

# **BCS CMSG Conference 2007**

## **CMDB: Fast-Track to the Benefits in a Lo-Tech Situation**

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Track 3: 9.30 – 10.15 am, 16<sup>th</sup> May 2007

*Keynote: From zero to continuous improvement*

### Conference Programme Profile

A company needed to be compliant with Security Audit to ISO 27001:2005 standards. In six weeks, two of us transformed the operations of the company. We introduced continuous improvement despite cultural barriers, undocumented processes and a virtual asset list. The catalyst was an inexpensive Configuration Management tool. The approach ensures future-proofing, minimal maintenance and a low total cost of ownership.

This has been adapted to cover a longer period and provide a framework for continuous improvement.

### John C Bennett - Profile

John is an experienced consultant, trainer and manager who has been an energetic and practical manager of the CIO remit. He has managed teams involved in architecture, data management design, application development and implementation, as well as serving as the UK Head of Consultancy.

He has proven competence in IT management, with the Manager's Certificate in IT Service Management through ISEB, and is practised in Security (BS7799) standards, Confidential Document Management (BS DISC PD0008) and long-term electronic Records Management (ISO 15489).

John consults on how ITIL enables corporate and IT Governance; he has helped change working practices and raised satisfaction levels, while implementing ITIL standards for Data Centre clients. He deploys Service Management tools where they are cost-effective.

## Management Summary

- This is the fictionalised account of a five-step, five month project to use a starter pack (lo-tec) CMDB to generate short-term and medium term benefits for the organisation
- By using a kick-start process (Stages 1 – 3), the organisation was able to make progress quickly and address key weaknesses. It was then in a position to enter the first one-year cycle of improvement
- Improvement cycles follow a pattern each year thereafter of 5 steps. The organisation's maturity level can also be addressed
- The principles come from the author's experience and can be applied to all types of data centres, out-sourced, in-house and start up
  
- Be warned: this is an unstructured task in an unstructured environment

This is the fictionalised account of a five-step, five month project to use a starter pack (lo-tec) CMDB to generate short-term and medium term benefits for the organisation. The major points of the story to note are that this was not a green field site, processes were immature and the author had little or no authority to change anything. The principles come from the author's experience and can be applied to all types of data centres, out-sourced, in-house and start up.

## Agenda

### *5 Stage CMDB Plan: 5 x 5 Content*

- Starting
  - Understand the patois but don't use it
- Resolving
  - Red Light – if you are doing this, stop it!
- Transforming
  - Amber light – be prepared for difficulties
- Delivering
  - Green light – go for it! A step at a time
- Finishing
  - Get benefit from now on at every step in the cycle

*Keynote: Have an immediate and important goal*

These five steps are the framework that has been used to initiate a continuous improvement process. From where we were there was no common ground for the process to start. Each stage of this initiation has 5 points of information.

Our greatest concern was that ground could be lost between stages.

We used the impetus of an impending Security audit to initiate change and the threat of revisits has been used since to stop back-sliding in several fundamental areas, principally in the last 5 months – asset management.

The five stages are summarised by questions, which are based on Kipling's honest serving men:

I keep six honest serving men - They taught me all I knew  
Their names are What and Why and When - And How and Where and Who

The "who" is myself who as Project Office Manager retains overall responsibility with the support of the Service Delivery manager

## Stage 1. Starting

*“What do you mean we have to plan?”*

When common sense is not good sense

- 99% inspiration; 1% perspiration – the tool will do it
  - (after Thomas Edison)
- 50% of an entry or 50% of the entries?
  - (after Lord Leverhulme)
- Finished: when I say it is
  - (after Humpty Dumpty and Gödel)
- We are getting there
  - (after Commanders-in-Chief from time immemorial)
- If I had more time I would do more
  - (after Pascal)

*Keynote: avoid slang and feral IT; having “previous” is an asset*

Based on previous experience, we considered it unwise and uneconomic to launch into new technology without understanding the business of building a CMDB. We needed to harness support for a radical rethink along ITIL lines of improvement. We wanted everyone to be ITIL by name and ITIL by nature. The first question we asked was: what baseline are we starting from? What is given and what is missing? How is it defined? Who is the owner? The five fallacies above are expressions of feral IT disciplines that can compound the problem: “which 50% did you want?” “It is 90% finished!” “Didn’t I tell you that?”. A CMDB environment cannot coexist with these myths.

The Real Quotes are:

**Thomas Alva Edison:** “Genius is 1% inspiration and 99% perspiration!”; “Opportunity is missed by most people because it is dressed in overalls and looks like work”

**Lord Leverhulme:** “Half of what I spend is wasted. The trouble is, I just don’t know which half”

**Lewis Carroll**

“When I use a word,” Humpty Dumpty said, in a rather scornful tone, “it means just what I choose it to mean--neither more nor less.”

“The question is,” said Alice, “whether you *can* make words mean do many different things.”

“The question is,” said Humpty Dumpty, “which is to be master--that’s all.”

From a commentary on **Gödel**: There is no point asking about the **completeness** of an inconsistent system

**Max Lerner** – 1902 – 1992, American politician and columnist: Despite the success cult, men are most deeply moved not by reaching the goal but by the grandness of the effort involved in getting there – or failing to get there”

**Blaise Pascal:** The present letter is a very long one, simply because I had no leisure to make it shorter.

## Stage 2. Resolving

*Where can things go wrong?*

- SPOF
  - Whose data base of whose known errors?
  - Expertise has a price: the cost is known
- Scope Creep
  - If we are slipping behind, adopt an extra area to manage
  - Never say ‘No’ – we must look busy and helpful
- Backlog
  - “Getting a round tuit” – when needed by supervisor and worker
  - Nobody asks about those documents anymore
- Culture
  - It wasn’t me; I’m off home now
  - Don’t ask, just do it
- Tools
  - If one falters, buy another, or better still build your own

*Keynote: Get a plan and start Thinking Ahead*

In our experience Experts tend to be CMDB-averse. Possibly this is because small organisations rely on and are in awe of their experts. The act of introducing the CMDB as a means of storing more consistently a full range of complex information, can diminish the key of the expert as information dispenser. Instead they must tackle the more complex role of being an expert and problem solver.

For an expert the most efficient way of working is to work alone and not communicate; this reduces their overheads. Conversely it increases the overheads of their managers and peers as they commit to extra work to report and interpret on their expert work.

Each expert has a store of knowledge, version controlled as an exception, and stored in a wiki. It is natural that knowledge expands and is partially recorded as the situation demands. Much of the passion for the information, the technology and the people is transitory. The challenge moves on.

The culture of the workplace suffers as “no blame” becomes interpreted as “no responsibility”.

Don’t let this happen to you. It takes forever to unravel the twisted web.

## Stage 3. Transforming

### *How do we manage the CMDB?*

- SPOF => **SPOC**
  - The Project Office: Take all calls from all people to the team
  - RFI, RFQ, RAI, RFC, events, incidents, problems
- Scope Creep => **Structure**
  - Let the environment set the limit; use diagrams to show&tell
  - Let the structure limit the amount of unaided diagnosis
- Backlog => **Change Management**
  - Via the SPOC: inclusive, auditable and reported on
  - Credible explanations have replaced excuses
- Culture => **Process**
  - Everyone must use processes
  - Hold the tested version in a secure wiki or central storage
- Tools => **Automate** in due course
  - Fit it to your situation; make sure it can report easily
  - Otherwise you will adopt someone else's way of doing things

*Keynote: CMDB, the road less traveled; Project Office, the constant companion*

In our experience the CMDB provided a line in the sand that changed perceptions of our asset base. With a CMDB it could be assured, checked and audited. It could be managed, reported on and reviewed. It could be documented accurately, verified and annotated.

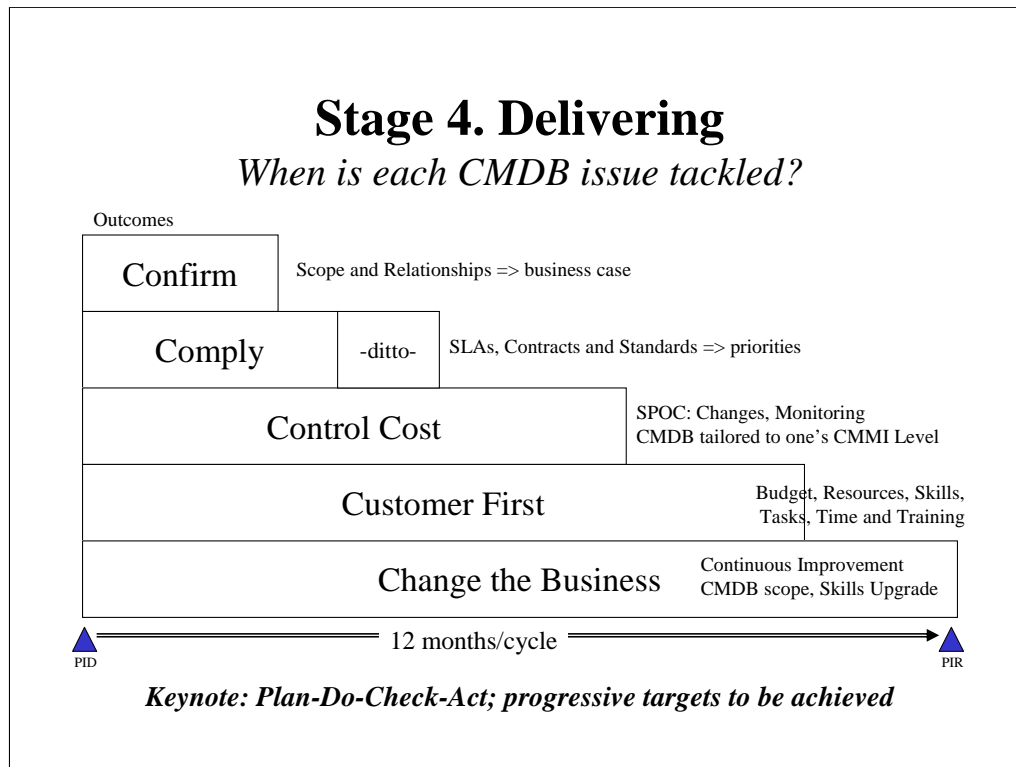
The Project Office was the public face for all enquiries and updates, as well as the focus for the management of all associated processes. SPOF became SPOC.

Structure replaced indulgent scope creep. The growing backlog was addressed and reduced in 4 weeks by applying Change Management processes linked to a more accurate CMDB.

The amount of time taken to apologise and create workarounds diminished month by month.

For the Security Audit everyone had to use the process and the store of processes had to be secure against uncontrolled update.

The three Tools adopted in the last year were put out to grass. The value of their data meant that only a limited set of data was transferred; their value was emotional rather than real. The replacement tool had take-on capabilities but they were not required in the main.

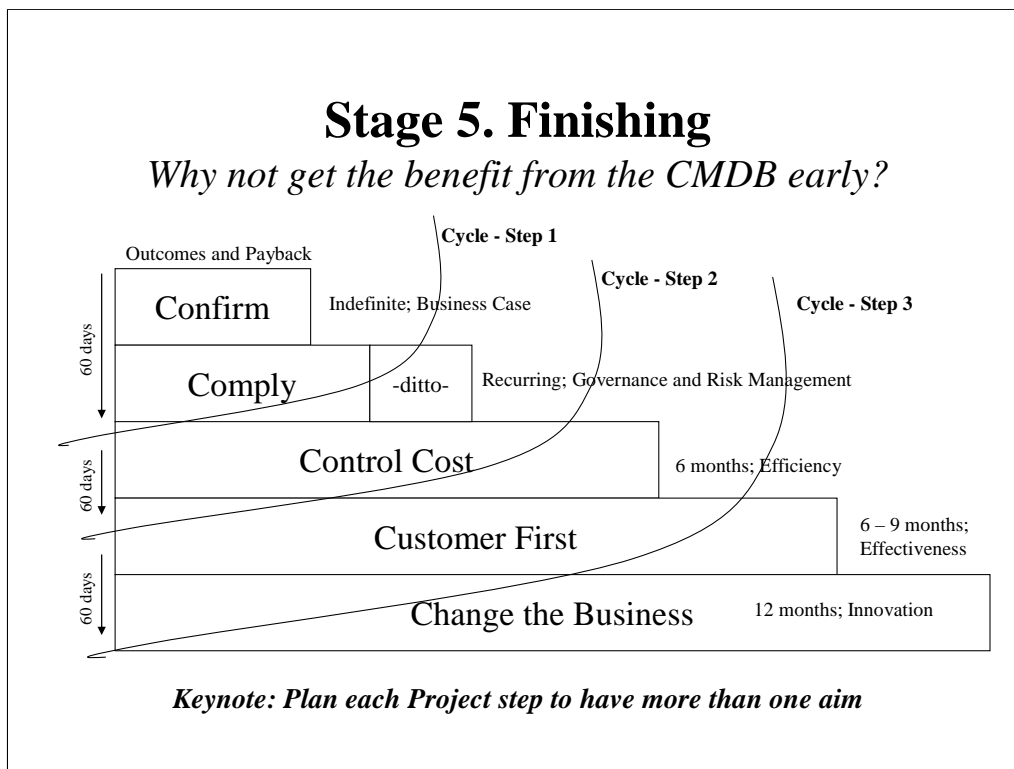


The transformation got the team underway so that they could tackle the real challenge. As the manager, I had a vision of how the CMDB could assist every part of the business, year on year. There were 5 steps, each addressing the underlying inadequacies in the bare minimum common foundation. They had to be tackled in sequence, each step building on the achievements of the one before. For example, Cost Control can only be done if the priorities are known and the code of practice is agreed.

That vision was supported by a business case – constructed from evidence of the deficiencies of the status quo and the savings that were possible. In the first year a small saving or productivity gain would pay for the product's installation and maintenance. The investment of effort was necessary anyway to gain a basic level of asset management. Even a BOTEC substantially supported the decision to create a CMDB. The business case documented the scope and the relationships that the CMDB would cover in the first 12 months. An outline PID was also used to put a stake in the ground.

Compliance with various standards was necessary over the next 6 months, with a critical test within 6 weeks of a Security Audit. It wasn't that asset management was bad, it was that we could not prove that we were adequate in our use of processes and records. The CMDB was a means to an end. Not only did we pass the Audit, but we also passed the second tranche 3 months later – we were making sustained progress. Prince 2, PAS 11000 and ITIL too.

Control of Costs comes from the SPOC, better Change Management (of all changes) and targeted Monitoring of priority assets and key events. Cost control is also linked to the level of maturity of the organisation and its use of processes. Continued on next slide



Continued from Stage 4: Customer First comes from the ability to give a “customer” a best price first time, an agreed level of service and a dependable resolution of issues that affect continuity of service. This can only be achieved by having first established an efficient and viable platform of Service Management. The assets extend beyond hardware and software into resources, skills and budgets. The CMDB can be architected to hold the facts and the inter-relationships.

Change the Business comes from the feedback of customer working and the effectiveness of the services delivered. Because the financial aspects of the assets and services are being recorded a better cost model can be constructed. As the needs of the customers change so can the skills upgrade and facilities renovation be better targeted.

Stage 5: Experience has shown that better ROI can be gained without putting project success at risk. This is achieved by making a project payback at several levels. Even the investment in a business case can be used to provide a recognised value from better Risk Management. Typically this is about better governance and risk avoidance: a value of several times the investment can be justified using company governance procedures. If (as in the diagram) a project is constructed that derives the business case and implements better governance, it is likely to provide elements of cost control, such as more accurate billing of services (plus or minus). Better accuracy in charging usually leads very quickly to less arguing over invoices at monthly management meetings. Productivity of senior managers is improved. Each cycle can take 60 days; each cycle can have an outline PID and a short Post-Implementation Review to ensure that the benefits were captured.