Migrating to LibreOffice to promote
Software and Document Freedom

LibreOffice is the leading Free Software personal productivity suite for MS Windows, MacOS X and GNU/Linux, offering six feature-rich applications for all document production and data processing needs: Writer for text, Calc for spreadsheets, Impress for presentations, Draw for drawings, Base for databases, and Math for mathematical annotations.

LibreOffice is designed to address any personal productivity need, whether the user is an individual or an organization. The software is deployed on millions of PCs, including those of the French government, many regions, provinces and cities all over Europe - including the city of Munich in Germany - and many other organizations like the hospital system of Copenhagen in Denmark.

LibreOffice adopts the ISO standard Open Document Format (ODF), recognized by governments and organizations worldwide - including NATO - and based on true open standards, as the default format for all office documents. ODF files can easily be recognized by the filename extension: .odt for texts, .ods for spreadsheets, .odp for presentations, .odg for drawings, .odb for databases and .odf for mathematical formulas.

LibreOffice allows to save documents in the so called "Hybrid PDF" format, which is a standard PDF file which embeds a fully editable ODF document. These documents can be opened by LibreOffice users as normal ODF documents, and by other users as plain PDF files (the recipients will get perfect formatting when reading-only, but still can edit the document in LibreOffice if necessary). This represents a significant improvement in document interoperability, which is impossible to obtain with proprietary solutions.

LibreOffice provides shortcuts to send documents as e-mail attachments in all available formats: ODF, PDF (including Hybrid) and MS Office formats, including legacy ones.

LibreOffice installs only free fonts, which are designed to be compatible with every operating system and therefore able to further increase interoperability by helping to maintain the same layout even if the document is accessed on a different operating system from the one used to create it.

Migrating to LibreOffice

The office suite is an integral component of any workflow, either personal or organizational, and as such is essential for the productivity of most personal computer users. Switching to LibreOffice is very easy at personal level, while migrating to LibreOffice might be a complex endeavor for organizations because of the underlying problems represented by the resistance to change inherent in group dynamics, and by the integration of the office suite in the IT infrastructure, encompassing third party proprietary software, document templates and macros.

On the other hand, the migration to LibreOffice represents an excellent opportunity to rethink the organization's processes. For example, before migrating any existing Visual

Basic macros, it is better to determine if the macros are still needed, in order to discard those that are no longer useful and re-engineer the remaining ones. The same applies to document templates, and to proprietary plugins.

LibreOffice 4.0 has significantly reduced the need of these plug-ins thanks to a native implementation of CMIS (Content Management Interoperability Services), an open standard that allows the user to access, read and modify documents in content management systems such as MS SharePoint, IBM FileNet, Alfresco and Nuxeo directly from LibreOffice.

Starting the migration process

Once the analysis of the third party applications, templates and macros to migrate has been completed, it is possible to start the process by implementing a pilot project. The pilot project is supposed to help in finding all the problems that could affect the migration and ensure that the document workflow and the interoperability work as intended. Although LibreOffice is, to a very large extent, compatible with MS Office, it is a different application with specific strengths and drawbacks, and might trigger specific workflow and interoperability issues.

The participants to the pilot should be a representative group of the entire organization workflow, and should be trained on LibreOffice, or have access to trained personnel.

The Document Foundation is aiming to provide a list of individuals with a significant experience in successful migrations to LibreOffice, who run professional services in the areas of project management, development, training and support. Using professional services is a key factor for the success of any large deployment of LibreOffice inside an organization. In addition, it helps to secure economic resources for further development of the software.

The pilot project has a few key objectives:

- Spotting critical documents, templates and macros: a good deal of the existing documents, templates and macros might not be in use, or will have outlived their usefulness after your move to LibreOffice. Documents and templates that are still in use should be converted to the standard ODF format, while macros should be re-created using the appropriate technology.

- Creating an inventory of document (single/multiple) round trip work flows with third parties, which have a direct impact on the organization internal production process. The updated work flow - including, if possible, new improved standard document formats - should be checked with the third party for consistency, and explained to all users involved.

- Creating an inventory of tools and MS Office dependent applications, especially in CRM and ERP environments. These applications need to be identified and checked for compatibility with LibreOffice, as the new features might offer an alternative solution (such as CMIS connectivity). Questionnaires given to team leads or group

managers can be used to get a better insight into how the business solutions interact with MS Office.

To minimize support calls and maximize productivity from the start, it is highly advisable to prepare a "welcome" package for users, with supplementary information about LibreOffice, highlighting the basic functionality of the software and the few specific functional differences compared to MS Office.

Switching to open document standards

It is important to switch immediately to the standard ODF format for all documents, and resort to legacy or current MS Office document formats only to exchange files with users of the proprietary office suite. File sharing is a crucial issue, because it is essential to be able to develop and exchange information effectively. Using ODF as the default document format helps organizations in establishing a repository for all information assets guaranteed against obsolescence and vendor lock-in.

It is highly recommended to install LibreOffice for all the users, and let the MS Office installed only for the users that have special needs fulfilled only by MS Office.

MS Office is able to read and write ODF format since version 2007, although with several important exceptions, especially in the case of spreadsheets, up to version 2013, which is supporting the reference implementation of ODF 1.2. Also, if the other party does not have LibreOffice and only needs to read or print the document, this can be exchanged in PDF format, either read-only for the final versions, or the Hybrid PDF that can be further edited in LibreOffice without loss of formatting or information.

Deciding the interoperability format for each document might be seen as an unnecessary nuisance for the average user, but is a key factor for liberating both the user itself and the organization from the constraints of proprietary formats that perpetuate the lock-in. Users and organizations should always remember that closed document formats are limiting not only their freedom but also the ownership of their information assets.

Identifying "technology leaders" within the organization

Once the pilot project and the migration to ODF are in place, it is the right time to identify "technology leaders" within the organization: they are the individuals who are recognized by their peers for their tech competence. For instance, they are the ones who are asked about the latest and greatest smartphone or PC to buy, and about the most recent applications to use.

"Technology leaders" will have a key role in the migration process, as they will become the LibreOffice evangelists and act as the first contact point for providing simple support to users. The role and efforts of the "technology leaders" should be recognized, supported and encouraged through appropriate incentives by the organization management.

The "technology leaders" should be invited to a small number of LibreOffice briefing sessions together with the senior and middle management, and the IT Support team .

The briefings are intended to achieve the required buy in of LibreOffice and motivate the decision makers and the opinion leaders about the migration process.

Once the key stakeholders are convinced, they will be able to inform their staff about the migration process and to encourage them to adopt LibreOffice as early as possible after the training and the installation.

The mix of senior management, middle managers, and "technology leaders" will help to penetrate into the different layers of the organization. The group will meet regularly during all the stages of the migration process, to share the different experiences and identify solutions to common issues.

Providing training and support

An advanced training on LibreOffice - including characteristics, advantages, features, peculiarities, and main differences with MS Office - is a fundamental step for any migration project. Training, at different levels, should be provided to IT personnel, trainers, "technology leaders", middle and upper management, and all end users.

Another objective of the training process is to make users aware of the rationale and objectives of the migration project, so that it is not perceived as a mere solution to budget related issues. Migrating to LibreOffice offers the opportunity of adopting an open and standard format, intended to protect the freedom of each individual's creative work and prevent vendor lock-in.

Users, including middle and upper managers, should be segmented according to their technical skills, training needs and organizational units. These groups form the basis for planning the implementation phase of the migration, so that the transition takes place in homogeneous steps to avoid fragmentation.

The Document Foundation is working to provide a reference program for training, and the list of the certified trainers. The availability of certified trainers is another important step for the development of a LibreOffice ecosystem capable of providing all the necessary value added services to organizations willing to deploy LibreOffice or to migrate from MS Office to LibreOffice.

In order to assist users, the entire support team will work together to compile a list of Frequently Asked Questions (FAQ) as a quick reference for future needs. These FAQ, together will all the documents used during the migration process - especially presentations and manuals - should be published online onto the organization's website, for easy access and retrieval.

Training is crucial for the development of a tech support team. When the "technology leaders" - who often provide the first hand support to colleagues - will not be able to provide an answer to issues arising within their department, the problem should always be escalated to Level 1 support and if necessary to Level 2 support.

Level 1 and Level 2 support team can be either internal or external, or a mix of the two, according to the stage of the migration to LibreOffice.

Level 3 support

When everything else fails, and the Level 1 and 2 support comes to conclusion that a problem is not on the user's side, it is necessary to have access to Level 3 support that can fix behavior of LibreOffice. The LibreOffice ecosystem provides third level certified support via developers who are able to identify and solve technical issues related to missing or partially implemented features, bugs or regressions.

It is important to understand that any improvement to the code done by the certified developers will be contributed back to LibreOffice in order to be shared with all the users of the office suite, and will have a positive impact on the entire ecosystem.

Deploying in a large organization without Level 3 support is extremely risky, and may lead to failure of the entire project. With the Level 3 support in place, the organization can be sure that any problem they might face will be solved in timely manner – something that is impossible to achieve when using only community forums, mailing lists, or bug tracking system.

Deploying LibreOffice on every personal computer

The deployment of LibreOffice on every personal computer, including those users who have been authorized to keep on using MS Office for specific technical reasons, needs to be planned in advance and should be coordinated with the training schedule, in order to ensure that users will be able to use the software immediately after the first training session.

The deployment method can be identified and selected based on the characteristics of the organization's IT infrastructure. LibreOffice can be mass deployed inside a large organization using the appropriate systems management software on all major platforms, or (on Windows) by tweaking the .msi package with the help of a MSI editor such as InstEd or Orca, and then by creating a Group Policy Object (GPO) to distribute the software package.

The users who will be allowed to keep an installation of MS Office together with the installation of LibreOffice should be made aware of specific interoperability needs (avoid C* fonts in the documents, etc.)

Lessons learned from past successful migrations to LibreOffice

LibreOffice feature set is more than adequate for the everyday needs of the majority of the users inside organizations of any size. In general, the few technical obstacles are related to spreadsheets using advanced features or to MS Office macros, which are often difficult to migrate for a number of reasons.

Users should be able to produce documents using LibreOffice right after the training: therefore, it is crucial to complete the set up and the test of the workstations before the training begins, as any delay in the installation of LibreOffice will diminish the effect of the training itself. It is also extremely important to offer a reference point for any

problem connected to the migration, starting from "technology leaders" up to trained support personnel.

The production of the first few documents will create a lasting perception about the quality of LibreOffice in the mind of the users: a smooth process will motivate them to continue and try more advanced features, while stumbling into a problem - even a trivial one - will discourage them and leave a negative feeling.

The biggest problem, then, is the resistance to change, which is a side effect of the introduction of a new technology in any large organization (and not specifically related to LibreOffice as such). This it often seen as a burden, in addition to everyday's work, and has to be tackled with a carefully crafted communication strategy. Users have to be persuaded that the new tools, after some training, can provide a better and more rewarding user experience.

Typical reasons for resistance to change are:

• The fear of the unknown, which triggers the fear of not being good enough to deal with the new technology;

• The perception that the change is being imposed by the top management, which is not using the new tool to the same extent of middle managers and employees;

• A poor communication strategy: when it comes to a change management process there's no such thing as too much communication;

• A change of the routine, which translated into a change - or perceived reduction - of the user's comfort zone;

• A low trust in the organization's, management's or personal capability to competently manage the change;

• A misunderstanding about the need for a change, especially from those who strongly believe that the current way of doing things works well... and has been for twenty years!

• A change in the status quo, which triggers the perception that at the end of the process one's situation will be worse than before (because the change favors another group, such as younger people in the case of old loyal employees).

Of course, the "brute force" method - which consists in installing LibreOffice and eradicating MS Office without any previous warning - is the worst of all choices, as it creates a rejection effect which kills any hope of success.

A focused communication strategy

In order to reduce the impact on the organization of the migration from MS Office to LibreOffice, it is extremely important to communicate to all stakeholders - first of all, to all office suite users - the reasons behind such a large organizational change. In fact, although the two office suites are almost identical on a feature-by-feature basis, users do

not understand why they have to change habits rooted in years of work, which have often become automatic.

The suggested approach should include the following messages:

- Outline of the migration process and rationale;

- Short introduction to LibreOffice and Free Software basic concepts;

- Migration project schedule, with a summary of the different steps directly involving users;

- Request for collaboration, by contributing documents/applications/work flows which are critical for each user productivity;

- Outline of the training schedule, and of additional training opportunities;

- Outline of the new support infrastructure in place after the training and at the end of the migration process;

- Request for feedback during the entire process, and summary of the mechanism for managing the feedback.

A carefully crafted change management communication plans should be targeted to the different constituencies likely to receive the message, which are represented not only by functional units inside the organizational chart, but also by the different types of people within those functional units.

The different types of people are captured by the categories of change adopters, which have been adapted to modern marketing plans: innovators, early adopters, early majority, late majority and laggards (or conservative traditionalists).

Innovators are the people who by nature always want to try new things, and will be at the front of any migration process to a new or different technology. Although they are just 2,5% of the total, they try a lot of things that never make it, but they always are up for something new: they are the people who want the change to be made even before the management decides for it.

The early adopters are the typical opinion leaders, and are the people that others want to check with to see if a change is worth doing. They are not as adventurous as innovators, but will typically be keeping track of what things are new to see what might be worthwhile, as they see change under a positive light.

Early adopters can be anywhere, regardless of title or position. Any change communication plan should begins by targeting these people, because their influence is essential and their resistance will make any change efforts futile. Early adopters are about 13,5% of any population.

The early majority is a bit more conservative than the early adopters, and adopts new ideas just before the average member of any group does, but don't tend to keep track of

things that might be new and exciting. They take longer to believe in a new change, and will follow change with "deliberate willingness" but won't lead it. They make up about 34% of any population.

The early majority won't move to accept change without the encouragement and the leadership of the early adopters. They will take more time and attention to win over in comparison with any other group, and this is the single point where most communication change campaigns will stand or fall, in winning these people over.

The late majority goes along with a change not out of belief but out of necessity, or because they see the change as inevitable. They make up another 34% of the entire population, and are most concerned about preserving the best elements of the old way. You can only get them once you have won over the early adopters and the early majority group members.

The laggards or conservative traditionalists will always like the old way better. They make up the last 16% of the population, and they could even make a show of compliance when everyone else is on board, but still resist the change in subtle and hidden ways.

Using these strategies to create a change management communications plan can make the job a lot easier and more effective. Too many change management projects fail because management loses its focus and begins to concentrate on skeptics and critics before building momentum with more natural allies.

Getting LibreOffice

LibreOffice 4.0 is available for download from: http://www.libreoffice.org/download/. Extensions are available from: http://extensions.libreoffice.org/extension-center.

LibreOffice is developed by The Document Foundation, a not for profit independent Free Software project which was launched in late September 2010, based on ten years of history of OpenOffice.org. Further information are available on the website: http://www.documentfoundation.org.

LibreOffice users, free software advocates and community members can support The Document Foundation with a donation at http://donate.libreoffice.org. Money collected will be used to grow the infrastructure, and support marketing activities to increase the awareness of the project.