Overcoming CMDB Deployment Challenges

A White Paper Prepared for SunView Software Inc.
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Executive Summary

If you have not yet deployed a configuration management database (CMDB), rest assured, you are not alone. Despite the fact that tremendous value can be derived from an effective CMDB System, IT organizations often face a number of hurdles in moving toward CMDB powered IT. As with the adoption of other relatively new technologies, some of these challenges are real and others are artificial, based on fear and inaccurate information.

Some very large CMDB deployments, as well as some that have simply struggled due to missteps, have created misconceptions about CMDB deployment costs, timelines and results. CMDB deployments are not typically multi-year, multi-million dollar projects that produce few beneficial results. With proper deployment processes and appropriate tool selection, the mid-sized IT organization should experience tangible results much more rapidly and at a far lower cost. As the CMDB is becoming a foundational element of IT management processes and CMDB products suitable for mainstream adoption have become available, there are fewer reasons to wait and many more to move forward. IT organizations that have not yet adopted a CMDB are encouraged to begin the process and involve all groups within IT operations.

Introduction

The CMDB market is beginning to move toward the mainstream but is not yet a fully mainstreamed market. CMDB awareness is strong and deployments are accelerating, yet adoption hurdles – both actual and imagined – remain. While some organizations have implemented fairly complete CMDB Systems, including integrations with multiple IT management processes, management data repositories (MDRs) and management tools, a larger number of IT organizations are still in the early planning and implementation phases.

With relatively high CMDB awareness, IT organizations understand many of the benefits provided by the CMDB. According to ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) research, the top three metrics defined by IT organizations for measuring CMDB success are reductions in mean time to repair (MTTR), number of successful versus unsuccessful changes made and reductions in trouble tickets. With 60% or more of IT outages caused by change, it is critical for IT organizations to reduce the number of changes that themselves create incidents, problems or outages.

To improve the change process, the CMDB provides insight to infrastructure components, their configurations and their interdependencies, also known as relationships. In this way, changes can be proposed, evaluated,
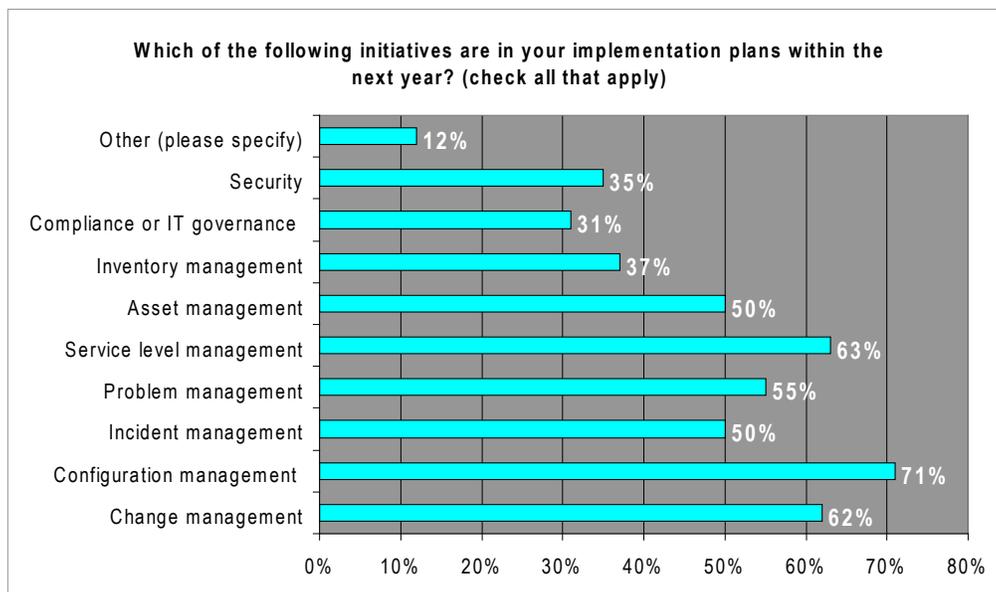

Which of the following initiatives are in your implementation plans within the next year? (check all that apply)

Initiative	Percentage
Other (please specify)	12%
Security	35%
Compliance or IT governance	31%
Inventory management	37%
Asset management	50%
Service level management	63%
Problem management	55%
Incident management	50%
Configuration management	71%
Change management	62%

Figure 1. Note that the top three IT initiatives each depend on CMDB technology

revised and approved based on an understanding of the impact of the change in the context of interdependent infrastructure components as represented in the CMDB. With controlled change and impact analysis, the percentage of successful changes will increase and the number of trouble tickets will decline.

The top three metrics also point to additional benefits which are driven by the CMDB. Where MTTR for incidents and problems is reduced, service availability is increased. With the CMDB's current and historic view of configuration settings, compliance can be both validated and audited. With IT management processes utilizing up to date configuration data in the CMDB, overall IT maturity improves and IT's value to the business is clarified.

Yet there remain challenges in CMDB adoption, both real and perceived. Starting with perceptions, a number of misconceptions in the CMDB world have developed:

- It takes two or more years to deploy a CMDB

- The CMDB must contain every configurable setting within the IT infrastructure

- All of this configuration information is stored in a single database

And, as with any new technology or IT management approach, there are some real challenges to CMDB deployment. These include:

- Gaining budget approval

- Allocating appropriate staffing

- Selecting the right products and tools

Fortunately, the myths can be countered with facts and the challenges have solutions.

Clearing the CMDB Adoption Hurdles

Even myths sometimes have elements of truth. An unfortunate example of this is the idea that CMDB deployments take two years or more. It is true that some deployments have taken, or are currently taking, that long. The classic example is the IT organization that believes every configurable setting within the IT infrastructure must be in the CMDB. They tend to spend large amounts of time ensuring that every possible configuration item (CI) is discovered and populated in the CMDB. *Then* they begin to consider how that data will be leveraged to improve management processes and provide value to the business. More appropriately, IT should identify a particular IT service or management process that could benefit from improved access to configuration information and relationships. This will result in the need for less CMDB data initially yet still allow for the CMDB to be extended iteratively as more services and/or processes begin to utilize the CMDB.
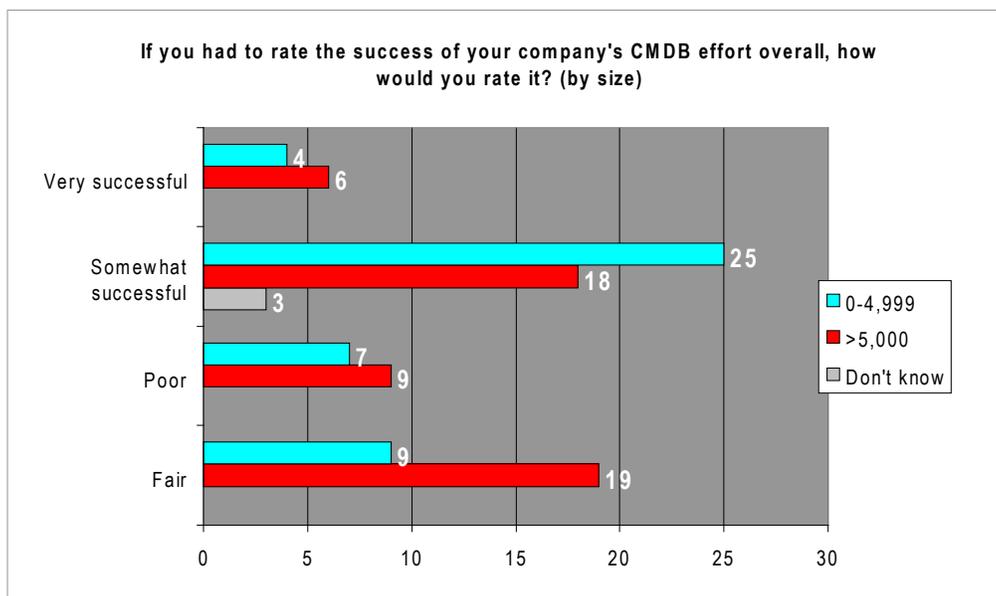

Figure 2. EMA research shows companies with less than 5,000 employees have higher CMDB success.

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IT staffing always seems to be a challenge. Workloads are high among staff members and demand for more or improved services never stops. A common misconception is that adding yet another technology such as CMDB will simply increase the burden on IT. However, a CMDB deployment actually helps improve operational efficiency by reducing time spent resolving incidents and preventing re-work caused by improper changes. CMDB offerings targeted to the mid-sized pragmatist are designed to enable not only rapid time to value but create minimal staffing impact through automated discovery for CMDB population, built-in templates for modeling CIs, ease of use and low training requirements. For these targeted offerings you won't need a team of ITIL certified experts to deploy the CMDB. Rather, you should ask your vendor about the availability of a self-guided free trial, which is itself an indicator of a rapid time to value offering. A proof of concept with vendor involvement is also a useful step in the selection process, especially where complex requirements exist.

It can be daunting to start budget approval and selection processes. However, the good news is that CMDB offerings are available for all budgets without sacrificing critical functionality such as federation, discovery, scalability and even dependency mapping. And, interestingly, the relatively lower priced software offerings also tend to have lower training, integration and consulting costs. All of this contributes to higher return on investment, attractive funding plans, and approved budgets.

Benefits of CMDB deployment extend to all IT operations groups and, consequently, successful CMDB adoption projects depend on participation and buy in from each of these groups. If IT operations teams are siloed in your organization, seek senior IT management or CIO support to bring them together and ensure a cohesive approach to the project. The CMDB is becoming a foundational element of IT management processes and there are increasingly fewer reasons to wait and many more to move forward.

EMA's Perspective

SunView Software Inc. provides IT Service Management software that ultimately helps companies meet their business goals and improve their business processes. By building on best practice IT management processes as described by the IT Infrastructure Library (ITIL),

SunView Software products allow companies to gain greater visibility into their IT infrastructure, eliminate system downtime, reduce operational costs and ensure regulatory compliance. IT organizations that incorporate ITIL based processes are better able to meet the needs of their customer, which is typically the business. Through ITIL, IT organizations become partners, providing value-added IT services to support business priorities. SunView Software's ChangeGear™ suite of products provides an end-to-end solution for automating and streamlining IT Services.

Just as IT organizations are building and integrating their processes and tools around the CMDB, SunView Software has built their ChangeGear suite around their ChangeGear CMDB. Products in the suite that integrate with the CMDB as a single, trusted repository of CIs, their attributes and relationships include Service Desk, Incident, Problem, Change and Release Management. ChangeGear is an impressively broad suite of ITIL focused products built with a common philosophy – "Easy to use. Simple to Deploy."

Like the ChangeGear CMDB, the entire ChangeGear suite employs intuitive user interfaces and requires minimal training. Using multiple products in the suite offers advantages appealing to many mid-sized companies – pre-integrated components, reduced overhead in vendor interactions, and improved consistency when moving between screens for the different products. In support of typical multi-vendor IT management product environments, customers can of course mix and match with offerings from other vendors or add in additional ChangeGear products as their needs expand. After all, a CMDB is meant to bring together relevant information from complementary data repositories no matter where it resides.

An iterative, continual improvement approach is appropriate for CMDB deployments and, rather than trying to boil the ocean, CMDB success stories generally come out of an evolutionary approach. The ChangeGear CMDB supports this methodology through automated discovery, visual mapping and pre-defined reports to quickly begin producing value. And the ChangeGear CMDB's scalable architecture allows IT to keep up with their growing infrastructures. Another aspect of the ChangeGear CMDB which supports an "expand as you go" approach is the built in asset management

capability. Some IT organizations have found success by starting with asset management and then progressing to CMDB. With the ChangeGear CMDB, both can be accomplished within the same tool while leveraging the same repository.

A final pleasant surprise with the ChangeGear CMDB is that it provides native change monitoring. Relatively few CMDBs build in this ability to detect granular device configuration changes. Instead, a common approach is for CMDBs to rely on other tools to monitor the infrastructure and indicate changes to the CMDB. At that point, CMDB based reporting or CMDB based automated actions can take over. The ChangeGear CMDB combines these elements, including workflow to automate responses to change, rather than relying on external tools. Simply put, the ChangeGear CMDB is an easy to use, simple to deploy, cost effective CMDB solution with the added benefits of asset management and change monitoring.

About SunView Software Inc.

Founded in 2003, SunView Software is a leading provider of IT Service Management software that enables companies to better track, manage and control their IT services and infrastructures. SunView Software is headquartered in Tampa, Florida and is privately held. For more information, visit the company's web site at http://www.sunviewsoftware.com.