AIMPOINT 2024

Jon Ambuhm 2024-09-12 **CM FORUM** - The art of managing configuration change

ABOUT

- Originator of the electronic red dot sight
- Founded in 1975

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- Mostly known for our high quality red dot sights Made In Sweden
- We have a full line of premium sighting solutions for any weapon platform



PRODUCT SEGMENTS



HUNTING



SPORT SHOOTING



LAW ENFORCEMENT



MILITARY



HOME DEFENCE

MADE IN SWEDEN

INNOVATIVE TECHNOLOGY AND CRAFTSMANSHIP

AIMPOINT SWEDEN AB

Production facility Gällivare

AIMPOINT AB

HQ and Production facility Malmö

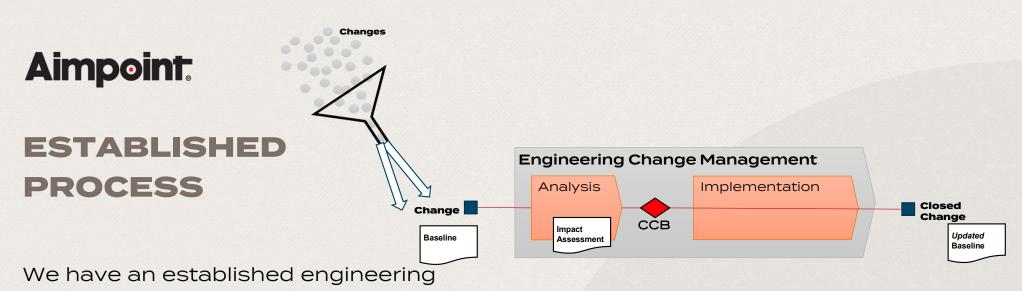
Aimpoint: RE-CAP FROM LAST YEAR

CM FORUM What PLM-systems can do for CM, and how to get there

- Aimpoint decided to invest in a PLM system 2022; Teamcenter
- Project implementation project started early 2023
- CM Forum in May-23
- Struggling with migration of legacy data (CAD-structures)

- GoLive Document Handling 25/9
- GoLive Part, eBOM and Change later this year
- Followed by mBOM, BOP, and Reqiurement management next year
- The goal is to have **1 tool** for product data/information

With help from the PLM system I believe we will get a better tool support to manage **configuration change**!



change process

Two CCB foras, covering different product families, and changes on released products (**PRODUCT BASELINES**)

Current tool support is divided between three systems; Sharepoint, MS Planner, and the PDM system with the CAD-files! Stakeholders from all areas in the company participates in the CCB meetings;

- R&D,
- Project Manager,
- Quality,
- Sales,
- Produt Owners,
- Production, and
- Supply

Aimpoint: CHANGE VS. CONFIGURATION CHANGE

The current CCB is a "Change Control Board" not a "Configuration Control Board"

The "changes" are used as a ticket to request help or resources (man hours) from R&D

Are the configuration baselines clearly defined, and does everyone understand the baselines?

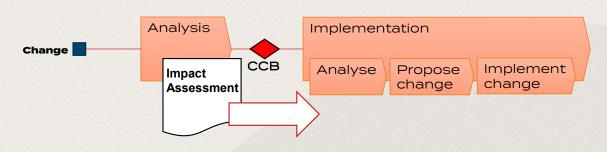
When do we need to write a formal change request?

Examples:

- New product configurations/variants
- "This is a problem..." fix it
- Set obsolete status on products
- Investigate possible solutions to improve work environment in production
- Change tolerance on drawing
- Change from this screw to this other screw
- Add functionality in software
- Update Work Instruction in Production
- Update or write new "Standard Operation Procedure"
- Check if a specific material is used in our products
- Develop a fixture or tool for production
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The organisation need to handle all "changes" above!

Aimpoint: IMPACT ASSESSMENT



According to the process the CCB stakeholders should make an analysis of the impact within their area and give a recommendation to the CCB decision.

But, many "changes" are not described properly - making it hard for the stakeholders to analyze impact since they doesn't know what is proposed to be changed or how the change will be implemented. The urgency of a change often force the <u>CCB to accept without</u> making a <u>complete analysis.</u>

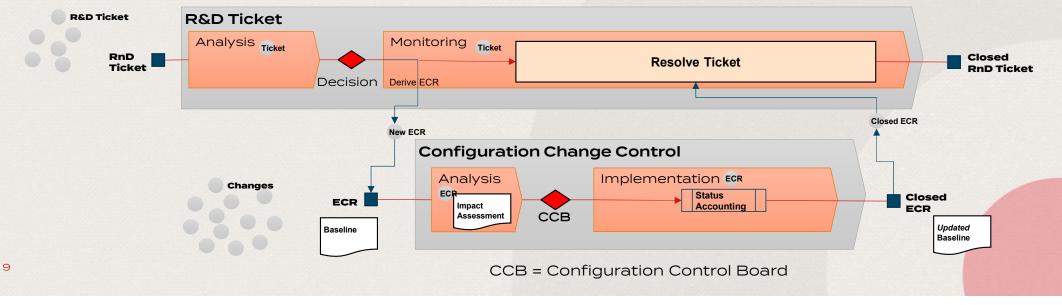
The analysis is pushed to the implementation team - but the stakeholders are also involved in the implementation

Some "changes" doesn't need a documented impact assessment since it's not a configuration change!

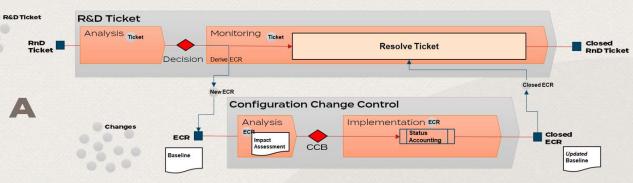
Aimpoint: WITH THE PLM SYSTEM WE NEED CHANGE THE CHANGE PROCESS

In the new PLM system we will separate configuration changes from "other changes" with separate Item types;

- R&D Ticket
- ECR (Engineering Change Request) and also
- ECN (Engineering Change Notice) to document and drive the release of the solution items, i.e revised parts, new parts, references to documentsand so on.



Aimpoint: HOW TO ESTABLISH A NEW PROCESS?



If the need of "change" is unclear, it will be investigated and tracked as an R&D Ticket.

Many tickets can be resolved fast, without passing the formal CCB.

But if the solution for the ticket is to make a technical change in a released product (baseline) an engineer is assigned to write a proper Configuration Change Request (ECR) explaining the change, with references to impacted items (products, parts, and documents). The stakeholders outside R&D in the current Change Control Board are now afraid that they will loose control and loose mandate to prioritize the R&D Tickets if we keep those tickets outside the Configuration Control Board (CCB)

We need to define a new fora for the decisions on R&D tickets - we will probably need representatives from the same stakeholders as the CCB

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Aimpoint: WHAT ABOUT THE REQUIREMENT BASELINE?

The requirements are managed in an Excel-based requirement specification today.

Changes in the requirements are handeled in a Project CCB (Project Decision meeting) and the changes are documented in a decision log during the development of a new product.

- Many requirements can be re-used for different products within the product family, but also between families.
- We have started the process implement support for requirement management in the PLM system.

How do you manage change of requirements that are re-used between products?

I'm convinced that the PLM system will give us a better support to manage configuration change – when we keep the product information in **1 tool/system!**



