accept credit card payments as the only payment option. Therefore, we need to buy a prepaid credit card facility from a bank according to Public Finance Circular 02/2013. The ICTA of Sri Lanka is currently using Sampath Bank webcard for internet payments. So this won't be a problem to implement it at NIFS.

7. Using online advertising

NIFS post advertisement (Specially Vacancies) on newspapers which cost around 50,000 - 80,000 LKR per advertisement. But we can reduce it by

post it only on our webpage. There are some services that promotes government vacancies for free (MyTutor, Lakkbima Jobs). So we can reduce the cost we paid for newspapers while getting desired candidates.

8. Improve the network infrastructure

NIFS has a high speed fibre optics connection which has a good stable internet connection. However, the network is too slow on peak times due to higher demand. So we need to address this issue (We think that the network should available on all the time without any interruptions). Something like applying a control mechanism which allocate specific bandwidth level depends on employee's job role.

9. Implement WiFi facility

Nowadays, most of employees are use their own Laptops, smartphones for office work. The main problem is configure their devices to access internet through NIFS network connection. Also new devices are not includes a ethernet ports. Therefore, we need to implement a WiFi facility which covers the whole institute with a proper security management. Also we should provide an open WiFi connections on Auditoriums, Lobby area and reception area for visitors.

10. Provide Information security awareness programme

NIFS has lot of data in digital and printed formats. In the future, we are going to digitize the data using new information systems. So we need to prepare our workforce to effectively deal with it while protecting institutional data. We have already discussed with Dr. Kanishka from Sri Lanka CERT and he is happy to conduct a training session at NIFS.

11. Security checkup - IT Infrastructure

There are some incidents reported that hacking information systems, leak government data to unauthorized parties. Therefore, we need to check our systems against industry standard security measures. We have already

discussed with Dr. Kanishka from Sri Lanka CERT and they will provide the consultancy service for reduced price for government institutions. We suggest that this needs to recheck at least once a year.

12. Implement a Backup Strategy

NIFS need a proper backup procedure(Individual and institutional wise) for take realtime, periodic backups of available digital information including information systems.

We suggest to store institutional backups on cloud storage or physically separated location. All the information systems, website and digital data should available immediately to public, employees even after a natural disaster, media failure or hacker attack.

13. Appoint an E-Government committee at NIFS

In order to implement and monitor above suggestions, we might need a E-Government committee with some level of authority(just appointing a committee and offer suggestions won't work since this needs to implement at NIFS while overriding traditional policies and procedures). The committee should meet at least once in every two months and suggest, monitor and implement required E-Government initiatives at NIFS.

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On 22nd October 2018.

References

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- [Use of Electronic Documents and Electronic Communication for Official Use -Circular](#)

- [Use of E-Mail and ICT in general in Government Business](#)
- [eGovernment Policy approved by the cabinet of ministers in 2009-12-15](#)
- [Draft Digital Government Policies and Procedures](#)