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Effect of Replacing Proprietary Software with FOSS (Free/Open Source Software) in Lokmitra (Friend of People) Kenderas of Himachal Pradesh State: A Case Study

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Abstract

Objective: Cost minimization on software so that it may be financially viable to provide the various services to all the people of India. **Method:** An Analytical study was conducted on costs incurred on proprietary software and their corresponding FOSS i.e. free and open source software. **Findings:** Most part of finance is spent on proprietary software that can be saved by replacing them with the alternative FOSS that too being developed and promoted by DIETY i.e. Department of Electronics and Information Technology and various organizations, societies and institutions like NIELIT i.e National Institute of Electronics & Information Technology, NRCFOSS i.e. National Resource Centre for FOSS and CDAC i.e. Centre for development of Advance Computing and NIC i.e. National Informatics Centre. **Applications/Improvements:** The huge amount of finances incurred on proprietary software can easily be saved by replacing these software by their corresponding FOSS i.e. free and open source software.

Keywords: Common Service Centers, FOSS, Finances, Lokmitra Kenderas, Proprietary software

1. Introduction

Information Technology act 2000 implemented by Central Govt. of India provides the legal status to transactions performed on Internet. [1]Central Govt. launched C.S.C. i.e Common Service Centre project to provide the benefits of Information Technology to the public in their daily needs. The technical framework of connectivity for providing these services is from state headquarter to district headquarter, then from district headquarter to block level headquarter and from block headquarter to VLE i.e. Village Level Entrepreneur. Central Govt. of India has approved the C.S.C. scheme in 2006 for setting up one lakh Internet enabled centers in rural areas under NeGP i.e. National Electronic Governance plan. This plan is being implemented with PPP framework i.e. the Framework of Public Private Partnership. The common service centers are being set up in rural and urban areas by private firms selected by state government which are called S.C.A. i.e. Service Centre Agencies in Himachal Pradesh. These agencies are appointed by the Govt. of the concerned state separately. The common service center is run by VLE. These Village Level Entrepreneurs are appointed by Service Centre Agencies. The agency to implement this project throughout India is CSC SPV i.e. CSC- Special Purpose Vehicle- CSC e-Governance

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Service India Ltd. DeitY Department of Electronics and Information Technology is the main department which gives policy support for implementation of the project.[2] In 2015 govt. of India has issued new guidelines under Digital India which are updated version of guidelines of 2006 and includes the points like to increase the share of VLE's income to 80 % and to set up the CSC very near to the gram panchayat office and many others which result into more and fast information delivery to the public and gram panchayat. [3]Each state has named its common service centers according to its language or likings for example in Madhya Pradesh these are called e - Samadhan, in Delhi - Jeevan Centers, in Gujrat - e gram Centers, in Himachal Pradesh they are called Lokmitra Kenderas and in Jammu and Kashmir they are called Khidmat Kenderas.

2. Scenario of Common Service Centers (CSCs) in Himachal Pradesh

[4]Himachal Pradesh Govt. realized the potential of Information Technology and made a strategy to take its benefit to make the people of the state enjoy the Information Technology facilities. As shown in figure 1 the IT department of Himachal Pradesh developed 3 stage connectivity network i.e. from state level centre to district level centre, from district level centre to tehsil level centre and then from tehsil level centre to village level centre i.e. VLE.

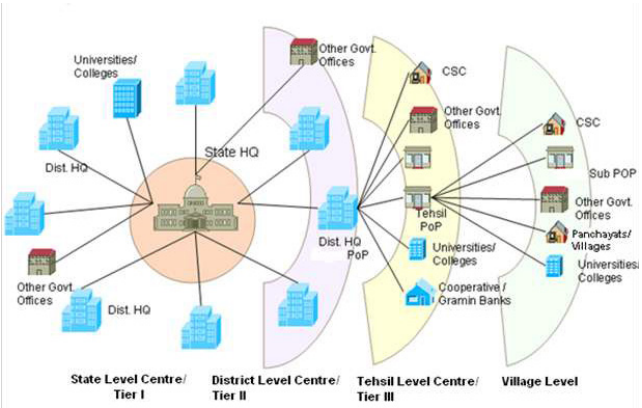

Figure 1. Core IT infrastructure.

Source: Department of Information Technology, Govt. of Himachal Pradesh

Each state has different name for CSC as well as different logo for its CSC.

Figure 2. A VLE sitting in his Lokmitra Kenderas serving a customer (Inner View).

Figure 2 shows a Village Level Entrepreneur depositing electricity bill of house of a small kid

[5]E governance increases Information and communication technology based jobs by big percentage. [6]Dissemination (spread) of information provides transparency and empowers citizens to ensure accountability and prevents the administration from indulging in corrupt practices. [7]The Govt. of Himachal Pradesh developed Internet based Govt. and public interface of state Govt. And named it Lokmitra Kenderas. These kinderas not only provide the awareness of Govt. programms and policies but also provide solutions to the many problems of citizens without their physical visit to Govt. offices.

[8]This also brings the transparency in Govt. working machinery and provides responsible e governance. The various types of services provided by Govt. at the Lokmitrakender as through the URLhttp://www.apna.csc.com/ include G2C, B2C and educational services like O Level Computer Courses, A Level Computer Courses, B Level Computer Courses and C Level Computer Courses of NIELIT, animation courses, NIOS i.e. National Institute of Open School, IGNOU services like student admission, Examination forms submissions and result declaration, electrical bill payment, water bill payments, bank related services, recharge of mobile phones, mobile phones bill payments, recharge of DTH, money transfer, data card recharge, LIC premium, Nakal/E Jamabandi, PAN card services, ADHAR Services, VAT returns of excise and taxation department, election services, passport services, Agriculture related services, recruitments, jeevanpraman, income tax form filling and skill develop-

ment. The services provided at these kinderas save time, cost and effort required to be made by city and rural public people. These services also minimize the corruption by stopping the bribery etc at intermediate levels and also from top to bottom levels of officials' chain because it directly connects the Govt. with public through Internet. Govt. of Himachal Pradesh has selected two S.C.A.s i.e. Service Centre Agencies M/S Zoom Development Private Limited. And Consortium of M/S Tera Software Limited And M/S GNG Trading Co. Private Limited.

3. Economic Effect of Replacing Proprietary Softwares by Free and Open Source Softwares in Lokmitra Kenderas of Himachal Pradesh

[8]The Govt. of Himachal Pradesh had planned to establish 3366 Lokmitra Kenderas in the state. As per the data available on Internet website hp.gov.in/csc/page/csc-scheme.aspx total rollout of Lokmitra Kenderas is 2896. Out of these total number of certified kenderas is 1922. Most of these centers are basically using Microsoft Windows and Microsoft Office softwares, which according to market rates cost apx. Rs. 10000/ and Rs. 15000/ respectively.

It means a total of Rs. 25000/ per Lokmitrakendera. Total cost of softwares installed on all the Lokmitrakendera amounts to Rs. 25000 * 1922 (no. of Lokmitra Kenderas in HP) = Rs. 4,80,50,000/. However the cost of other allied softwares has been ignored like antivirus and Internet browsers etc.[9]Compertz distribution model can be used as an alternative model in this field in terms of cost.

[10]By introducing e governance the state of Himachal Pradesh has earned laurels in Information Technology throughout India. In 2008-09 the Dataquest placed Himachal Pradesh at second position in India as e governed state. Department of Information Technology, Central Govt. of India has evaluated this project of Himachal Pradesh as a good project.

[11]Govt. of India took a major step in direction of making FOSS popular and usable among all e governance systems by advising and recommending to promote and adopt Open Source Software in e governance. It has been clearly mentioned that most suitable area for open source software is desktop operating system including office productivity tools. Govt. clearly has recommended to adopt BOSS i.e. Bharat operating system solution.

[12]A weakness in software becomes insecure for piracy.[13]The cases of software theft or license infringement are increasing every year which are in proprietary software. In lieu of Microsoft Windows and Microsoft Office, BOSS and B.O.O. i.e. Bharateeya Open Office a new Indian brand of libre office which belongs to the FOSS, can save huge amount of finance i.e. nearly 5 crores by using the software of free and open source software category.[14]Organisations are competing to develop services for satisfying their customers.

These software have been developed by CDAC i.e. Centre for Development of Advanced Computing. The users can be provided the training of these software at various CDAC centers like Mohali, Pune, Delhi, Chennai and Bangalore etc. However when the target of Himachal Pradesh Govt. of 3366 centres will be achieved then this amount will become = 3366 * 25000/= 8,41,50,000/ i.e. 8.5 crores apx. And if scenario of whole of India is assumed to be like this then probable amount which can be saved can be easily calculated. On 31/12/2012 total CSCs in India were 99,247. And cost of Software per csc = Rs. 25000/ total amount required for all the centres will be = 99247 * Rs. 25000/ = Rs. 2,48,11,75,000/ that means apx. = Rs. 248 croresapx. This huge amount can be easily saved by replacing proprietary software by free and open source software. In this way the state of Himachal Pradesh can earn more laurels by implementing the advice of Govt of India i.e. to support free and open source software in its all Lokmitra Kenderas.

4. Conclusion

From above discussion and logic it is very clear that the Lokmitra Kenderas are not only an unavoidable need but also highly beneficial for public as well as govt. They bring a big social and economic change in the public. But as proved above that the financial burden incurred on proprietary software to run the Lokmitra Kenderasor CSCs is greatly reduced.

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