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Driving EUC Retirement
A White Paper on How to Identify, Eliminate and
Replace High Risk Spreadsheet EUCs

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Introduction

At the heart of our recent article and Blog Post: 'What is an EUC and Why Should You Care?', https://www.linkedin.com/feed/update/urn:li:activity:6637439513067044864, we defined first what an EUC actually is in today's world and then asked the question: '… whether it was important to understand this background on the nature of EUCs because their scope is contested amongst regulators and bankers.'
Our conclusion is that it is now more important than ever to understand the scope and impact of EUCs and in particular spreadsheet EUCs.

"Regulators have a more fluid definition of what constitutes an EUC, while bankers are more rigid in their definition. To them, an EUC is only synonymous with a spreadsheet. However, their collective understanding is beginning to shift towards the more inclusive view. While on this topic, it is worth noting that anecdotal evidence suggests that EUC policy is becoming a much higher-level issue in many organizations than before. For example, I am aware of several banks that were approached by central banking authorities such as the Fed and the ECB to discuss precisely this issue. I have also heard of auditors taking a tougher line, especially in the States, around EUC management and governance."

Executive Summary

With this in mind and given that all the available evidence is now pointing to a 'crack down' on the use of EUCs by regulators, as well as both internal and external audit groups / companies - it is inevitable that institutions will be or already are being required to comprehensively evidence what EUCs they are using, what risk they present and how they are managing and controlling that risk. At the top of the list of EUCs coming under the compliance microscope are spreadsheets!

This paper therefore will focus at a high level on the challenge of dealing with spreadsheets within a highly regulated industry and will propose a radical approach that institutions must consider as a long-term viable solution to a problem that will, if left unaddressed, continue to grow in size, complexity, and associated risk. In short, the identification, re-engineering and retirement of all High-Risk Spreadsheet EUCs

As a result, the approach provided below should be considered as an outline, a methodology framework supported by a technology platform that is designed and configured to support the re-engineering and retirement effort. This outline is provided as the basis against which detailed project management, task level and company specific detail will need to be added. But should however be considered an explanation of the fundamentals that describe how companies can undertake and sustain a comprehensive spreadsheet re-engineering and retirement program.

Or put another way - this paper will not be focusing on the actual re-engineering process itself, meaning the potential languages (R and Python for example) or the technology vendors (Caspio, Appsilon, Spreadsheet Converter et al) that would be used to replace the spreadsheet - but rather on what processes and supporting technology a company must have in place to support the conversion and retirement project and process itself.

A Couple of Notes of Caution:

Because Spreadsheets are uniquely ubiquitous and carry with them a loyalty and often an entrenched sense of personal ownership that will challenge even the most culturally robust organization – it is worth considering the following:

I. First - this is by no means an easy task and for this kind of 'transformative' project to be successful – there are at a minimum, three critical Phases that must be considered. Each phase comes with a number of pre-requisites, the details of which must be agreed and then acted upon before the individual spreadsheet retirement cycles are begun in earnest.

II. Second, given how embedded spreadsheets are operationally and how much 'personal history' users associate with them, the success or failure of the project as a whole will depend on all efforts, phases and outcomes, from project start to completion being clearly articulated, overtly sponsored and continuously supported by the most senior levels of any company embarking on this process of change.

Spreadsheet EUC Retirement Methodology
Phases and Pre-Requisites

1. **Discover, Recover, and Inventory Phase:**
   Successful retirement projects require that a company has a complete 'view' into its spreadsheet population. Further, this 'view', because the retirement cycles can be lengthy, must also be continuously updated or refreshed to take account of new spreadsheets, created during the lifetime of the 'Retirement' project.

   To this end the following three pre-requisites must be in place before the Re-Engineering Prioritization phase begins.
   I.   Every financial institution or publicly traded company will need to **'Discover'** and identify every version / copy of a spreadsheet that is either currently being used in 'Production' or is currently under Development.
   II.   In addition, the organization must also decide which spreadsheets (typically a time based 'cutoff' is agreed), that have been used in the past, and are supposedly no longer in Production. These spreadsheets will also then need to be identified (all versions / copies) and **'Recovered'.**
   III. All Discovered and Recovered spreadsheets must then need be added to an inventory that is capable of being uniquely designed and configured to monitor the process of 'Spreadsheet Retirement'.

2. **Re-Engineering Prioritization Phase**
   Once an organization is satisfied that it has discovered, recovered, and inventoried all the spreadsheets it considers relevant – it must then assess and prioritize the risk and vulnerability those spreadsheets present to the company. Prioritization assessment is essential to ensure senior management buy in and to provide a coherent, manageable and accountable project framework. However, because no company is alike, (all will have different governance policies, near term and longer-term goals based on their core business model(s)) and because every company will also have a set of on-going 'audit events' this prioritization assessment process and its associated algorithms must be configurable to the unique needs of the company and the 'retirement Plan.

   Ensuring that the Re-Engineering Prioritization Phase remains in sync with the Discover, Recover and Inventory phase the following pre-requisites must be implemented in parallel:

   I.   Before the spreadsheet discovery effort gets underway the rules / algorithms to be used to determine the level of risk a spreadsheet presents to the organization must be agreed. Implementation of these rules should be both systematic (i.e., complexity, interconnected mappings, groupings, organizational segmentation etc.) as well as heuristic, requiring users to provide data on 'impact', 'review frequency', 'business process(es)', 'ownership and review structures', 'attestation history', 'audit outcomes to name but a few of the most common examples.

II.   Once agreed these rules should be configured to the Discovery system and the system generated results automatically calculated. The resulting records should be automatically updated into the inventory system and a process in place for the appropriate user to have access to those records that require their individual input.

III.   Once complete, the combination of system and human entered data should then translate into a 'Prioritization' ranking.

This ranking score will then be used to drive the final third Phase of Spreadsheet Re-Engineering and Retirement.

3. **Spreadsheet Re-Engineering and Retirement Phase**
At the initial completion of the first two phases, the process of identifying which spreadsheets should be scheduled for immediate 'retirement' can begin.

Note: as mentioned earlier the 'view' of a company's spreadsheet population that has now been generated is not a 'static' one. In large organizations the creation of new spreadsheets and changes / copies made to existing spreadsheets will continue unabated. It is imperative therefore that this 'view' be regularly refreshed, (typically either weekly or biweekly), and any changes to the 'prioritization' assessment immediately identified and acted upon.

However, the process of identifying which spreadsheets should be retired is not just a simple matter of going through the list of prioritized spreadsheets and sequentially re-engineering and retiring those spreadsheets – but is in actuality a process composed of two key elements. Both elements are driven by the same regulatory concerns. – the ability to evidence that the spreadsheet EUCs identified as posing significant risk are being adequately monitored and controlled by the process of re-engineering itself as well evidencing that the spreadsheets that have not yet been re-engineered and retired continue to be appropriately tracked and monitored for regulatory compliance.

To that end, the following pre-requisites must be in place before the re-engineering and retirement process can begin:

I.   The ability to track and enforce the appropriate level of controls across all spreadsheets that remain 'queued' for retirement that will continue to pose a compliance risk sufficient to meet current regulatory requirements.

II.   The ability to report on and evidence compliance oversight for all prioritized spreadsheets both before and during the re-engineering and retirement process.

Conclusion

In summary, any company that is considering embarking on the process of identifying and ultimately replacing their spreadsheet population with custom 'built for purpose' applications as a way of eliminating all the inherent risk spreadsheets can present – must first consider, devise and implement a technology platform that can support this effort. For companies with hundreds or thousands of spreadsheets, the failure to deploy this critical infrastructure will very likely result in a chaotic and highly inefficient process which will ultimately lead to an expensive and unsuccessful attempt to mitigate the growing concerns of the regulators around EUC governance and control.

Moreover, unless correctly planned and supported a failure of a project as sensitive as spreadsheet retirement can only have one predictable outcome – a further entrenchment of spreadsheet usage in the organization and an inevitable increase in the number of significant audit events.