

Spreadsheets: The Most Expensive Project Portfolio Management Tool - You Didn't Pay For!

Spreadsheets are everywhere

Microsoft® estimates there are 450 million users of Excel® world-wide. And it is no wonder - the spreadsheet is a very handy tool. People use them for many purposes: from simple lists and tables to advanced calculations and graphs. They can be a great productivity enhancing tool and offer many advantages including:

- Ease of Use – Most people already know how to create spreadsheets or could learn very quickly
- Availability – Spreadsheet applications are on almost every laptop and PC, just a click away. As a result, they have become a standard form of communication between computer users.
- Flexibility – Spreadsheets allow even non-technical people to do things they never thought possible without learning a programming language
- Inexpensive Start-Up – Because spreadsheets are typically already installed on most laptops and PCs, and creating a spreadsheet can be very fast and easy, they have very low start-up costs.

For these reasons, spreadsheets are the project tracking and project portfolio management (PPM) tool of choice for many organizations – both large and small. They offer a very quick, adaptable and inexpensive way to create a project inventory list from scratch. Then it is very easy to grow the use of spreadsheets for PPM from there. We create spreadsheets of our project backlog, spreadsheets of our active projects, and spreadsheets of our finished projects. And, it doesn't stop there. We also create additional spreadsheets for our resource lists with availability projections and spreadsheets of our project plans. Some even create project scope statements and other documents in spreadsheets. So, what does it take to implement PPM on spreadsheets?

Implementing PPM on spreadsheets generally requires the creation of multiple spreadsheets. One reason for this is that the information needs for decision-making change as the project progresses through the life-cycle.

For example while the project is still in the pipeline, it is important to understand project alignment characteristics, value, the requested due date and the estimated start date. However, after the project is initiated, of greater concern are the project's health, progress and the likely finish date.

Another reason for multiple spreadsheets is that certain functions in the decision process do not lend themselves to a project list format. For example, if a scoring model is used for value assessment, this is typically done in different spreadsheet from the project lists.

Spreadsheets present a number of advantages:

- Ease of Use
- Availability
- Flexibility
- Inexpensive Start-Up

Another example is a resource availability table. This information typically needs to be viewed both by resource and by project.

The flexibility and ease of use of spreadsheets also leads to the creation of multiple personalized spreadsheets within an organization, often called the “not invented here” spreadsheet.

This is an all-too-common occurrence when people that are not satisfied with the standard spreadsheet must create their own personalized version that looks “just” like they want. The result is multiple spreadsheets with the same information and the opportunity for data inaccuracies.

The spreadsheet was not built with the idea of multi-user access. However, some of the objectives of PPM are to create visibility, communicate information and facilitate discussions. This requires the information within the PPM spreadsheets be shared, consolidated and sometimes reformatted for other purposes. As a result PPM spreadsheets are typically emailed throughout the organization. Often a great deal of manual work is required to consolidate or reformat the information. Alternatively, some organizations attempt to set up shared spreadsheets resulting in check-in and check-out requirements and user access controls that are difficult to establish and manage.

True project portfolio management also requires a governance model and controls with an integrated workflow. Having a defined process with decision points and requirements for movement from one stage to the next allows an organization to remain in control, be consistent and make improvements.

Spreadsheets were never designed to be able to implement a workflow, though there is no question that a PPM workflow could be designed and created by a spreadsheet guru. However, this is rarely done for a PPM implementation with spreadsheets, and even if it could be, is this really worth the effort and time to maintain?

“My solution is really quite cheap”

Since spreadsheets are so pervasive and inexpensive to create, they are perceived as a free solution for PPM. One blogger who created his own set of PPM spreadsheets recently commented,

“My solution is really quite cheap.” However, he goes on to say, “But, there is of course a manual overhead.” It is this “overhead” that can turn the spreadsheet from a “cheap” tool into a very expensive PPM solution.

Performance management consultant and founder of Hired Brains, Inc., Neil Raden wrote: “The benefits of spreadsheets are undeniable; however the drawbacks can be significant.”

Implementing PPM on spreadsheets typically requires:

- Multiple spreadsheets
- Emailing to facilitate communication
- Duplicate data
- Sharing and update procedures

According to Raden, people have a tendency to be more aware of upfront costs than of the ongoing maintenance costs of using spreadsheets. With regard to PPM, the problems usually start occurring when the spreadsheets grow from a personal productivity tool into a departmental solution used by multiple people. Raden goes on to state that “The ongoing effort to support a complicated system built with components that were never designed to operate in a collaborative manner is very significant.”

“Don’t worry; it is just a little chunk of ice”

Just like with the iceberg metaphor where you only see the tip, but there is a huge mass hiding under the water; there are many costs associated with spreadsheets that are not seen initially. In the end, all of those positive characteristics of spreadsheets also lead to hidden costs and risks. These costs are generated from the creation and use of multiple spreadsheets, the attempts to collaborate and share information from these spreadsheets, and the fact that spreadsheets were not designed for certain PPM functions. The resulting hidden costs include:

Wasted Time

Spreadsheet users waste hours of time trying to consolidate information from multiple spreadsheets and transferring selected information from one spreadsheet to another.

Individual users also waste time trying to perfect their own view by resizing columns and rows, justifying text and many other beautification activities that really don’t add value.

"For the University of Oklahoma Information Technology, individualized tracking of projects made managing the portfolio challenging," said Mitch Seal, a project manager for OU IT.

"Historically everyone had their own personal system for tracking projects including the use of spreadsheets. Individualized project tracking made consolidation of project information time consuming. In addition, there was no standardized central repository of project information available for timely review."

With multiple spreadsheets and duplications of data, much time is wasted in looking for and correcting inaccuracies in the data. Or worse, these inaccuracies never get corrected and create a risk to the organization.

With differing skill levels from the users of these spreadsheets, often there is time wasted for the builder of the spreadsheet to explain the intricacies of their work so others can use it. And, given the creators are constantly modifying their work, there is a constant need to explain the changes.

Inefficiencies

Inefficiencies from spreadsheets occur in multiple areas.

The preferred method of communicating information from spreadsheets is to email them to others. In some cases, this is completed instantaneously. However, in other instances, there is elapsed time between when the spreadsheet was emailed and when it was opened. This leads to delays in work and decisions. Basically, the information needed might not be available to a person when they need it.

Emailing of spreadsheets also leads to the potential for multiple versions of the same spreadsheet being updated independently and even more inefficiencies due to duplications of effort. Special reporting causes inefficiency when certain people only want to see a subset of the information in the main spreadsheets. This requires the generation of special views of the data that can be communicated to these people and even more versions of the spreadsheet.

On occasion massive PPM spreadsheets are created over time with no thought to the value of the additional data or the compounding problems in using the new creation, causing data overload. More data does not always lead to better decisions. Often it leads to paralysis or “minutia” – the focus on minutia that leads to negative inertia. Along the same lines, spreadsheets have so many neat features, we often over-analyze the information, creating new filters and generating pivot tables of data to our hearts content, almost always an inefficient use of time.

Risks

There is no doubt that the use and communication of spreadsheets can lead to higher risks for data security. With the portability of spreadsheets it is very difficult to control who has access to them both internally and externally. It is very easy to send a spreadsheet to a destination outside of an organization’s control, whether intentionally or accidentally. Having copies of the spreadsheets and data in multiple hands only compounds the potential risk. To a minor extent, there is also a potential risk of making a bad decision as a result of the data inaccuracies that often occur.

The hidden costs of spreadsheets result from the time wasted:

- Consolidating information
- Correcting inaccuracies
- Educating users on formulas and values
- Waiting for communication
- Establishing version control and sharing
- Reporting
- Over-analyzing data
- Mitigating risks

Spreadsheets are a valuable tool and a great place to start at the beginning of a PPM initiative. They are a great personal productivity tool because of their availability, ease-of-use and flexibility. And, they will always play a part in PPM for certain types of reporting and analysis. However, they are not “free” of cost and become a very expensive tool when trying to use them for a departmental PPM solution.

It does not take much of a productivity gain to justify the cost of some of the more affordable PPM solutions on the market. If your employees waste as little as one hour per day with PPM spreadsheets, the costs can be substantial. For example, let’s say you have 3 employees involved in PPM, they work an average of 200 days per year, and your hourly rate is £x. This adds up to a lot of money per year of wasted expense. You could easily get a 10 times return on your investment in an affordable PPM solution for this amount of savings.

Orbus, Inc. an industry leader in developing display and exhibit products based in Chicago, Illinois was faced with this situation. They managed their portfolio of projects and resources on a series of spreadsheets that were constantly being updated and emailed throughout the company. According to Steve Westcott, Product Development Manager for Orbus, “We wasted a lot of time waiting for spreadsheet updates, emailing them across time zones and consolidating data.” They have since implemented project portfolio management and were able to increase our productivity by 25%.”

Mitch Seal of OU IT also implemented Portfolio Intelligence for their PPM solution. Mitch said, “PPM provided the tools to consolidate all our project information into one solution and the capability to control our process.” The proliferation of spreadsheets for PPM is an indication that users have unfulfilled needs. With this, there may be resistance to a single PPM solution and the abandonment of the more familiar spreadsheet. Spreadsheets are quick and easy. Although it is difficult for any PPM solution to meet this standard, it is critical that the solution is non-complex and easy-to-learn. It is also helpful to provide familiar spreadsheet-like views and not try to over automate the process. This will just add unneeded complexity.

Organizations have implemented a sophisticated PPM tool only to see their users fall back to the more familiar spreadsheets for these reasons. If you want your PPM solution to actually be used by your organization, keep it non-complex and used as an aid for the decision-making that will increase the value delivered by your department to the organization.

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