


Win in the flat world

## Ignite your Configuration Engines

Real world experiences for CMDB Success

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 Infosys Technologies Limited  
 The CMDB and CMS - the Powerhouse of Service Management  
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### Agenda

- The present state
- CMDB implementation challenges
- Best practices
- The real world story


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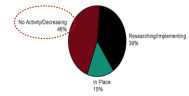
### Today, organizations have realized the benefits of CMDB, but are skeptical about the success of implementation projects

**CMDB brings in a lot of benefits**

- Business/Service impact analysis and better implementation of changes
- Facilitate adherence to regulatory obligations
- Increases business productivity by reducing incident and problem resolution time
- Improved capacity and availability planning
- Supports operational decisions

**...but the success is uncertain**


**CMDB Adoption Levels: All Organizations**



Source: Computer Economics, 2008 Figure 1

Central to ITIL's service support and service delivery process methodology is the configuration management database (CMDB), which acts as a repository of all information regarding infrastructure components, hardware, and software.  
- Forrester Research, Inc.

CMDB can't be done. Not as ITIL defines it. At least not with a justifiable return on the investment of doing it. It is such an enormous undertaking that any organisation attempting it is going to burn money on an irresponsible scale.  
- ITskeptic.com


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...and this is what you hear from the organizations which are planning or implementing CMDB

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CMDB implementation will take years.  
My business will not wait for so long to see the results

User's requirements are endless.  
How do I incorporate everything in the CMDB?

How do I demonstrate the value of investment?

How do I maintain the accuracy of CMDB?

How do I minimize the impact of rollout?

Let's look at some of the best practices for overcoming these challenges and implementing CMDB successfully

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A quick look at the ITIL V3's Configuration Management System (CMS)

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The diagram illustrates the Configuration Management System (CMS) architecture across five layers:

- Presentation Layer:** Includes Web analysis GUI, Change and Release view, CM lifecycle view, Asset Mgmt View, Technical Configuration View, and Service Desk view.
- Process Layer:** Divided into Service Strategy, Service Design, Service Transition, Service Operations, and Continual Service Improvement. Each sub-section lists specific activities like Service Information, Change Management, and Incident Management.
- Knowledge Management:** Contains Configuration Management and Asset Management.
- Technology Layer:** Features an Integrated CMDB at the top, supported by Discovery, Audit, Asset Management Tools, Software Configuration Mgmt, and NMS. Below these are CMDB 1 and CMDB 2 components.
- Data Layer:** Lists various Configuration Items (CIs) such as Service Lifecycle CIs, Service CIs, Organizational CIs, Internal CIs, External CIs, and Interface CIs, along with their underlying data sources like Hardware, Applications, Processes, People, Contracts, SLI Plans, Financial Capital, and Infrastructure & Facilities.

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Before initiating the implementation, It is important to know what could be delivered by CMDB and how?

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- Automation and Integration are the Keys to success. Know about these magic words
  - Federation
  - Reconciliation
  - Synchronization
  - Visualization
- CMDB need not to be a monolithic database. Plan for federated CMDB solution
- It's not necessary to populate CMDB with all organization CIs. Take a pragmatic approach while defining the scope
- Integrate ! Integrate ! Integrate !
  - With -
    - Discovery and audit tools
    - Software Configuration tools
    - ITAM and related tools
    - Service management tools & processes

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Determine business impact and prepare organization for rollout

- Analyze **Business impact** of the rollout
  - Identify consequences of shortcomings
  - Determine cost of making organization operationally ready
- Develop and executes plans for preparing organization ready for rollout
- Managing Organization changes is the key to success

- Implementation & Transition**  
Implement the program in the organization, ensuring that the program is fully operational and that the organization is ready to support the program.
- Strategy and Communication**  
Develop a strategy for the program, ensuring that the program is aligned with the organization's overall strategy. Communicate the strategy to the organization, ensuring that all stakeholders are aware of the program and its goals.
- Organization Change Man...**  
Identify the organization's current structure and processes, and determine the changes that are needed to support the program. Implement the changes, ensuring that the organization is ready to support the program.
- Program and Project Man...**  
Develop a project plan for the program, ensuring that the program is completed on time and within budget. Monitor the progress of the program, ensuring that all milestones are met.

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Develop robust processes to extract maximum value out of CMDB implementation

- Don't overlook the processes.** Without processes, CMDB will lose its value
- Follow a Top-Down approach** for defining the process architecture
  - Define policy statements
  - Develop process and workflows
  - Develop detailed procedures and work instructions
- Define Metrics, Roles-Responsibilities and Governance framework**
- Plan for **flexible and scalable process architecture**

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Implement Quick Wins – Justify the investments by implementing a "Pay As You Go" model

- Demonstrate clear benefits of CMDB implementation at regular intervals**
- Quick Wins helps in –
  - Keeping the Buzz Alive
  - Making management informed of the progress
  - Justifying the investment
  - Fine tuning of long term IT strategy
- Identify "Quick Wins" carefully
  - Determine the **immediate business needs** and develop quick wins to address the priority issues
  - Should be achieved within a **short period** of time and demonstrate clear benefits

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### Demonstrate CMDB value by establishing interfaces with other service management processes and tools

- The CMDB has no value in itself. The value comes from the information it provides to other service management processes/tools
- Demonstrate value by integrating CMDB with other processes/tools
- Develop mechanism to take constant feedback from other processes
- Real value can be demonstrated when any impact on the infrastructure CIs will result in the determination of impact on the business services

Incident Problem: CIs and relationship information for impact analysis, incident resolution and root cause diagnosis  
 Configuration: CIs data for capacity/availability planning  
 Risk Assessment: CIs data for risk assessment and planning  
 License Information, Software/hardware metering, CI financial value  
 ITIL Management: Associated SLA targets, contract information  
 Change Request: CIs, relationship information for change planning and impact analysis

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### Develop metrics to measure the success

- Develop "Hard" metrics to demonstrate the value of CMDB implementation
- Follow a "Top-Down" approach for defining detailed metrics –
  - Identify Critical success factors
    - Define KPIs supporting the critical success factors
    - Develop detailed metrics for the identified KPIs
- Remember! Some of the metrics could only be measured if appropriate integrations have been established with other process areas

**Critical Success Factors**

- Completeness and Correctness of CIs information
- Seamless Interaction with other Service Management processes
- Accurate and timely Data Feed into CMDB
- Usefulness of the CIs information
- Automation of tasks for CIs lifecycle management

**Key Performance Indicators to support the Critical Success Factor**

- Number of CIs recorded in the system against the CIs present
- % of CIs with wrong attributes information
- Number and % of physical to database differences highlighted in Audit
- Number of duplicate CIs detected
- Number of CIs with partially filled information

**Metric: Number of Utilized Licenses**

Purpose of Metric	To get details on total number of valid licenses
Frequency	Monthly
Method	Generate Software metering report from the tool
Audience	Configuration Manager
CSF Impacted	Usefulness of CI information

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### Org. Change Management – Invest in trainings and communications

- Develop and execute training and communications plans
- Select training approach that is best suited for current implementation
- Identify the Super users to be trained, and use the super users for mass training of other IT support users
- Conduct orientation sessions. Ensure the information on CMDB rollout is shared with all the affected users

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**CMDB Population and Data Quality Management**

- Implement discovery tools for initial data population
- Complete CIs information cannot be captured by the discovery tools. Plan for manual efforts for data entries
- Develop business rules for data reconciliation
  - Identification
  - Comparison
  - Merging
  - Handling exceptions
- Integrate with Change Management to ensure accuracy and correctness of CIs information

Business rule for managing exceptions

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**The Real World Story...**

What Works	What Doesn't Work
✓ Consensus on what can be delivered	✗ Unrealistic Expectations
✓ Baseline present environment before planning for future state	✗ All-in-one approach
✓ Structured requirements gathering	✗ Implementing CMDB in isolation
✓ Determining operational readiness before implementation	✗ Lack of trainings and communications
✓ Regular demonstration of "Value" by implementing "Quick Wins"	✗ Inability to determine interim milestones people can look forward to
✓ Buy-in from the management	✗ Ignoring the value of processes for managing CMDB

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**Thank You !**

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<http://www.infosysblogs.com/ITSM-service-matters/>

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