

Whitepaper

Product Change Management

*Three Challenges,
Five Fixes*

Product Change Management

Three product change management challenges that may be holding you back

1) You're managing change with a paper-based process. A paper-based change management system locks your organization into communication habits that add time and hassle to the change process.

- **Paper is cumbersome.** A folder of printouts is not a secure and efficient means to communicate information. What if a page slips out or the folder gets lost? What if a reviewer has a question? And what would happen if the folder were to fall into the wrong hands?
- **Reconciling paper data sources is time-consuming and error-prone.** The potential for conflict between different sources is high, and the process of reconciling this conflicting information places a huge burden on resources.

2) Real-time visibility to change information isn't a top priority. Real-time visibility that enables people throughout the organization to view change information at any point in the process saves time and money.

- **Don't assume that visibility equals vulnerability.** Letting people view information is not the same thing as letting people change information.
- **Visibility extends throughout the organization.** A change system needs to accommodate everyone involved in the product process, from engineers to managers to executives.

3) The supply chain is not integrated into the change process. Don't think of your four walls as the boundary of your business: including your suppliers and outsourced partners in the change process saves you time and money.

- **Supply chain mistakes are expensive.** Scrap is costly for you and repeated ordering mistakes can damage your relationship with a supplier.
- **Don't waste supplier expertise.** It's in the best interest of your suppliers to help you—capitalize on this by involving them in change decisions.

Five fixes that make product change management work for you

1) Go electronic. Moving away from paper-based product documentation frees you from the limitations that paper imposes.

- **Create electronic change orders.** Stop shuffling paper—organize change information into a virtual document folder. You'll need thorough documentation of product changes for ISO-9001 compliance, and a well-organized ECO system is the foundation for adherence.
- **Capture complete change history.** With electronic change management, compiling and reviewing change history is easy. You don't have to wade through file cabinets or binders to find records of changes.

- **Manage access automatically.** Set up user permissions that ensure that the right people can view and approve ECOs. When the administrative overhead of managing the change process is handled electronically, resources are freed to focus on core competencies.
- **Capture changes for multiple parts and assemblies in a single ECO.** Don't think part-by-part—think about whole problems. Your reviewers will thank you when they can see the big picture without having to wade through several ECOs.
- **Have change information automatically incorporated into the product definition.** Don't rely on manual reconciliation—fold changes into the product specification as soon as they're approved.

2) Make it easy to get up to speed. The more time reviewers spend trying to understand an ECO, the longer the process takes.

- **Include just the changing information in the ECO.** If you are asking for approval on a simple sourcing change, there's no need to put the entire product specification in the ECO. Extraneous unchanging information just slows down the review process.
- **Include redlined BOMs.** A redline BOM that clearly indicates changed quantities, part numbers, reference designators, and so on saves wear and tear on reviewers.
- **Attach documentation to the ECO itself.** Include inventory reports with the ECO so reviewers don't have to ask questions.

3) Route ECOs electronically to anyone in the organization or supply chain. Once your change process is paper-free, you gain enormous flexibility about how that information moves through the organization.

- **Notify people automatically when their decision is needed.** Have an email message with a link directly to the ECO sent automatically to each reviewer. Include details of the parts and assemblies involved.
- **Don't limit visibility to the change board.** The change boards are not the only people who need to see an ECO—don't limit visibility to them. Let other people view and subscribe to ECOs so that they are notified when the ECO has been submitted, modified, rejected or approved.
- **Capture decisions and comments online.** Enable people to approve and reject ECOs immediately, and let others see their decisions.
- **Add additional reviewers on the fly.** Change boards add structure to the change process, but business realities sometimes require that other people be included in the process. Make it easy to add extra reviewers to an ECO without interfering with the existing process.

4) Route specific kinds of changes to specific people at specific stages in the process. Product development is a dynamic process—your change process needs to be flexible as well.

- **Adjust change control for each stage of development.** Set up lightweight version control during design so engineers can make changes on a part-by-part basis. Use ECOs and change boards during production to formalize the change process. When you have options for each stage in development, you can tailor your change strategy for your business processes.
- **Route different kinds of changes to specific people.** Use separate change boards for each category of information—documentation, costing, sourcing, specifications, and so on. You will ensure that the appropriate people make decisions within their expertise about the information that impacts them.

5) Get real-time access online to any ECO in the system. Your ECOs contain critical information about your products and your process—share them with the organization.

- **Store your ECOs in a central location that the whole team can access.** With ECOs available online, the complete product team—from engineers to suppliers—can contribute to the change process.
- **Track who has reviewed and who hasn't.** When it's obvious who has reviewed an ECO and who has yet to do so, people will be more responsive to the process.
- **Send reminders to reviewers about their pending decisions.** People are busy—send an email reminder with a link to the ECO to make sure they know their attention is needed.
- **Track ECOs from creation to approval and beyond.** Your ECO history is your product history—so make it easy for people to review completed ECOs.

Sound impossible?

It's being done right now by Arena. Now that you know how an electronic change management solution can improve efficiency and save you money, come see how Arena makes it happen. Arena helps innovative manufacturers bring better products to market faster with cloud PLM offerings that speed prototyping, reduce scrap and help manufacturers collaborate on product changes with strategic partners across the globe.

Arena BOMControl, a cloud-based solution for bill of material (BOM) and change management, provides a controlled and centralized way to manage changes to product data. It's easy to use and allows everyone across your organization and your entire supply chain to be on the same page. BOMControl gives you everything you need in one place:

- **Product definition** for organizing complete information—including BOM, sourcing, costing, documentation, and version information—throughout the product lifecycle
- **Sourcing** for capturing full supplier, cost, lead time and part specifications
- **Product change management** that tracks versions and changes, and automates notifications and workflow
- **Collaboration** for integrating the entire design chain into the development process
- **Product analytics** for assessing costs, project status and more

BOMControl offers these benefits:

- **Instant on:** Account activation & data import complete in days
- **Easy to use:** No training, consultants or classes required
- **Zero IT overhead:** Fully hosted solution frees valuable IT time
- **Low cost of ownership:** Full solution at a fraction of competition's price

Learn more about our suite of cloud PLM product offerings by visiting us online at www.arenasolutions.com. You can also reach us at 1.866.937.1438 or questions@arenasolutions.com.

About Arena

For over a decade, Arena has been redefining PLM with a suite of cloud applications that enable engineering, manufacturing and their extended supply chains to work better together—from first prototype to full-scale production. Arena helps innovative manufacturers bring better products to market faster with cloud PLM offerings that speed prototyping, reduce scrap and help manufacturers collaborate on product changes with strategic partners worldwide.



Contact

Arena Solutions
Foster City, CA 94404
P. 650.513.3500
F. 650.513.3511