**Background**

The evolving hybrid cloud environment presents huge opportunities to enterprises, but at the same time poses significant organizational challenges. While new cloud based solutions such as SalesForce and Google Apps bear significant benefits of increased productivity, collaboration and reduced costs, considerable efforts are involved in the transition to such services; and while phenomena like BYOD (bring your own device) and mobile computing also serve as a strong driver to move to the cloud, CIOs still feel that they are lacking vital information, tools and methodologies that will enable them to make informed decisions, plan the migration, effectively manage the transition and slash excessive software license budgets.

SoftWatch CloudIT Assessment Service is an application analytics tool designed to help executives in their decision making and planning processes. It provides essential information about the real usage of the different business applications within the enterprise. By uncovering the real usage of applications, IT executives get better insights to their users’ needs, understand the economics involved and are able to make informed decisions regarding moving to cloud based solutions and optimizing their investments in software applications.

In the past two years SoftWatch CloudIT Assessment Service was embraced by dozens of companies and helped them assess their MS Office usage patterns and make decisions regarding the possibility to move to Google Apps, as well as rightsize their MS Office licenses investments.

The purpose of this study is to present a benchmark of MS Office applications usage based on the information collected. While this information cannot serve a specific decision, it provides insights and visibility that should enhance decision making regarding the transition to cloud based solutions and software license optimization.

**SoftWatch CloudIT Assessment Service**

SoftWatch CloudIT Assessment Service helps companies manage the move to cloud based solutions (e.g. Google Apps) delivering the data needed to make more informed, more confident transition decisions.

The service helps organizations to profile their users’ Microsoft application usage in order to:

- Understand the real usage of each MS Office application and assess the real magnitude of change in moving to the cloud
- Assess the potential cost savings by transitioning to the cloud and reducing their on-premise Microsoft Office usage
- Identify users and departments with limited creation or editing of Microsoft Office documents who can rather easily be migrated to the cloud
- Identify users who only view documents, whose needs will be met with free viewer licenses
- Identify inactive users of Microsoft Office, whose software can be removed to reduce license costs
User segmentation as described below is made possible thanks to SoftWatch’s unique patent pending IP that enables the detection of three distinct application usage activities: Opening an application, focusing (viewing) on the application and editing inside the application.

**Methodology**

The assessment analysis is based on the following segmentation of users:

1. **Inactive Users** – users who have the application installed on their device but didn’t open it
2. **Viewers** – users who view documents/presentations/spreadsheets/emails but didn’t perform any editing activities
3. **Light Editors** – users who do some light editing

   *The accumulation of the above segments are considered as Light Users*

4. **Heavy Users** – users who do substantial editing

The distinction between Light Editors and Heavy Users is done by setting a time threshold representing the average daily amount of time a user is editing a document/email. Thus, a user is defined as a Heavy User when the aggregated editing time throughout the assessment period divided by the number of days exceeds the daily threshold. The underlying assumption is that the less time you use the application, the lower the probability of using advanced editing capabilities. The threshold is configurable, thus allowing the organization to decide its own policy, being conservative or bold. Setting a low threshold will yield a high number of Heavy Users, where in the extreme case of 0 there will be no Light Editors and all the editors will be identified as Heavy Users. Setting high value to the threshold will yield a higher number of Light Users, representing a more aggressive, bold risk taking approach.

The analysis presented herein is done with three different values of the threshold:

- 5 minutes per day for Word and PPT, 8 minutes per day for Excel – should be considered as a very conservative policy
- 12 minutes per day for Word and PPT, 18 minutes per day for Excel - this is SoftWatch’s recommended threshold
- 18 minutes per day for Word and PPT, 24 minutes per day for Excel – should be considered as an aggressive approach

The use of a higher threshold for Excel is derived from the fact that it takes considerably more time to create complex Excel sheets vs. the time it takes to create complex Word documents or complex PPT presentations. Also, the nature of using Excel is less intuitive and therefore more time consuming.

While it is obvious that moving Inactive Users and Viewers to cloud based solution is rather easy, the decision regarding moving Light Editors is less trivial. One can argue that some users may use advanced editing capabilities even in a relatively short period of time. While this may be true it is still a marginal phenomenon. Moreover, the
opposite is also true: one can use the application extensively by using basic functions only. We argue that for the sake of understanding the magnitude of change for the entire organization these marginal cases are immaterial.

The usage metrics are collected for each company and the benchmark results are generated through calculating the average usage of all the companies participated in the study. No weight is applied to the company when calculating the average number. Thus, companies with 500 seats (which are the smallest in this study) have the same impact on the outcome as companies with 10,000 seats. The question which is being addressed by this study is "what is the average usage of MS Office Applications in companies above 500 seats?".

**Benchmark Population**

The benchmark is based on data collected from 148,500 users over a period of 3 months, in 51 companies, representing an average size of 2900 users per company.

The companies are from different regions: North and Central America, UK, Western Europe, Israel, ANZI, and APAC. Some companies are large global companies. The largest company has 11,000 users and the smallest has 500 users.

The companies belong to different industries: Finance, Telecommunications, Retail, Manufacturing, Media, Healthcare, Food industry, Government agencies and others.

The analysis was done on all windows based machines: desktops, laptops, Terminal servers and Citrix. Apple computers were not included in this study.

The analysis is done on the three main components of the MS Office package: PowerPoint, Word and Excel. Please note that Outlook, which is commonly used by all users, is excluded from the user segmentation analysis.

**Key Findings**

The following tables present the major findings of the study.

1) Average daily interactive use by employee

<table>
<thead>
<tr>
<th>Application</th>
<th>Daily time spent (Minutes)</th>
<th>Time spent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlook</td>
<td>33</td>
<td>68</td>
</tr>
<tr>
<td>PowerPoint</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Word</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Excel</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100</td>
</tr>
</tbody>
</table>
2) User Segmentation: threshold=12 minutes/day for Word and PPT, 18 minutes/day for Excel

<table>
<thead>
<tr>
<th>Application</th>
<th>Heavy Users (%)</th>
<th>Light Users (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerPoint</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td>Word</td>
<td>9</td>
<td>91</td>
</tr>
<tr>
<td>Excel</td>
<td>19</td>
<td>81</td>
</tr>
</tbody>
</table>

3) Percentage of Heavy Users with 3 threshold scenarios*

<table>
<thead>
<tr>
<th>Application</th>
<th>Low TH Heavy Users (%)</th>
<th>Medium TH Heavy Users (%)</th>
<th>High TH Heavy Users (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerPoint</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Word</td>
<td>18</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Excel</td>
<td>30</td>
<td>19</td>
<td>14</td>
</tr>
</tbody>
</table>

*Low TH (very conservative): 5 minutes/day for Word and PPT, 8 minutes/day for Excel
Medium TH (recommended): 12 minutes/day for Word and PPT, 18 minutes/day for Excel
High TH (aggressive): 18 minutes/day for Word and PPT, 24 minutes for Excel

4) Segmentation of Light Users

<table>
<thead>
<tr>
<th>Application</th>
<th>Inactive Users (%)</th>
<th>Viewers (%)</th>
<th>Light Editors (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerPoint</td>
<td>52</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>Word</td>
<td>18</td>
<td>11</td>
<td>62</td>
</tr>
<tr>
<td>Excel</td>
<td>19</td>
<td>10</td>
<td>53</td>
</tr>
</tbody>
</table>

5) Additional findings:

- The percentage of users who were segmented as Light Users on all applications is 68% (with the recommended threshold).
- The number of employees who used 2 applications heavily was very small – less than 2%. The number of employees who used all the three applications heavily is virtually zero.
The information collected from companies who went through a detailed analysis by departments showed clear trends of usage: Thus, Excel is highly used in financial departments, PPT in marketing and Word in the legal department, which usually showed close to 100% of Heavy Users. Still, at this stage there isn’t enough data to present benchmark figures regarding departmental usage.

The results did not reveal significant variations across industries or geographies. However, the sample is not big enough to draw a decisive conclusion at this point.

**Observations and conclusions**

When examining the data, a clear observation is that the overall usage of the different applications is relatively low. This is extremely true with PowerPoint which is hardly being used. From our engagements with customers we have found that in most cases, the usage levels were far below what they perceived before using the service. As a general statement, these results indicate that at least 80% of Office users can move to alternative cloud based solutions.

The fact that 68% of the users don’t use any application heavily lead to a conclusion that this population can be moved to alternative cloud based solutions rather easily and their Office licenses should be decommissioned. Specifically, the Inactive and Viewers populations which accounts for 29% in Excel and Word and 70%(!) in PowerPoint. It’s safe to say that these populations are the low hanging fruit for that matter.

The sensitivity analysis of using different thresholds shows that the segmentation, although impacted, does not change the overall picture which still shows a relatively small percentage of Heavy Users, even with an aggressive threshold.

It should be noted that Excel is, in general, the most popular application with a considerable higher usage metrics than Word. This may call for further investigation. However, one of the reasons for the high use of Excel is attributed to corporate applications that integrate with Excel or export data to Excel (e.g. ERP systems).

The low usage levels and the fact that many employees mainly use one application should draw the attention to the excessive investment in MS Office licenses. While Microsoft did a smart marketing move by bundling Office applications into one package, the study shows that the actual need, in most cases, is for standalone applications.

Now, that an alternative to MS Office is emerging, we believe that enterprises should consider this alternative seriously as the magnitude of change in transitioning to the cloud is less than perceived and the ROI is high. It should be emphasized though, that this is not a recommendation to move to Google Apps as there are other considerations involved when making such a decision.

To summarize, the two main conclusions from this study are:
The magnitude of change when moving to cloud based solutions is less than perceived and should encourage decision makers to seriously evaluate alternative cloud based solutions.

Companies should realize significant savings on their MS Office licenses spending by renegotiating licensing agreements with Microsoft based on their real MS Office usage analysis.

**Summary**

This study shows that the 20/80 rule applies in regard to the extent of MS Office application usage. Most employees don't use advanced editing capabilities and organizations are simply wasting a lot of money on excessive licenses. SoftWatch believes that usage information will become mandatory in optimizing the evolving hybrid cloud environment. In light of the findings, decision makers should take prudent risks in building their new environment as the economical, operational and business benefits are substantial.