

Reducing Design and Production Errors With Cloud PLM



ABOUT THE COMPANY

Haltian is a leading Internet of Things (IoT) and product development company. Haltian's IoT services include the Empathic Building digital twin for smart offices. The company's Thingsee IoT devices and platform facilitate large-scale deployments and are used for applications such as occupancy detection, indoor air quality monitoring, and predictive maintenance. Haltian also provides manufacturers with world-class new product development services—from initial concept and prototype design to launch and mass production. Haltian IoT customers include many global operators, such as Lindström and W.L. Gore. Haltian is also behind many global signature products, such as the Oura health ring.

AT A GLANCE

Mission

Inspire new possibilities through smart, connected products

Best Thing About Arena

Eliminates manual, disconnected processes

Bottom-Line Impact

Enables Haltian to keep production running and deliver high-quality products on schedule

Key Benefits

- Provides a single source of truth for product information
- Enables real-time collaboration across global teams
- Gives engineers visibility into changes that impact production
- Minimizes BOM and production errors that lead to costly scrap and rework
- Helps circumvent part shortages and other supply chain disruptions
- Accelerates product development cycles



BUSINESS CHALLENGES

Due to the complexity of their IoT devices, Haltian must ensure seamless interoperability between the devices' sensors, software, and electrical components. Previously, Haltian relied on multiple disconnected systems to store and manage their product data. Bills of materials (BOMs) were maintained in Excel spreadsheets, making it difficult for teams to keep track of the latest product designs and ensure data integrity. "We were constantly having to update BOMs across multiple systems and recheck them for accuracy. This manual process was very time-consuming and created opportunities for errors," stated Annika Liimatta, Operations Manager at Haltian.



As the company continued to expand globally and extend their product portfolio, it became nearly impossible to effectively manage product information using this manual, siloed approach. In addition, Haltian's transition to a remote work model because of the COVID-19 pandemic created communication gaps and other inefficiencies as teams scattered to different locations.

Ultimately, the company needed a single, centralized solution that would bring more structure to their product data and keep their dispersed teams on the same page.

THE SOLUTION

Arena provides Haltian a structured approach to manage the entire product record.

Liimatta set out to find a product lifecycle management (PLM) solution that could scale with the company and meet Haltian's evolving product development needs. "We ultimately chose Arena PLM for its ease of use as well as its comprehensive BOM and engineering change management capabilities," noted Liimatta.

By combining components, files, drawings, and other elements of the BOM into a centralized cloud-based system, Haltian always has access to the most current and accurate product information. Arena PLM enables Haltian's teams to easily create, share, and approve product designs and gain greater visibility into any changes that impact production with revision controls and automated engineering change processes applied to parts, BOMs, and documents.

“**Having real-time access to a single, unified system gives us confidence that information is always up to date and that the right product gets built without any errors or delays.**”

—Annika Liimatta, Operations Manager, Haltian

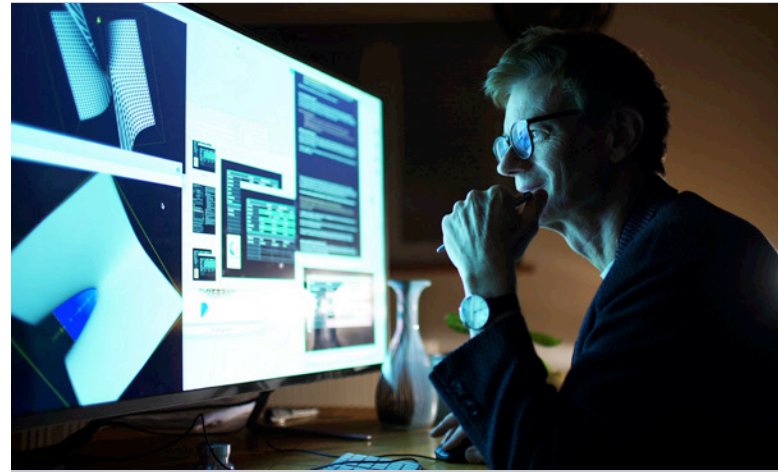
KEY BENEFITS

Since deploying Arena PLM, Haltian's dispersed teams can access the system anytime and anywhere and provide real-time input around drawings, specifications, assemblies, and other product information. This keeps teams aligned and helps them address interoperability of the total design to accelerate new product development.

With Haltian's multiple product configurations, a robust part numbering system is essential to ensure full traceability and control of the various designs. Haltian assigns Arena item numbers and other attributes to components so that they are properly coded and tracked in their BOMs. Because engineering teams and subcontractors are accessing the same BOMs and working off of the same part numbers and revisions, it eliminates confusion and errors during the production phase. For added clarity, they can easily compare redlines of the BOMs to see the history of changes between revisions. Where Used capabilities also provide visibility into where a particular component is used across all product assemblies.

“ Due to the pandemic, we often encounter part shortages and must source alternate components to build our products. Arena provides complete visibility into all assemblies that utilize a specific component. This enables us to pivot fast and make the necessary changes to keep production on schedule.

—Juha Pikkarainen, R&D Manager, Haltian



SOLID FOUNDATION FOR IoT INNOVATION

Now that Arena PLM has been embraced by teams throughout the organization, Haltian is working to further optimize their product-related business processes and streamline production.

Haltian is integrating Arena PLM with SOLIDWORKS engineering design solution to accelerate the handoff between mechanical and electrical design teams. They are also integrating Arena with NetSuite enterprise resource planning (ERP) to transfer the product designs to production without any errors or delays. Juha Pikkarainen, Haltian R&D Manager, said, "With Arena, we now have a solid foundation to accelerate innovations in IoT and meet the evolving needs of our customers."