

Increase Uptake of Core Business Technology

Software Metering as Part of a Robust Implementation Program

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This scenario is part of corporate legend: a company decides to switch to a new core business technology, one that will affect a significant part of their organization and will be used to affect key business outcomes. Key elements are in place; senior management is on-board with the switch; the IT department has a plan to implement the needed infrastructure change, data migration, and a training program. Senior management has decided that the switch is an optional one, meaning that various organizational units will decide whether to migrate to the new system or not. Yet, even with senior management's visible support, the adoption process is slow and agonizing, acting much like a root canal on the company. Management is surprised it takes so long for the technology to be adopted. Switching is more painful for the organizational units than expected and the loss of productivity is shocking.

When making the decision to switch, companies often consider factors such as data conversion, license costs, features/functionality, usability, required infrastructure change, and support costs. However, the decision to implement new technology that is core to business performance usually ignores or underestimates the cost of loss of productivity caused by switching (1). Too little emphasis is placed on the work needed to motivate the organization to change, and to move users from a level of *incompetency* with a new tool to *competence*, and some to the expert level. This lack of emphasis results in low adoption rates, low usage, and higher organizational costs from productivity loss.

An important way to improve the rate of new core business technology uptake and aid in reducing productivity loss during transition is through a holistic technology deployment or adoption program including software application monitoring. An effective program will continuously monitor software license usage, both to document overall program success metrics and to optimize uptake by making any necessary deployment/adoption program changes along the way.

Holistic Implementation Programs

Once a purchase decision is made on a core business technology, a company must decide how it will be implemented to the target user community. The least effective implementation strategy is to address only IT and data management requirements, leaving users to organically adopt the new technology with minimal training. Putting in place a holistic implementation program will improve the odds that the technology will be effectively implemented. A holistic implementation program is one in which infrastructure, data management, organizational, and behavioral aspects of technology change management are consciously designed, implemented and program-managed. The program has stagegates and clearly defined metrics for each stage, as well as for the overall program. A focus of this type of program is on building a user community with application champions to promote and mentor others. A strong user community will minimize productivity loss and improve business performance through the effective use of the new core business technology. There are two distinct strategies for holistic implementation programs:

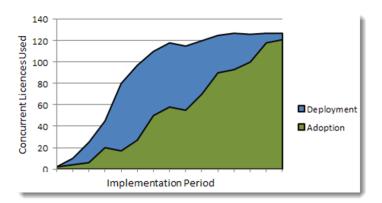


Deployment – Require the target user base to use the new technology by a set date. Deployment is most effective in organizations with a strong command and control culture and centralized IT functions.

Adoption – Each user or organizational unit has the option to use the new technology or not. There may be recommendations from top management to use it, however there is a choice to use the new technology or continue with their current tool. Adoption programs are very common in less autocratic organizations or those with decentralized IT functions.

There are some technology implementations that must be deployed and not simply adopted because of their enterprise-wide effects on the organization. Examples of these are a new finance system or a new HR management program. Other core business applications may impact only limited parts of the organization. In these cases, a company may defer to their overall IT strategy on whether to choose to implement via deployment or adoption.

Whether the implementation is achieved through deployment or adoption, each strategy can be successful. In both scenarios, the perceived value of the necessary functionality added must be identified and communicated throughout the affected organization. Typically, adoption programs have slower user adoption rates because of the nature of organic growth; however, an effective, well-managed adoption program can have user adoption rates approaching typical deployment programs. One key component to success for both strategies is in how the user community network is built and managed.



In a deployment program, a user community network is built by the project implementation team, but grows through the development of technology champions within the community. The technology champions are trained and their projects are migrated to the new system at the beginning of the implementation. Training or support staff will mentor the champions first to ensure the champions have learned to use the technology at a competent or expert level. The champions then will be engaged within the user community network to provide knowledge and expertise from a user perspective to others, to help them learn the new system.

In an adoption program, the new core business technology has to be "sold" to each organizational unit or individual. In developing the implementation program, the originating purchasing unit will likely begin forming the user community network. Champions might not be identified early on, but probably will self-select, and will spread the word about the technology's value through the developing network.



License Usage Metrics

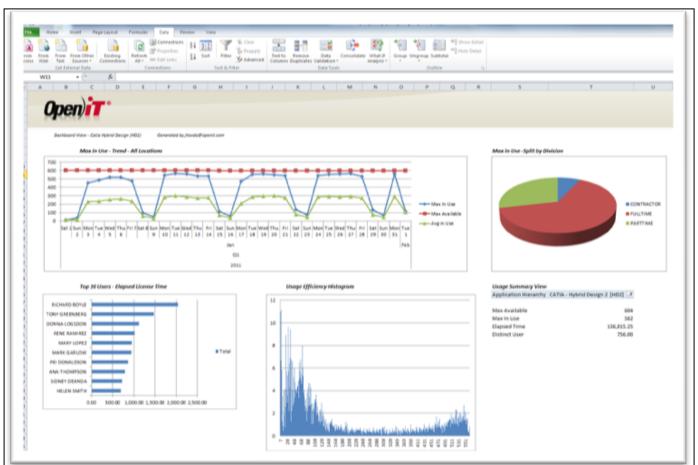
Before any core business implementation begins, top management must decide which implementation approach best fits the organization's culture and the requirements of the technology. Management must also agree upon the success criteria not only for the implementation of the new technology (program performance), but also for its impact on the organization (business performance). These key performance indicators (KPIs) will need to be measured throughout the implementation process. License and application usage metrics are critical to support program performance KPIs and may include measures such as:

- Total License Usage per Product, Feature Version, Location, Total Active Time (Elapsed time) and Number of Unique Users
- Concurrent License Usage (Maximum, Minimum or Average) per Product, Feature Versions, Feature Name, as well as Available Licenses at any one time
- Trend License Usage per Application (target growth rate per product, feature etc.)
- Compare Active vs. Inactive Usage per Application

Continuously monitoring license usage throughout the program, not just at the beginning and the end, will give the implementation team a real-time dashboard on which to see how well the program is progressing. Using a dashboard, the implementation team will be able to see if there are problems with uptake and will be able to address them immediately. The dashboard becomes a way to monitor the health of the program.

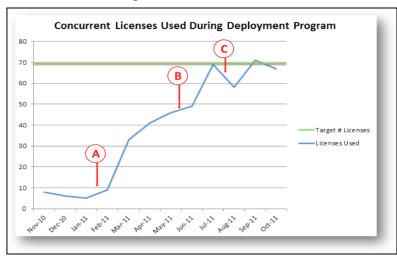
To illustrate this: A dashboard should profile both the targeted application (e.g. trends in usage over time, maximum and average usage compared to what is available) and the user-community that is deploying/adopting this new application (e.g. user name sorted by total hours active on the application). This information will give insight into who are the product champions and late adopters. More graphs can be added to give additional understanding of how an application is being used by location or business unit and the total distribution of usage: how often licenses are checked out at the same time (illustrated by a histogram). Through integration with the company's HR database, the user name, location, email and phone number is available with the usage data, for easy communication with the user-community.

Illustration of a sample dashboard that profiles both the application and the user-community:





The graph below describes a specific scenario of a typical, effectively managed adoption program. The company identified a new core business technology and targeted 70 global concurrent users. Since the company's corporate culture is one that discouraged mandating new technology from a central unit, the sponsoring senior manager chose to pursue an adoption program, giving the business units permission to use the new technology while at the same time communicating its preference to make the switch to the new tool. An adoption implementation team put together a holistic plan to inform the organization about the benefits and capabilities of the tool, and included training, mentoring, IT infrastructure changes.

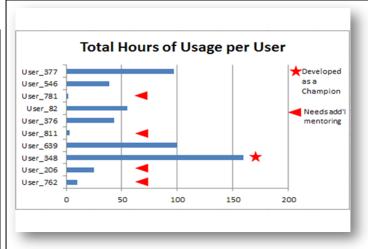


At Point 'A' in the program, the pilot project concluded and the first group of users was trained to use the new software application. Included in this first group were a couple of "power users" of the old technology who indicated a willingness to move to the new application quickly. Prior to the first training session, all data from the first group's active projects were migrated to the new application so the new users could come back from training and immediately begin working on their own datasets in the new application. Application specialists were present, ready to support and mentor the new users when they returned from training.

The user group began to develop and license usage began to grow. At Point 'B', the growth rate in usage slowed because the first champion transferred out of the organization and new champions had to be developed. The upward trajectory of the graph shows the overall effectiveness of the adoption team. At Point 'C', there was a required infrastructure upgrade, but the user community quickly recovered from the change. Ten months after the initial pilot program began the organization hit its targeted number of licenses.

Developing a strong user community helped "spread the word" about the new tool. The deployment team identified user champions by graphing total hours of usage per user (see

below) and made resources available to them to further develop their skills. The team also monitored usage of the old and new applications to identify users that were reverting to the old system to get their job done or that needed additional mentoring. The deployment team sought out those users to understand what difficulties they may be having and then worked to address them. Without monitoring license usage, the team might not know if someone is having trouble with the transition to the new technology. By proactively working with those users, productivity loss during the switch was dramatically reduced.



Monitoring license usage to build a strong user community:
A strong user community lead by champions helps reduce
productivity loss during the technology switch.

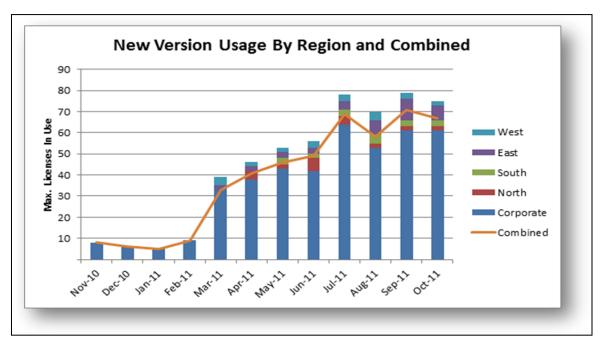
Organizational Communication

Another adoption/deployment program success factor is ensuring abundant communication throughout the organization, both upward to management and laterally to the newly developing user community as well as to the organization as a whole. Behavioral changes that accompany the technology switch are cascaded through the organization when clear expectations are articulated and then actively modeled by senior management. As the deployment or adoption program continues, consistent updates about the program's progress maintain organizational consciousness about the switch.

Continuous license monitoring of usage data and using dashboards allows for real-time reporting customized to fit the needs and interests of the various parts of the organization. Below are sample reports that can be used on a weekly basis to document progress and set new targets for training and support. In the first graph, the uptake of technology is measured by geographic distribution. In this case, the rollout began the week of February 12th in the

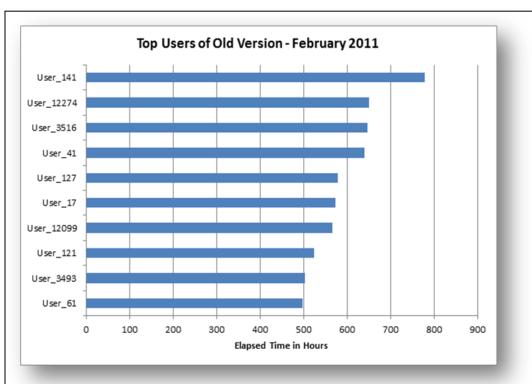
corporate group, but quickly moved to other regions through April. By midsummer, the adoption of the technology had reached its goal of 70 global concurrent licenses. Notice that

the sum of licenses used in each region was higher, close to 80 licenses (bar charts), since peak usage in each region did not happen at the same time. It is important that the metering tool can calculate true global concurrency, even if the licenses are served locally, to get a correct picture of your true global license needs.



The graph of the top users of the old version of software (to the right) was produced when the implementation program was being designed. It helped to identify which users the implementation team should focus on first to ensure their success using the new version, so that they would be active champions during the rollout.

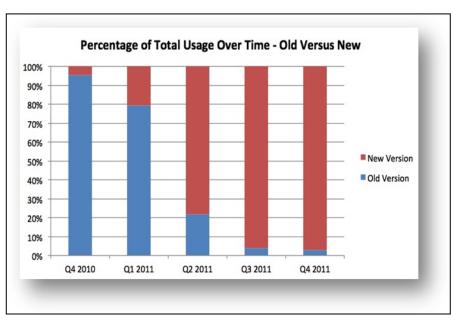
Identifying the power users and potential champions of the new version.



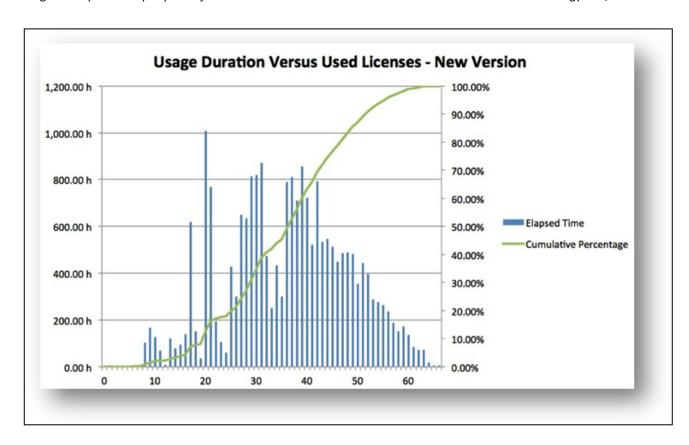
By monitoring the usage of the new version per user, the implementation team can find out quickly if "power users" of the old version accept the new version or if they experience difficulty with the new version. Actions can then be taken to address any issues, including technical and behavioral, that might arise. The result is a much more responsive implementation to the user community.

The bar chart to the right shows the conversion of the company's users from the old version to the new version throughout the year. It is a clear visual display of the success of the implementation program.

Adoption rate: By the end of Q3 the company has nearly fully embraced the new application



In the histogram below the number of hours of license usage, e.g. each bar shows how long the user community has checked out particular numbers of licenses. This graph gives the implementation team a forewarning about when the company would begin to run out of licenses and would need to purchase more. In this case, the company has used up to 70 global concurrent licenses, but the last few licenses were used very little. To further refine their understanding of their license needs, a company can also monitor active and inactive license usage, i.e. when licenses are checked out, but are not actively engaged by the user. This type of monitoring can help the company re-adjust their license counts and enable them to invest in more technology and/or additional





training resources from their vendors. These kinds of further analyses are not covered in this paper, but are offered by additional modules of the metering software.

Software application metering is commonly used in postimplementation environments as a way to manage a company's technology portfolio, but this tool is also effective when used as part of an actively managed implementation program. Implementation programs vary significantly in their effectiveness and success. Often, a new technology is offered to the organization, but with little or no process in place to ensure it is incorporated into the workflow. The lack of process will likely doom uptake of the technology. In other organizations, an adoption program (voluntary uptake) or a deployment program (required uptake) is used to implement new technology, but even these programs need to be actively managed, with processes that facilitate the necessary changes in behavior, workflow, infrastructure, and information management. Without a well-organized and managed implementation program, significant loss of organizational productivity will likely occur.

Metering software applications during an implementation is an extremely effective way to monitor the program's effectiveness. It can be used to measure program KPIs and most importantly, to reduce the loss of productivity when switching core business technologies by giving the implementation team a real-time window to manage the program.

References

Lieberman, Jerry, and R. Mauro. April 2011, "Technology Selection Decision: With the Shoe on the Other Foot", DAAG 2011 Conference

ITAM - More than 1s and 0s

Highlighted Speaker



Signe M. Stenseth SVP OpeniT

Support Cost Optimization and Technology Uptake for your Enterprise with Software Usage Metering

Signe Marie Stenseth is Senior Vice President of Open iT., a software company dedicated to help organizations meter, analyze and optimize their IT assets.

Signe has been with Open iT for over 10 years, and has also served on the Board of Directors of the company. She has a varied professional background; working as an advisor to the Norwegian Government, for the EU Commission in Brussels, Belgium, in addition to positions in finance for Norsk Hydro – an industrial conglomerate. She holds an MBA from The Norwegian School of Economics and Business Administration with additional studies in economics from University of Mannheim, Germany, and College of Europe, Belgium.



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