



CM Trends

News and Perspectives for CM Professionals

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SOFTWARE VENDORS



Check out the software tool vendor listings for information about CM tools.

Configuration Management Trends

Welcome to the Inaugural Issue of the CMPIC newsletter!

The Configuration Management Process Improvement Center, CMPIC, is dedicated to providing you with relevant configuration management information. We have created this newsletter to inform you about issues such as process, technology and training as they relate to Configuration Management.

CMPIC offers a new breed of Configuration Management Training. See what we're about. Read on and go to our website, www.cmpic.com, for more information.



Change Process Takes Too Long?

By Steven Easterbrook, CMPIC



I am always hearing that the change process takes too long. In addition, it appears “CM,” the department, is always to blame. In reality, the blame may lie with the CM process itself, which includes everyone who prepares information, proposes changes, reviews changes, dispositions changes, and implements changes. The following is a partial list of reasons why the change process might take too long.

Forms

- The change request is not accurate/complete when submitted and needs to be reworked

multiple times.

- The change forms are just too complicated and not user friendly, resulting in rework.

Change Review Process

- The change process has only one path (everything has to go through a change board).

- Reviewers take too long to review a change and have to be tracked down and reminded to review changes.

- Decision makers attend the change board unprepared.

- The technical review is

incomplete.

- Costs are not gathered, or the estimate is in error.

- The system/process/workflow for change management is not automated.

Too many corrective action changes overwhelm the process

- Too many corrective action changes exist because released documentation is not what it should be.

Change Board Issues



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- Attendees are unprepared.
- There are people involved in these reviews that are not necessary.
- Impact analysis was incomplete.

Signature Requirements

- There are non-value added signatures required for disposition of the change.

Prioritization Issues

- Everything is urgent.

Resource Issues

- Resources needed to do all the above correctly and implement change tasks are not available.
- Personnel state they are too busy to review changes.

Lead Time

- Personnel wait until the last minute to write a change, forwarding the change to the CM Department; then complaining that “CM” (the Dept.) is slowing

them down.

Training

- Employees are not trained in how the change process works or how to properly fill out the change request and/or implementation plan.
- As a result, personnel need the CM department to write changes for them, or have the CM Department assist in various aspects of preparing a change, resulting in a bottleneck in the CM department.

Changes to Changes

- People do not have the information they need to fully assess the impact of a change, and identify items/documents affected the first time around. This results in changes to changes.
- People make revisions to changes to already approved changes without notifying anyone; resulting in delays when the alteration is discovered.

Manual Systems

- There is no automated workflow, or automated forms, associated with the change process. Automation makes a good process move quicker. However, even if there is automation, you will still have the same issues described above if your processes are not what they should be.

The Bottom Line

CM is a cross-functional business process that, if done right, enables everyone to do their jobs effectively and efficiently. Everyone needs to understand that if it is too slow, it may not be the fault of “CM” (the department). In fact, the fault usually lies elsewhere. If you are having problems it is time your organization reevaluated the process, and the roles of everyone involved.



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Aras is an advanced solution for CM that is entirely Web browser-based and is enterprise open source with complete access for unlimited users for no license costs.

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The Fable Of The Inspector And The Bolts

Volume 4 Number 7 1958 Vulcan Foundry Company Magazine

http://www.enuii.org/vulcan_foundry/magazine.htm

Author unknown.

The BoltMaker of Vul



Do you have a CM story you would like published in this newsletter? Share it with us. Send your article to Kathy Easterbrook at: kathy@cmpic.com.

There dwelt in the City of Newt an Inspector of a Factory, and his Chief spake unto him saying: "Lo, there is in the wilderness of Vul a maker of bolts, and he has made two score and five special bolts. These be Sooper-Dooper bolts and great is the tensile strength thereof, that they may fix, even the very top of a cylinder casing, even unto the very bottom. Get thee hence and inspect them. And take

micrometers and things that thou shalt gauge them unto within the widenesses off a certain part of a gnat. For I say unto thee, if thou shalt release them and they be found wanting then I will tear a strip off thee. Yea, if the bolts be not properly inspected, then will I cause a great misfortune to fall upon thee."

And the Inspector who was a sound bloke spake thus: "O.K. O Chief. That which is asked for by Drawing and Specification, shall be done."

And then he departed and journeyed unto the maker of bolts who spake unto him saying: "Here they are Charlie. Want a sixinshrool?"

But the Inspector chided him saying: "Before I measure them command your servants and your handmaidens, that they may deliver unto me, all paper works thereunto."

Then there were carried unto

him one hundred and fifty-nine scrolls, which were the Release Notes and the Test Certificates for the raw materials and the M.S.L. Certificates of the fiery furnace in which they did heat treat the bolts, and the Calibration Charts for the hardness machine in which they did test the bolts, and a host of Certificates of Accuracy for the tensile and Izod machines in which they did stretch and smite the test pieces. And there was also brought unto him a dog licence, a copy of the Factories Act and a Pool's coupon, which were included amongst the papers in error. And they delivered unto him also many M.S.L. Certificates relating unto the Wickham Gauges used upon the Bolts. There were also Certificates of Chemical Analysis and Radiological Reports and Inspection Records and many other reports of strange and wonderful things of which none knew the meaning. And they brought a copy of the order and a set of drawings and a Pyrometer Record Chart which was fifty cubits in length and a multitude of other things too numerous to recite.

For twelve days the Inspector looked upon these things, and on the twelfth day he said they were good. Then did he measure the bolts, and all the dimensions thereof were according to Hoyle. And he put them in strange

potions, and tested them upon a machine of Magnaflux. And he performed Rockwells upon them all and some he rubbed with a precious jewel.

Then he cast his eye upon them through a microscope, a horoscope, a telescope, a periscope, a stroboscope and other strange devices. And he did project the threads upon a screen and gazed upon their form, and it was fair. And he gauged the threads by the law of Go and Nogo, and the law of Best Cylinders. And from one bolt which seemed doubtful he did cause a test piece to be made, and great was the tensile thereof and Izod and the Elongation were fair to behold. Then he caused X-rays to shine upon them lest there be concealed weevils inside them. These things and many others which are in the Sacred Book did he perform with great cunning.

And when all these things had come to pass it was the evening of the nineteenth day and he made out a release note

and inscribed therein all the necessary details. And he signed it and put his stamp upon it and upon the bolts also. Then he spake unto the Bolt Maker saying:

"I do declare this batch of bolts to be pretty ruddy good. Despatch them unto the Factory and if they bounce, then I shall eat them

without salt."

But Lo, it came to pass that they were rejected. They had been fashioned to an obsolete issue of the drawing. And the grief of the Inspector was terrible to behold.



Decision Making in a Bad Economic Climate

By A. Larry Gurule

As economic news continues to get worse many companies are left wondering what it will take to remain in business. Their instincts are to “cut back” so they close divisions/plants/stores, layoff personnel, and implement salary and hiring freezes. In addition, many strategic initiatives like process understanding and improvement, configuration identification and control, status accounting and subcontractor/vendor control that are critical to successful day-to-day operations, and continued and improved profit generation are stopped or put on hold in an at-

tempt to cut costs.

Although it seems logical to cut contracts and programs during an economic downturn, strategic continuous improvement activities of this nature should be enhanced and provided more focus than when “times are good.” Companies must focus on cash flow to survive the downturn, but they must also keep their strategic programs in place to better position them for the future. Management that focuses on continuous improvement aligned with changing corporate goals will not



only survive, but position them beautifully when the economy takes an upward swing.

Specifically, here are some examples of how strategic process improvement programs and initiatives can help in good and bad times: First, eliminate waste from (“Lean”) your operational processes, this can reduce cost, as well as increase productivity, quality and cash. Second, improve enterprise communication



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by exercising configuration identification and control. Effective communication relies on getting or giving answers quickly and trusting the information given was truthful, which will dramatically improve decision making allowing your business to become more agile and able to meet today's shifting landscape. Third, develop and employ status accounting initiatives. This will allow you to record and report the information you will need to measure and improve your business, as well as provide the traceability needed to protect you and your business from liability and potential recalls of product. Finally, by establishing and adhering to your own operational standards and policies, your business will

be better able to manage subcontract/vendor control. In our global economy, supply chains are reaching farther than ever and becoming increasingly more complicated, it pays to have your house in order prior to reaching out to others.

A final thought; The Toyota's of the world are not recognized as great companies because they operate perfectly, they are great because they realize that they can always be better, continuous improvement has become for them a way of life. These businesses have found a way to manage their enterprises to achieve the configurations that they themselves have defined by

concentrating on and continually improving the processes used to accomplish them, putting them in an enviable position when the economy makes its upward swing.

A. Larry Gurule is President of Imagine Technology Inc., a global management and technology consulting firm focused on business value engineering, as well as a CMPIC Associate. Mr. Gurule has over 30 years experience with manufacturing, enterprise data management, engineering system design and implementation. Larry has also owned and/or held a senior level position in manufacturing based businesses, as well as lectured to, and/or consulted with, hundreds of individuals from Fortune 500 companies on process improvement and IT implementation initiatives. Larry holds a Mechanical Engineering degree from the University of Colorado and is a CMII and CMPIC Certified Professional.



Professional Systems Associates, Inc.



CMPPro

CMPPro is a COTS software solution developed by PSA with an architecture that allows rapid customer-driven development around its core CMPPro engine to meet the needs of each client's unique business process environment.

More important than any of the functionality that CMPPro provides to help you manage your organization's data and processes is PSA's partnership approach to helping you achieve success. Software is great, but it doesn't amount to much of anything without good people. People make it work.

[Learn more about CMPPro and PSA at www.psasys.com](http://www.psasys.com)

What is Enterprise Configuration Management? Part 1

By Jack Wasson

Many organizations have not addressed or embraced Enterprise Configuration Management (ECM) to manage their business goals in a strategic manner because it does not use terms normally used by finance or viewed by upper management. Ironically, Configuration Management (CM) is all about controlling requirements, configurations, costs and changes to the baseline of a system, product, or an organization as a whole. It should be noted, that CM is a key component for every business improvement process for good reason, since it is hard to manage anything unless you know what it is you are managing. Then, you can control requirements, manage changes and maintain accurate

baselines of what you have to continue. Enterprise configuration management provides the framework within the enterprise to control the growth and complexity of all modern large-scale systems and products by not only controlling Configuration Item (CI) baselines but also the relationships and interfaces of each CI to the enterprise. You have to know what you have before you can effectively manage it.

Complex products such as aircraft, major capital equipment, facilities, IT components and systems can consist of thousands to hundreds of thousands of parts including all the procedures, tests, templates, test equipment, firmware and software associ-

ated with those parts. Any single component of a system or product can also be a CI under configuration management going through numerous changes over the lifecycle of a product or system. An organization might propose and process thousands of engineering change proposals for all of these complex products during their lifetime. But in order to manage the Enterprise Strategically we must be assured that all Configuration Item baselines (as-built, approved as-designed and operational) are under strict configuration management control at any point in time (baseline effectivity) satisfying all requirements.

We perform an amazing job of



If we can't trust in our own data to know exactly what we have then rework (intervention or corrective action) is most certainly a common practice...

Configuration Management within all of our Configuration Items (CIs) in most organizations but, we can do much better. We have to step back, look at what we must achieve strategically to maintain the organizational longevity, strength and quality. The need for disaster recovery, controlling costs, maintaining safety and standardization are a just few good reasons. With any new system in the planning stages of development, it is essential that Enterprise CM and conventional CM are already in place early on.

The benefits of Enterprise Configuration Management are countless, with the biggest one being resource savings or cost avoidance (rework). Savings can come from many areas, such as large purchases (100 standardized products are cheaper than 100 unique products); ease of maintenance (maintenance information, training, and spares for that one product are much cheaper than for many different products and vendors); and finally improvements are much faster and cheaper without all the rework and errors generated when CM is poor. If we can't trust in our own data to know exactly what we have then rework (intervention or corrective action) is most certainly a common practice, wasting valuable resources. In many cases, a change is usually predicated on a previous

change already being in place. Implementing that change without a previous one in place may cause serious damage or even become a serious safety issue to employees, customers and the public, hence the need for a closed loop CM system.

Enterprise CM supports the primary goal for organizational excellence in a few areas including;

- Safety – By controlling configuration baselines and preventing unsafe changes to the system or product.
- Documentation – fully documenting changes, requirements, issues, lessons learned, corporate knowledge and stakeholder inputs.
- Security – as required by law, disaster recovery in the event of a natural or manmade disaster, to re-establish.
- Logistics – Accurate and current inventory for builds, repair and maintenance support.
- Systems Engineering – Accurate and current drawings to reduce site survey costs and better planning.
- Finance - Bridging asset purchases with asset assignments, initial costs and ongoing maintenance costs to capitalize costs with annual budgets and bridge to business goals.
- Funding issues – It is far easier to justify costs or increases

when a clear document trail can be traced from inception to the current state.

- Strategic - By knowing who owns the asset, who is accountable for it (who maintains and uses it), what is the effective cost of ownership and maintenance (what the replacement costs are), and to whom the asset is assigned (what organization owns it), management is better able to make strategic decisions.

So how do we implement Enterprise Configuration Management? Part 2 of this article will be in the next issue of CM Trends.

Mr. Jack Wasson, CM certified and a PMPTM, is a Computer Specialist with the Enterprise Configuration Management Program office in the Federal Aviation Administration in Washington DC. Mr. Wasson has over 25 years experience in Configuration Management and Project / Program Management in government and private industry.

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CM Trends 2009 CONFERENCE

Hosted by CMPIC

**Join Us For The
CM Trends 2009
Conference!**

**Conference Overview -
this page**

**Registration & Dates -
page 11**

**Location & Hotel
Information - page 12**

**Complete Details at
www.cmpic.com**



The *CM Trends 2009* Conference will embrace all aspects of Configuration Management best practices including: CM process, automation, industry standards and professional organizations.

This conference will not focus on a sole methodology or singular approach. Attendees will be exposed to all facets of CM as presented by industry experts in the field. Government and commercial best practices, as well as current and future trends in

CM automation, will highlight this event.

The *CM Trends 2009* Conference will be suited for professionals in the following work environments: hardware, software, IT, facilities and process, as well as engineering, QA and others.

The CMPIC *CM Trends 2009* Conference is open to all practitioners and all levels of management. Those who attend will leave with a thorough understanding of CM process and automation, including current and future CM Trends.



CM Trends 2009 CONFERENCE

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To Register For This Event

Please call 434.525.8648 or Email info@cmpic.com
You may also use the online registration form at www.cmpic.com

Registration Fees

\$875.00 per person or \$825.00 per person for two or more people registering simultaneously.

Dates To Remember

Conference Dates: September 21 - 23, 2009
Group Discount Expiration for sleeping rooms at The Orleans:
August 19, 2009



5 Reasons to Attend the CM Trends 2009 Conference

1 Learn About a Variety of CM Best Practices! CM process, automation, industry standards and much more.

2 Networking Opportunities! This event will give you an opportunity to meet with new people who share similar interests in CM.

3 Save on Travel Expenses! Sleeping rooms at The Orleans are only \$58.00 per night and flights into Las Vegas are very competitively priced.

4 This Is Our First Event! And that's a good thing because we will start with a fresh perspective, new ideas, and we are eager to earn your confidence and respect.

5 Learn More About CMPIC! This is your opportunity to meet the CMPIC instructors and participate in some of the CMPIC training during our free training session.



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The Orleans Meeting Space



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Metric of the Month

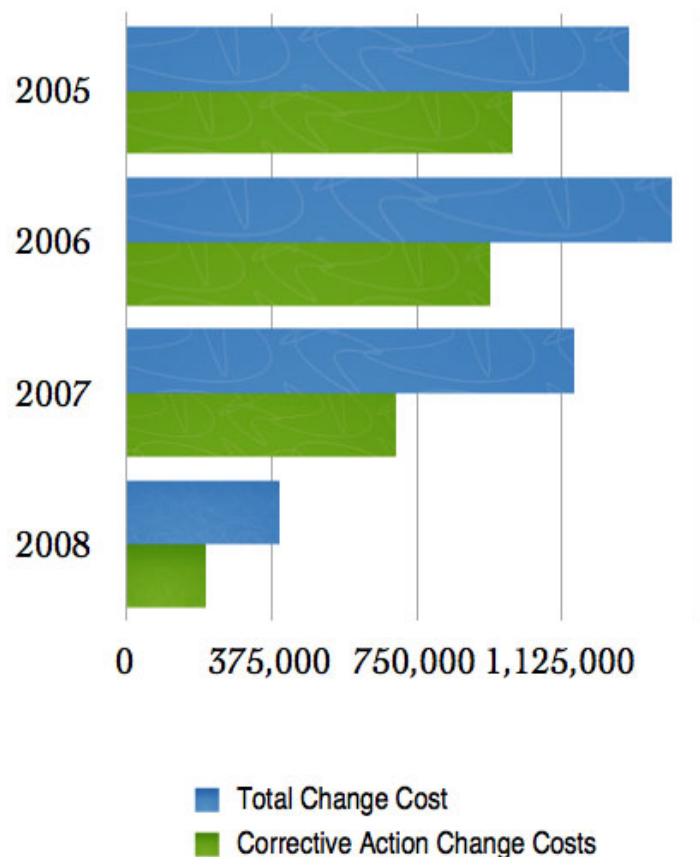
Change Process Metrics

There are two types of metrics you can get from a properly structured change process. One type of metric is about the change process itself. The other type is about organizational performance as revealed in the various types of change activity.

Metrics reveal process effectiveness and efficiency. Without metrics, continuous improvement is impossible. Ask management and process improvement people what metrics they would like to receive. Show them examples, and give them options. If there seems to be no interest (and that is rare), keep metrics anyway, especially those that reveal improvements in your own area (CM). Be careful with cycle time metrics, not all changes can be summed into one cycle time category.

If you have properly structured forms and automated tools, many metrics can be generated quickly.

Below is a sample chart showing **Corrective Action Change Cost** as a percentage of total change cost.



Upcoming CM Certification Courses



- **CMPIC Certification Series Courses 1 - 4**

Upcoming Series:

Washington, DC area starting April 6, 2009

Seabrook, TX starting April 14, 2009

Andover, MA starting May 4, 2009

Huntsville, AL area starting July 20, 2009

- **Software CM Certification**

CMPIC Course 5 “Configuration Management for IT and Software Development Certification” will be offered in the following locations:

Bloomington, MN starting March 23, 2009

Washington, DC area starting April 6, 2009

Andover, MA starting June 15, 2009

San Diego, CA starting September 14, 2009

- **EIA-649**

CMPIC Course 6 “Configuration Management Industry Standard ANSI/EIA-649A Principles and Applications” will be offered in the following locations:

Seattle, WA area starting June 8, 2009

Washington DC area starting August 31, 2009

Huntsville, AL area starting October 26, 2009

- **CM Trends 2009 Conference**

This event will be held in Las Vegas, NV from September 21 to 23, 2009. See pages 10 - 12 of this newsletter for more information.

- **Go to www.cmpic.com for more information about these courses and events.**

CMPIC Onsite Certification

Did you know that CMPIC offers onsite certification and training for as few as five attendees? This is a great way to train your staff and eliminate the need for a large travel expenditure. Call us to find out more, or visit www.cmpic.com.

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