DITY™ Weekly Newsletter
itSM Solutions® IT Experience. Practical Solutions
The workable, practical guide to Do IT Yourself Vol. 4.36 . September 10, 2008

Why ROI Calculations Will be the Achilles' Heel for CMDB Implementations in 2009 and What You Can Do to Avoid the Pain

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There are two common answers to the question as to why to undertake a Return-On-Investment (ROI) calculation for a Configuration Management Database (CMDB) implementation. One is right. One is wrong.

A CMDB is much like the tires and wheels of a car. When an automobile manufacturer is designing a new car, it does not ask for an ROI study to justify having wheels and tires on the new model. It is understood that the new car will not be complete, will not work, without wheels and tires.

Comparing the ROI calculation of the CMDB to other IT projects, a mistake often made by IT and business executives, is interpreting that the CMDB return is too low (and most likely negative) to warrant undertaking or continuing the project. Instead, executives decide to put a fancy, high-definition radio into a car without any wheels.

CMDB in the Mainstream

By all accounts, CMDB implementations are happily in the mainstream of IT operations. EMA research has shown that by 3Q2007 "a majority of enterprise IT organizations were actively planning, purchasing and implementing a CMDB solution to provide foundational groundwork for a wide range of initiatives." Since then, many have made significant progress with 32% of companies over $1B in revenue claiming in an April 2008 EMA survey to have completed first phase implementations – and 87% claiming to be somewhat or very successful.

So, what storm clouds lie on the horizon for the seemingly unstoppable tide of CMDB implementations? EMA predicts that many enterprise CMDB projects will face a significant hurdle from ROI calculations as projects move from pilots to production and implementation costs top the $1M mark.

In fact, EMA sees ROI as the Achilles' Heel for unwary CMDB implementations in 2009.

Can ROI Justify a CMDB Investment?

EMA research concluded in 2006, "Most IT organizations are willing to go forward with the CMDB investment on softer grounds with respect to ROI. This fits in with the CMDB's role as a transformational enabler for culture, process and organizational changes which can show strong values, but for which the metrics are more difficult to define."

EMA is now measuring an increasing rate of projects hitting a brick wall when it comes to justifying the ROI for CMDB efforts which are now going into a second year with price tags commonly exceeding $1M.

For the lucky, this means rolling up your sleeves and figuring it out. The unlucky are likely to join 23% of respondents in EMA's latest research report whose CMDB budgets are being redirected towards IT investments considered "new and more urgent" by management. This article discusses two approaches to successfully undertaking an ROI calculation – and how to explain the results to your boss.

Why should I do an ROI for my CMDB project?

The CMDB is a foundational element to any IT organization's efforts to improve efficiency, provide scalable services, and handle increasing complexity.

Don't take my word for it, however. ITIL diagrams showing the Service Support disciplines have an underlying CMDB clearly depicted as the definitive source of IT information used by the business. Ask any of your peers who have successfully implemented the CMDB how they would track relationships between applications, services and the infrastructure without it. In short, undertaking an ROI solely to justify a CMDB project is not only short-sighted, it is the wrong answer.

ROI calculations are very valuable, however, in right-sizing the CMDB efforts. With scope creep the #3 killer of enterprise CMDB projects, understanding what is "in scope" and "out of scope" is a critical element of success. The right answer to why to undertake an ROI calculation is to make sure that you are not spending $5M to solve a $1M problem. Context is key for getting value from ROI efforts.

When should I do an ROI for my CMDB project?

Again, there are two answers to this question, but both are right, in their own fashion. ROI calculations are based on metrics, not so much measuring the CMDB project itself, but understanding how the CMDB is improving the efficiency, availability and performance of the IT processes that consume its data.

ROI metrics need to be established during the strategic planning phases of the CMDB project. Each detailed requirement for the CMDB should have a metric associated with its success. And, each metric should have a cost benefit and baseline established. In this way, we know that implementing the CMDB increased a particular process by 18%, saving the company $50,000. Add these detailed requirements up, and you now have your ROI.

However, while these metrics should be gathered in the initial phases of the project, EMA research and consulting has shown that a formal, financial ROI calculation should be delayed as long as possible. EMA research shows that most companies start to consider the formal ROI at about $1M cumulative investment. For most enterprises, that investment mark will be reached in 2009.

Remember, however, the CMDB is like the wheels and tires on our newly designed automobile. It is not an optional exercise and the ROI should be used to put the project into context, not to decide to "keep it going" or redirect funding.

What should the ROI show for my CMDB project?

"Hard" ROI calculations are best accomplished using detailed requirements, as described above. However, don't expect to see the 200% or 400% returns commonly quoted in the press today. Your hard ROI calculations are going to show less than a 25% return, based on EMA consulting results.

That's fine. Your peers are struggling with the same numbers. Of course, you could throw in a 40% improvement in change collisions and get a huge number, but remember you are setting expectations with an ROI calculation – and eventually the piper must be paid.

"Soft" ROI calculations include 'fuzzier' metrics such as recovered value; i.e., what would have been lost without a CMDB. As an example, a large East Coast bank relied on a manually populated Excel spreadsheet to track the relationships between services and production/development devices. A simple human error which marked a production firewall as "test" caused an outage of the public internet for two hours when a patch was applied.

Avoiding that single mistake would have paid for the entire CMDB project - in addition to saving the CIO's reputation with his peers.

However, the same advice applies. Be honest with what "soft" saving you expect to recover. Most companies can only justify about 60% of the overall cost of the CMDB project with a pragmatic "soft" ROI calculation.

Summary

If EMA predictions are right, CMDB ROI calculations are going to be a big problem, fatal in some cases, for unwary implementations in 2009.

What can you do? Accept the inevitability of the ROI and prepare for its coming with solid, detailed requirements. Focus on metrics around CMDB success. Be honest and cautious in making projections. And, drop this article on your boss' desk to make sure they know what to expect.