

Workflow and Asset Management Challenges in a Distributed Organization

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ABSTRACT

Increasingly Automotive OEMs and their suppliers find themselves spread across different continents. This in turn gives rise to knowledge, physical assets and key decision makers also being spread across the globe. This poses significant challenges for the companies to effectively manage and keep track of their resources. It is also challenging to work with teams spread across globe and for the team to arrive at intelligent decisions quickly and efficiently. In last few years we have spent significant amount of person hours trying to create systems and Software to help manage Workflow and Assets spread across diverse Geographic and Political areas. This paper intends to discuss some of the key factors involved such as:

- Keeping Track of Assets in a diverse and distributed Organization
- Controlling the movement of Assets
- Implementing workflow Software for change management in a distributed Organization
- Using workflow Software to manage/approve the movement of Assets
- Challenges in implementing common Workflow and Asset Management Solution in a global Organization
 - Technology/Infrastructure Challenges
 - Security Challenges
 - Organization Silos/barriers
 - Cultural Challenges
 - Language Barriers

1. INTRODUCTION

Asset Management, Decision making and Workflow pose significant challenges for all major enterprises. OEMs and their suppliers create and expand their manufacturing and technical facilities across the globe to leverage the local strengths, become competitive and gain strategic advantage. In this new landscape Asset Management and Workflow becomes more complex. This paper examines some of the key challenges observed and their solutions.

2. WHY ASSET MANAGEMENT?

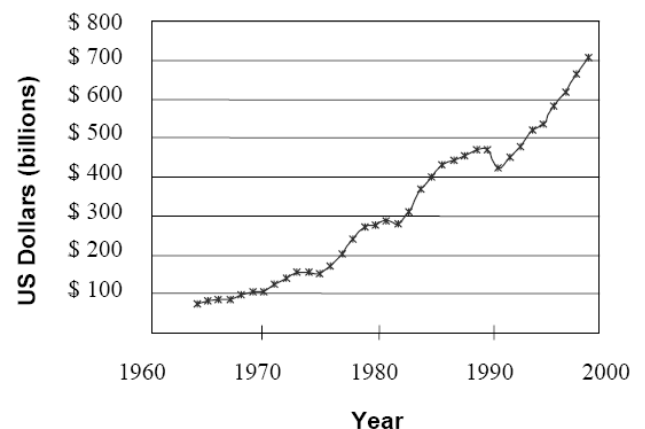


Figure 1: New Assets in USA (US Census Data)

Substantial Effort and Expenses are deployed to replace, maintain and safe guard the assets and their optimal performance.
The Effort and the Expenses are usually proportional to the value of the assets and their criticality.

Expenses = (Asset Value) X (Risk) -----(1)

Asset Management is important for optimal asset utilization. It helps us answer questions such as:
- What is the net worth of the Assets?
- Who owns these assets?
- Where are they deployed?
Using this information management can arrive at decisions such as:
How can we use them in future? What are the strategic implications of these assets? Tax liabilities and environmental guidelines vary with the type and location of Assets. Audit compliance may also require companies to have Asset Management information handy.

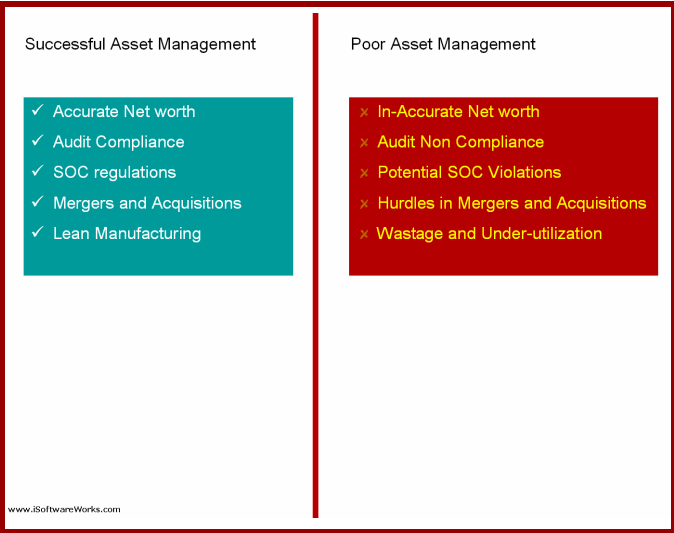


Figure 2: Advantages of Successful Asset Mgmt.

3. Asset Management Variables:

A successful Asset Management System should be able to readily identify, locate and specify the 'state information' of the Asset.

How this data is captured and stored therefore depends on the type of the Asset. Examples of various Asset types include Tools, Equipment, Designs, Drawings, Hardware, Software and Real Estate.

Important Attributes/Metadata of an Asset stored in the system is:

- 1) Asset Type/Specification
- 2) Identification Number/Smart Tag
- 3) Location
- 4) Ownership
- 5) Asset Value/ Tax Considerations /

For an Asset Management System to be successful the Meta Data is frequently updated, throughout the Asset Lifecycle.

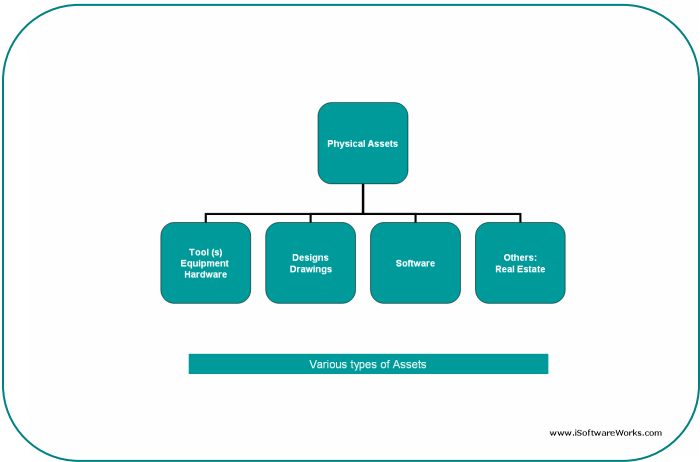


Figure 3: Types of Assets.

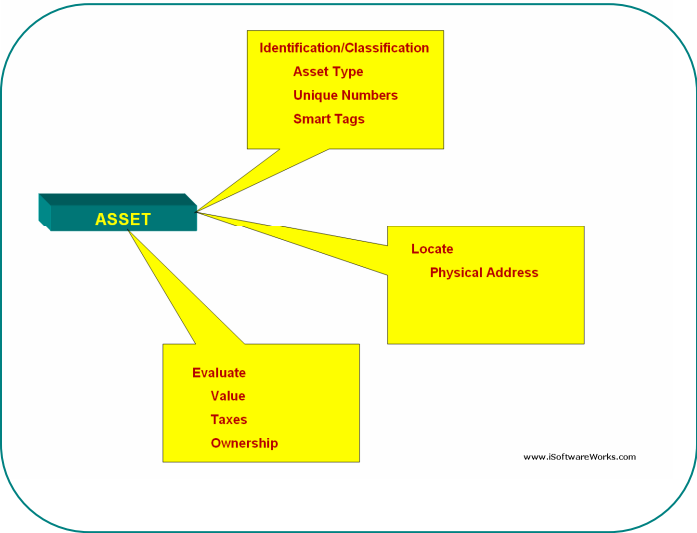


Figure 4: Attributes and Metadata

4. Asset Lifecycle:

Through out the Life cycle of an Asset the state /status changes. In an Enterprise Environment, the change needs to be authorized by the stakeholders and the system should be updated with this information.