New Evaluation Approach Using a Case Study on Comparison of Libre/Open Office Vs MS-Office

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Abstract: As per [1]Framework for Adoption of Open Source Software in e-Governance Systems Version 1.0 April 2015, prescribed by Department of Electronics and I.T., Ministry of Communications and I. T. , Government of India , Annexure-II Illustrative list of OSS includes PHP, libre office, open office, gEdit, vi, Eye of Gnome, Nagios , vlc player, clamav, Postfix, Cloud Stack, Meghdoot and BOSS. As per the recommendations of Govt of India the organizations should prefer the softwares of FOSS category but according to [2] Red Hat – Georgia Tech study has placed India at twenty third rank in FOSS (Free and Open Source Software) adoption out of 75 countries studied. In the above scenario libre/open office (free/open source software, part of BOSS i.e. Bharat operating system solution developed by India) has been picked up for analysis and its comparison with corresponding proprietary software i.e. MS Office. In this paper these two application software has been studied, analyzed, compared on the basis of experiments, surveys of end users using questionnaires, study of previous research outputs in form of research papers and extracts of research work done. MS Office may be better in many aspects than libre/open office but at some points libre/open office may be better and it may be improved if used and feedback supplied regularly. The practical implementation has been performed on these two software systems for exploring their features like user friendliness, complexity beimg faced by users in transition to open office softwares, newness, reluctance of users, problem faced during installation etc. Users feedback has also been collected using questionnaire, analysed and graphically represented using charts of different types.

Keywords: FOSS, libre office, open office, adoption etc.

1. INTRODUCTION

Office softwares /packages are a need of nearly each and every computer user for daily applications like typing notes, creating presentations, storing data in tables etc. Nowadays people are not using only MS office i.e. Microsoft Office but also some packages of Free and Open Source Software category like open office and libre office. Fortunately BOSS i.e. Bharat Operating System Solution BOSS 4.0 has open office as its constituent component and BOS 5.0 has Libre office as its constituent component. Therefore it becomes a type of responsibility of Indian researcher to weigh and compare the softwares of the two categories for the sake of end users. Sushil Kuamr et.al. in the paper on "Comparative evaluation of Bharat Operating System Solutions, a free/open source software, developed by India versus M.S. windows, a proprietary software to assist Indian organisations to select the better option" published in I.J.A.R.C.S (International Journal of Advanced Research in Computer Science) Volume 8, Number 1, January-February 2017 issue have proposed a new approach to compare the softwares of the two categories proprietary software and free and open source software category. Bhartiya open office/Libre/open office and Microsoft Office are different from each other in various aspects like philosophy, adaptability ,cost and such many other features. This paper is an effort to compare MS Office software which is a proprietary software with Libre/open office software of the free and open source software category. Following is the flowchart form of the new evaluation approach developed for comparing the two categories of softwares i.e. proprietary Softwares and FOSS (Free/Open Source Softwares) to assist Indian organizations to select the better option.
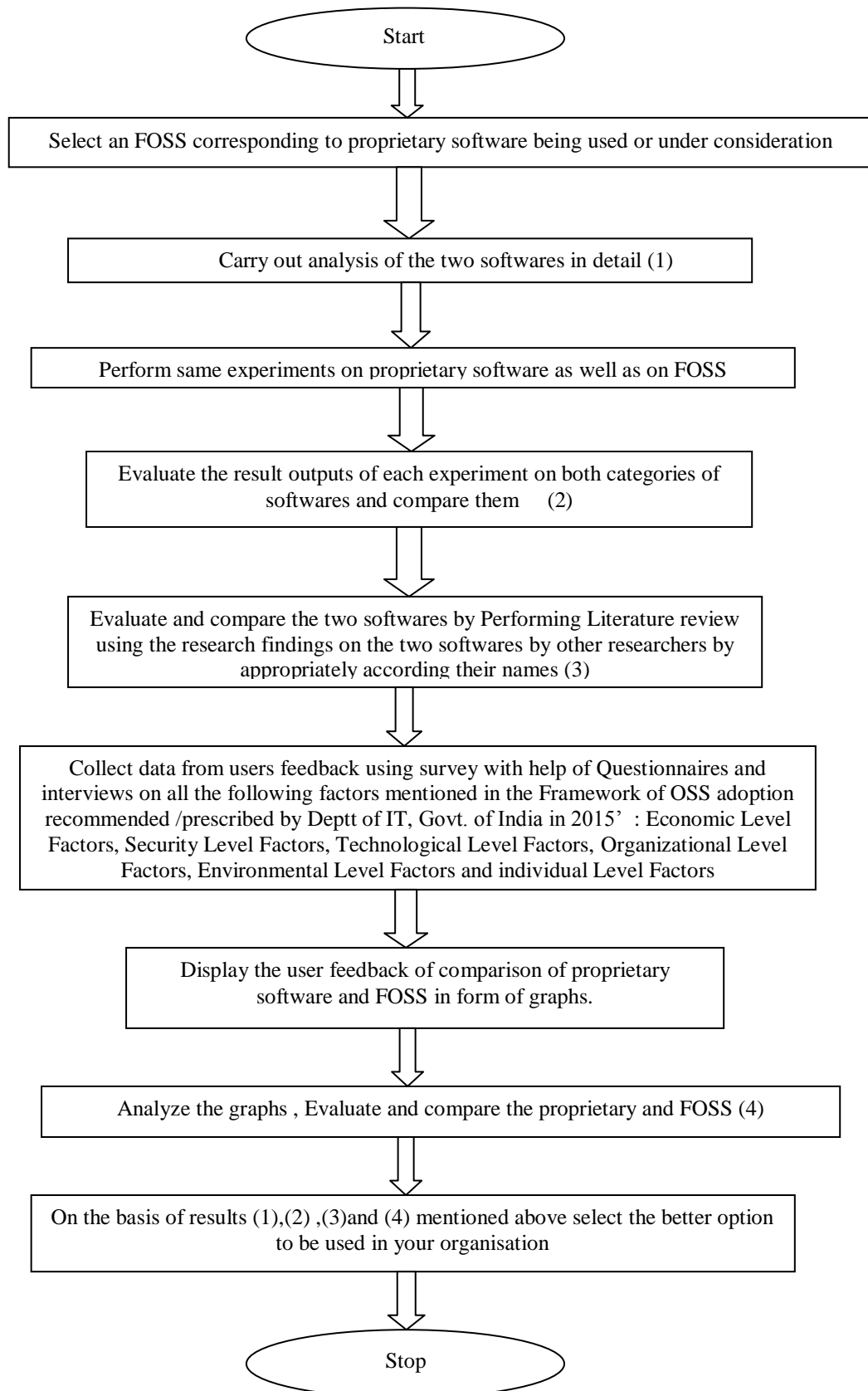
Figure1

In this paper all the steps will be applied of above mentioned flowchart one by one and weigh the softwares of two categories to make proposals for Indian end users for deciding over the use of these softwares in their organisations.

II. Following is the implementation of above mentioned algorithm- flowchart. The two softwares selected for study are 1) Libre office/open office which is a part of BOSS,

2) M.S.Office

Step 1: Analysis :

1. (A) : Open Office Software (constituent component of BOSS 4.0)

[3]Open Office is an easy to use and very much useful for all common office applications like word processing, spreadsheet, drawing and presentation etc. The open office achieves Indian language support and support for Complex Text Layout, Indian locales, dictionary and sorting in the suite, on Windows and Linux platforms, the project aims at a Localized and Internationalized Office suite in Indian Languages that is free to all. According to the website http://www.openoffice.org, the Open Office.org community has given copyright to the work done at the Centre for Development of Advanced Computing CDAC, Electronics City, Bangalore, and a Hindi Native Language project has been setup in conjunction with this work at http://hi.openoffice.org to disseminate information on the project, and its developmental aspects. Resource strings were extracted from the build source, translated in Hindi, and merged back with the localisation tools. For localising the source in India, the Hindi language added to the built environment, which had the entire user interface elements like menus, strings, messages, tool tips, pop ups, dialog boxes and so on in Hindi. The modules of Open Office.org application are Writer Word processor application module, Calc Spreadsheet application module, Impress Presentation application module, Base Database application module and Draw Application module for drawing vector graphics.

1. (B): Libre Office software(constituent component of BOSS 5.0)

[4] Libre Office is a freely available, fully featured office productivity suite. Its native file format is Open Document, an open standard format that is being adopted by governments worldwide as a required file format for publishing and accepting documents. Libre Office can also open and save documents in many other formats, including those used by several versions of Microsoft Office .[5] Libre Office has been built for suite localized in Hindi just as open office. This is very similar to open office discussed above.

2. MS Office: MS Office is a proprietary software system, which means that it is possessed by a company i.e. Microsoft with copyrights. It is important to note that source code of MS Office is not accessible to the users; only the developers of MS Office can access and modify/update its code The GUI of MS Office software system is so nice and user friendly that no command is. required to remember MS Office is a set of applications which helps a user in projects and applications. The users can write letters, prepare presentations, maintain records etc. with the help of various tools that are available in MS Office.MS Office was introduced in 1988. Later on developments were made and the modified version MS Office was launched in 1995. Later on MS Office 97, 2000, 2003, 2007 and others were also launched time to time. MS Office is used to increase use of computers in offices and households. Microsoft carefully analysed need of time and developed individual products for each usability area. As a result the sale of office suits boosted and many versions of Microsoft office have been developed till date. Microsoft office is a stable product having customers worldwide. It has undergone through many development stages and upgrades with new feature addition in each new version. Components of MS Office are Microsoft Word, Microsoft Excel, Microsoft Powerpoint, Microsoft Access, Microsoft office outlook, Microsoft publisher, Microsoft One Note, Microsoft equation editor, Microsoft graph.

Step 2) Experiments

Experiments were carried over These applications : Same Curriculum vitae was prepared, SameTable was prepared, Same Presentations were prepared and much more such operations were carried out then it is generally felt that Libre office applications may have less number of features as compared to that of MS Office components but they are more easy to handle, simplicity is more and complexity is less. And due to this simplicity a less educated person can also handle and operate on these applications.
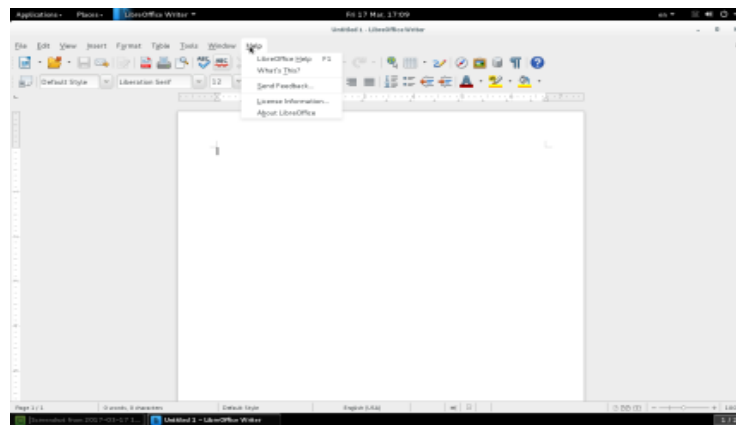
Figure 2. Screenshot of Libre office writer
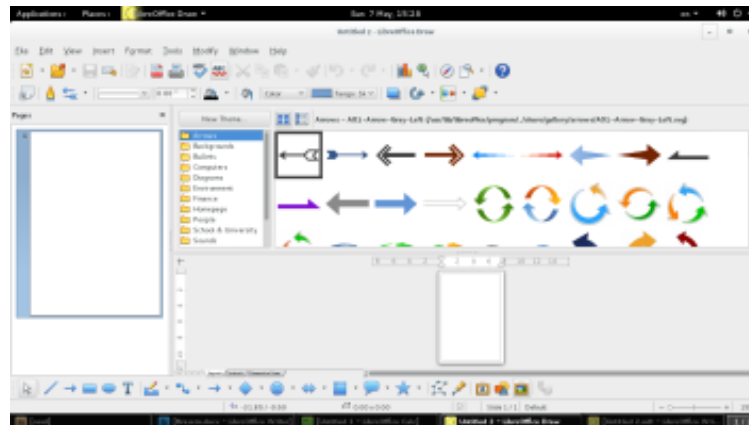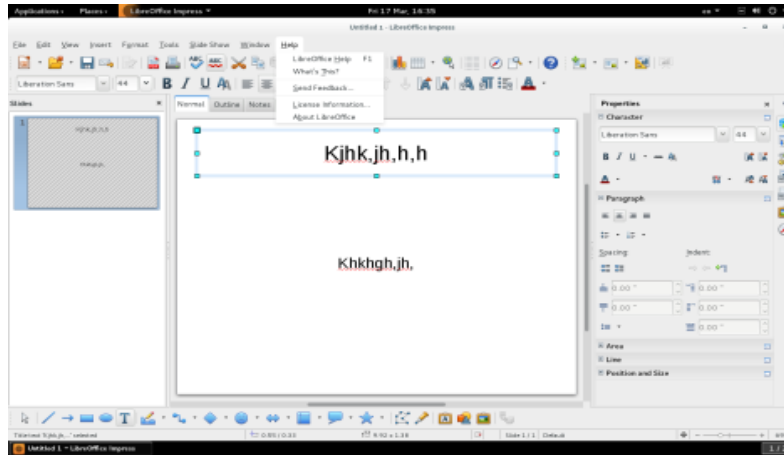

Figure 3 Screenshot of Libre office draw
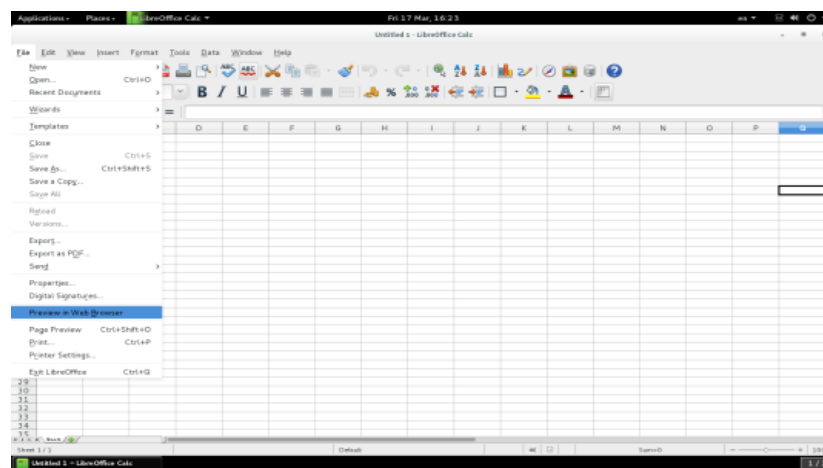
Figure 4 Screenshot of Libre office impress

Figure 5 Screenshot of Libre office Calc

Step 3 :Literature Review:

[6] advocates Simplicity: Many of the students accepted that Open Office.org 3.0 is a simple and easy to use office suite It is available for multi platforms and Multilanguage support is also available. It is easy to install and simple to use. Consistency: Open office.org is a complete office suite and it provides almost maximum tool which are required to the user. It provides consistent layout of the interface as of MS-Office 2003. Learnability & Efficiency: Openoffice.org is easy to learn and efficient because they do not need to learn the same features of the system repeatedly. Few task remains incomplete during experiment. Completeness: OpenOffice.org provides maximum frequent used tools and functions leaving few. [7] In December 2006, the Finnish Ministry of Justice decided to migrate to the open source Open Office.org office suite. The migration decision was based on evaluation of office software performed in 2005. [8] indicates that there is no lack of productivity in the group transited to Open Office. Even some of the members of this group present a higher productivity when working with only open Office documents. [9] explains the general difference between the use of MS Office and Open Office. Also possesses more or less similar but simple to use features like Help, Zoom , the view, percentage, AutoCorrect / AutoFormat Menus ,Personalized menus, Toolbars ,,Moving toolbars, Tear-off toolbars,, The Draw Functions toolbar, the Load ,URL drop-down on the Function bar,, Mouse use, click, Drag and drop,. Right click Side panes, docked / floating windows, docking and undocking, Resizing ,Show / Hide Stick / , Navigator, Stylist, Gallery Data, source viewer Page preview, General Differences in Use between OpenOffice.org and Microsoft Office, Keyboard shortcuts, Smart tags, Special characters / symbols File management, Default locations, Creating new files, Default templates, Template folder management, Open and Save As dialogs, Password protection ,Privacy options ,PDF (Adobe Reader) file creation, Creating

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web pages (HTML files) ,overview Document properties, Searching for files, Working with multiple files, Version control ,Find and Replace, Some tips for find and replace Attributes, Formats, Regular expressions, Similarity search, Search for styles ,Grammar checking etc. [10] Although Libre Office and. Open Office share common roots. At the feature level, the two products remain much the same. Libre Office looks a bit more polished, offering little extras such as a more robust status bar at the bottom of the application screen, facility of embedding fonts.in documents, and support for the Office Open XML Text (.docx) format. [11] Govt. of India has established resource centre for free and open source softwares and Various softwares can be downloaded from website of National Resource Centre for FOSS.

Step 4 : Feedback from Indian Users :

Feedback collected from users on factors mentioned in [1] Framework for OSS adoption by NEILT, Govt of India. The data on some of various factors has been collected from users through the questionnaire and results are represented in form of charts :
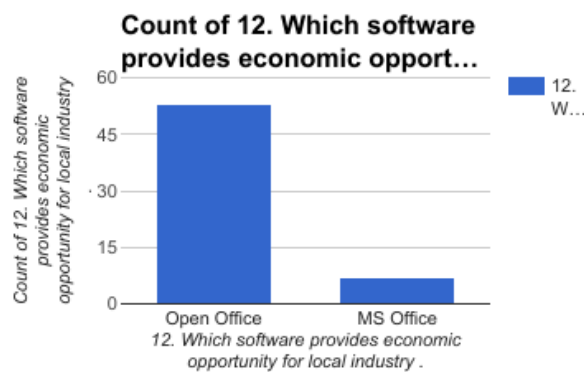

Figure 6. End users' feedback for economic oppurtunities for local industry
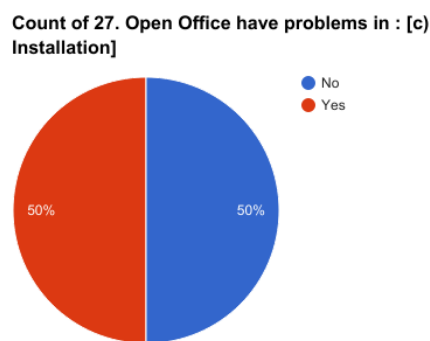

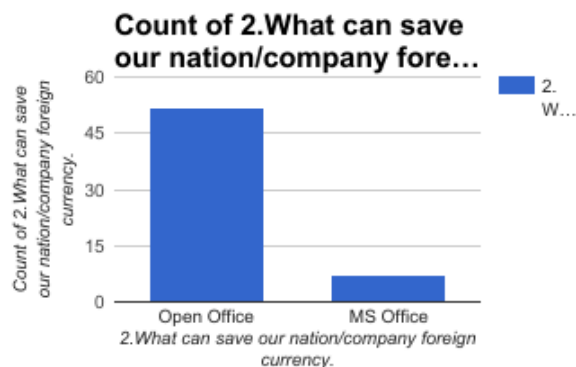Figure 7. End users' feedback for installation problems in open office packages

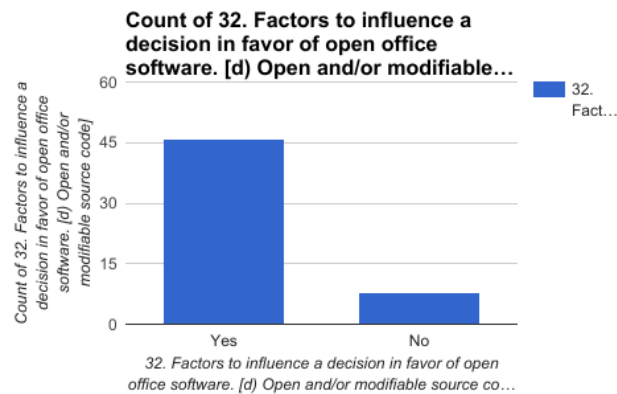Figure 8 End users' feedback for saving foreign currency

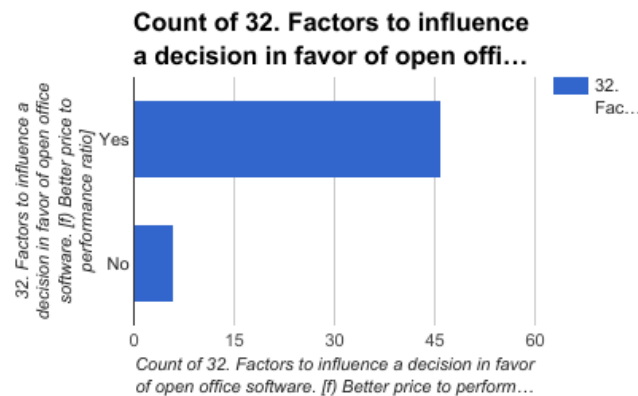Figure 9. End users' feedback on is openness and modifiability an influencing factor for FOSS adoption

Figure 10. End users' feedback on price to performance ratio of softwares

III. Conclusion

From the outputs of Phase 1 to phase 4 of the above mentioned flowchart it is easy to conclude that Libre office/open office can be used as an alternative to MS Office especially in India. There may be many shortcomings in Libre office / open office in comparison to MS office but if computer users use it and provide the feedback to right people development end then it may be improved.

IV. References

[1] Framework for adoption of open source software in e-governance systems Version 1.0 department of electronics and information technology ministry of communications and information technology government of India New Delhi- April 2015

[2] S.K. Saini ,"Use of free/open source software by indian organisations – a preliminary study and its findings" , Ph.D. thesis submitted in 2013

[3] BOSS 4.0 manual at https://bosslinux.in/

[4] BOSS 5.0 manual at https://bosslinux.in/

[5] BOSS GNU/Linux User Manual Version 6.08 at https://bosslinux.in/ LibreOffice

[6] Syed Mehr Ali Shah ,"Usability assessment Method of the open source applications Case Study of OpenOffice.Org 3.0 " at School of Computing Blekinge Institute of Technology Soft Center Ronneby Sweden

[7] Martti Karjalainen Martti,"Migrating a ministry to openoffice.org ministry of justice, finland".

[8] Bruno Rossi, Barbara Russo, Paolo Zuliani, Giancarlo Succi ,"On the Transition to an Open Source Solution for Desktop Office Automation Center for Applied Software Engineering", Free University of Bolzano-Bozen Piazza Domenicani Bolzano-Bozen, Italy

[9]General Differences in Use between OpenOffice.org and Microsoft Office Version: 1.0 First edition: November 2004

[10] Robert Sheldon ,"Why to try LibreOffice vs. OpenOffice free office suites".

[11] Http://nrcfoss.org.in/

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