

# Spreadsheets and ERP: Why They Are Inadequate for Government Property Management



## Introduction

The eQuip! team talks with people that work in all aspects and stages of asset management, from everyday eQuip! users to National Property Management Association members.

In one such discussion, we found that a majority of those we spoke with did not have a dedicated purpose-built system for asset management. In addition, a majority did not know where every item of Government Property was.

We were concerned that the former may actually cause the latter. We wondered if this was true, and if so, why that is.

In our research, we have found several challenges that these systems cause which may lead to insufficient asset management. In this white paper, we will outline the specific challenges that spreadsheets and ERP systems cause in asset management.

Because spreadsheets and ERP systems can cause difficulties in the asset management process, the solution is a purpose-built asset management system. Here we provide a few considerations in choosing an asset management system. These will help ensure that the challenges encountered with other systems do not occur again.



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## The Data

In January of 2016, the national CPA firm Dixon Hugh Goodman organized a webinar called “Government Property Management – the Forgotten System” with o.

Hundreds of people attended this webinar. The attendees were people involved in managing Government Property with mid- to large-sized government contractors. Their roles include:

1. CFOs, Accounting Managers
2. Government Property Managers
3. Project Managers
4. Contract Managers
5. Compliance Managers

Before this webinar, we performed a quick survey. We wanted to know how many managers had a good hold on their property, and how they kept track of it.

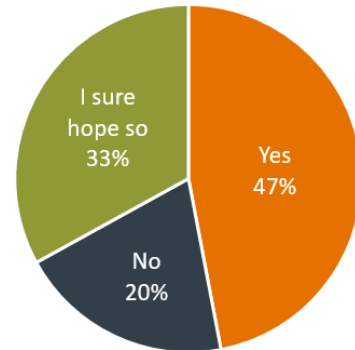
Only 47% of the participants surveyed believed they knew where every item of government property is.

Most of the audience (58%) indicated that they either used ERP asset management module or spreadsheets to manage government property. Only a quarter of them had a dedicated system to manage government property.

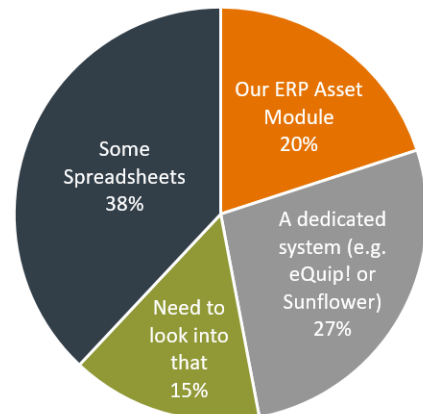
As you can see from the survey, more than 50% of the companies used spreadsheets or an ERP asset management module, and more than 50% of the companies were not convinced they have a good record of their government property.

This led us to wonder: Is there a correlation between these systems and insufficient asset records? We needed additional research to discover if there was a correlation, and if so, why.

"Do you believe you know where every item of Government Property is, with good records to show an auditor?" (n=243)



"What type of system do you use to track Government Property?" (n=243)



## Challenges in using spreadsheets and ERP systems to manage Government Property

There may be a correlation between using non-purpose-built systems to manage government property and insufficient asset records. Why might this be?

In interviews with property managers and research from Government Property resources, we have found several challenges that these systems cause which may lead to insufficient asset management. These challenges occur at all stages of the asset lifecycle and may affect many aspects of Government Property management.

Let's go through the 10 Performance Outcomes from Government Property Management System, as outlined by FAR 52.245.1, and what challenges these systems may cause for each outcome.

10 Performance Outcomes	Challenges Caused by Spreadsheet Use	Challenges Caused by ERP System Use
<b>Acquisition</b>	<ul style="list-style-type: none"> <li>Information in the Acquisition record doesn't automatically transfer to spreadsheets</li> <li>Reconciliation between Acquisition records and Property records takes more time and resources</li> </ul>	<ul style="list-style-type: none"> <li>Reconciliation between Acquisition records and Property records takes more time and resources</li> </ul>
<b>Receiving &amp; Identification</b>	<ul style="list-style-type: none"> <li>Lack of mechanism to easily track returns, generate shipping documents (e.g. DD149's) for change of custody or simply confirming the receipt</li> <li>Lack of automated mechanism to exchange/update information with the IUID registry (a DoD requirement)</li> <li>Multiple items in one PO line can't automatically be serialized upon receipt</li> <li>Asset tags/labels require manual data entry</li> </ul>	<ul style="list-style-type: none"> <li>Lack of mechanism to easily track returns, generate shipping documents (e.g. DD149's) for change of custody or simply confirming the receipt</li> <li>Lack of automated mechanism to exchange/update information with the IUID registry (a DoD requirement)</li> <li>Multiple items in one PO line can't automatically be serialized upon receipt</li> <li>Asset tags/labels require manual data entry</li> </ul>
<b>Records</b>	<ul style="list-style-type: none"> <li>Can't keep track of the entire history of the asset, and can't be searched for the history of a subset of assets</li> <li>Can't track the assembled products as linked assets, with</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to use when supporting frequent moves of assets, updates on the condition and location of assets, assigned custodian, or consumption</li> <li>While many ERP systems have a Materials module, most are not</li> </ul>

	<p>each asset having its own history and other information</p> <ul style="list-style-type: none"> <li>• Vulnerable to errors</li> </ul>	<p>optimized to manage Property through the full lifecycle</p> <ul style="list-style-type: none"> <li>• Can't track the assembled products as linked assets, with each asset having its own history</li> </ul>
<b>Physical Inventory</b>	<ul style="list-style-type: none"> <li>• Can't support "inventory by exception" transaction based inventory methods</li> <li>• Usually requires printing out a file, verifying inventory compared to the records, then updating manually later. This is time-consuming and prone to error.</li> </ul>	<ul style="list-style-type: none"> <li>• Most ERP asset management modules don't come with mobile applications for handheld computers/scanners that are used in physical inventory data verification</li> </ul>
<b>Subcontract Control</b>	<ul style="list-style-type: none"> <li>• Subcontractors are not able to have the same access to the spreadsheets as the prime</li> <li>• If the subcontractors have their own spreadsheets (typically in their own formats) this will present challenges to reconciling records</li> </ul>	<ul style="list-style-type: none"> <li>• Subcontractors are not able to have the same access to the ERP module as the prime</li> </ul>
<b>Reports</b>	<ul style="list-style-type: none"> <li>• Difficult to generate customized reports from information in spreadsheets quickly</li> </ul>	<ul style="list-style-type: none"> <li>• The reporting tool in ERP asset management modules are typically hard to use</li> <li>• The reporting tool is often not formatted to support Government Property Management report requirements</li> </ul>
<b>Relief of Stewardship</b>	<ul style="list-style-type: none"> <li>• Can't regularly monitor the loss rates, shortages, and overages for a contract</li> <li>• Lack of mechanism to retain records for recycling/retiring assets in an auditable form</li> <li>• Most spreadsheet databases have no mechanism to retain document records (e.g. scanned copies of DD1149's, DD250's, WAWF confirmations, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Most ERP system databases have no mechanism to retain document records (e.g. scanned copies of DD1149's, DD250's, WAWF confirmations, etc.)</li> </ul>
<b>Utilization</b>	<ul style="list-style-type: none"> <li>• A great deal of manual effort to track entire asset usage history</li> </ul>	<ul style="list-style-type: none"> <li>• Usually only track the beginning and end of asset lifecycle, missing many steps in between</li> </ul>
<b>Maintenance</b>	<ul style="list-style-type: none"> <li>• Can't easily track maintenance history, or schedule routine or ad hoc maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Most ERP systems lack a module to manage and track maintenance, calibration, etc.</li> </ul>

	<ul style="list-style-type: none"> <li>• Can't generate or track work orders</li> </ul>	
<b>Property Closeout</b>	<ul style="list-style-type: none"> <li>• Lack of ongoing updates and record keeping makes property closeout a challenge</li> <li>• Contract Property Closeout requires final Physical Inventory, Reports, and documentation to support Relief of Stewardship, as mentioned above</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of ongoing updates and record keeping makes property closeout a challenge</li> <li>• Contract Property Closeout requires final Physical Inventory, Reports, and documentation to support Relief of Stewardship, as mentioned above</li> </ul>

### Spreadsheets are prone to errors

According to research in human error, the [likelihood of error in any one spreadsheet cell](#) is about 3.9 percent. Because a worker may write in hundreds of cells, it's very likely they'll make a mistake.

In addition, spreadsheets can't catch these errors. You can program an Excel file to catch some mistakes, but many can slip through the cracks.

### Spreadsheets are time-intensive

For many businesses, spreadsheets are inefficient and time-consuming. In a [recent study of Excel users](#), 60 percent said they spend too much time cleaning and manipulating data. More than half surveyed spend too much time manually checking numbers every time a change is made.

Spreadsheets are especially time-intensive in enterprise asset management. Let's take physical inventory for example. With spreadsheets, the process usually involves printing out a file, verifying inventory against current records, then updating the records manually later. That's a long process for something that many managers need to conduct regularly.



### ERP Systems don't have enough functionality

Even the best ERP systems available are not typically designed to manage Government Property. They are designed and built to support financial processes and manufacturing processes. Manufacturing inputs, such as parts and materials, may support part of a Contractor's work, but will not provide the whole asset "story".

For example, ERP systems typically only track the beginning and end of asset lifecycle. This means the Contractor will not have access to a complete asset history, including asset record updates, asset moves, and asset assignment.

Even ERP systems with modules meant to support tracking of materials or assets are not designed and built to support the needs of a Government Contractor. They cannot easily

automate reporting in a format required by the Government, populate and produce transaction documentation (e.g. DD1149's, DD250's, etc.) or transmit reports (e.g. WAWF transactions) to government reporting systems.

## Choosing a Government Property Management system

A government property management system should be able to accommodate the unique needs and characteristics of a Contractor. A Contractor needs to consider some of these aspects when choosing a government property management system

### Number of assets

It's important to consider the number of assets when choosing an asset management system. If a Contractor has just 20 items to manage and track, with just a few changes in content over the course of a year or contract life, perhaps keeping records in a simple spreadsheet is adequate. Even so, care would need to be taken to be sure all transactions are carefully recorded, the data fields are complete, notes for each record include who made what changes and when etc.

However, if a Contractor has more items to manage, they will likely need a more sophisticated management solution than spreadsheets. Managing significant quantities of assets with frequent transactions using spreadsheets can become very unwieldy and prone to error.

### Type of contract work

The type of contract dictates what kinds of assets a Contractor will be working with, as well as the kind of requirements and regulations they must adhere to. For example, Contractors who work with the Department of Defense must comply with FAR and DFARS requirements.

## Government Property transactions

The types, quantities, and frequency of Government Property transactions are important to consider when choosing a Government Property Management system. The system you choose needs to be able to accommodate your common transactions. It should also make it easy to manage all GFP, regardless of quantity and type.

### Important considerations when choosing a system:

- Number of assets
- Type of contract work
- Types, quantities, and frequency of necessary transactions of Government Property



## Conclusion

There is no perfect, all-encompassing system that can fully support all enterprise resources while also adequately supporting Government Property management. The best approach is to use an enterprise asset management system that is built for that purpose, preferably one that can connect with an existing ERP system.

Government property management is a specific discipline, with its own unique requirements. It is neither very simple nor overly complex. It can be easily supported by an Enterprise Asset Management System designed and built for that purpose.

### ***Special Thanks to Alex Barenblitt for contributing to this article.***

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### ***About E-ISG Asset Intelligence***

E-ISG Asset Intelligence, as a part of Assetworks, provides out-of-box software solutions and implementation services for managing enterprise assets.