



Tier 1 Supplier Drives Consistent Design Output By Leveraging AurosIQ

CLIENT CASE STUDY

OVERVIEW

Due to the distinct functions of various departments, each individual department stored the working SOPs in their own formats, such as documents, Excel spreadsheets, or checklists.

As is often the case, the checklists were relevant to specific departments and did little to qualify output. The fragmentation of checklists— which were specific to a certain task and not to the overall company objectives— led to multiple iterations as designs slowly passed through various stakeholders and checkpoints, including design, development, manufacturing, and productions.

Multiple issues were raised repeatedly at various checkpoints. However, these issues were not transplanted into the organizational knowledge database. Only the users who knew about the issues and requirements of a cross-functional department were able to apply them to the upcoming designs and the knowledge remained locked with those individuals. This led to:

- Frustration across various departments for repeated issues and mistakes
- Longer development lead cycle for a product from design to manufacturing
- Inconsistency of information stored across departments, leading to conflicting rules and guidelines

The organization operated in multiple locations. Because of this, the subject matter experts or stakeholders residing at different facilities couldn't work together to consolidate requirements across a larger group.

The consolidation of rules across departments was difficult, as most of the checklists, requirements, and guidelines were in vastly different formats, used different terminologies, and were very inconsistent. Consolidation of information was time-consuming, expensive, and had the risk of quickly becoming obsolete since there wasn't an available consistent mechanism to capture and update information.

Tactical know-how from experts was only realized when problems were encountered. This information stayed restricted by features of its application for specific issues. Often, employees

will understand the solution to a problem but might not fully understand the origin or rationale of the solution. Therefore, the knowledge of “how” as opposed to “why” restricted the further percolation of the information to similar challenges that were elsewhere in the organization. This also led to transient decay of knowledge.

APPROACH

AuroslQ provided a web-based solution that was easy to deploy and could be quickly rolled out across the organization. Knowledge captured in K-PACs led to consistency in the way that knowledge was captured and delivered to each user, which in turn increased understanding of the application.

Information from various departments pertaining to a certain component, subsystem, or process automatically collected in the form of Assessments at the design and requirements phase, eliminating most commonly recurring problems during gate checks.

The conformance statuses accessed at each stage allowed users to preview past solutions and how to reapply them without the direct advisement of the subject matter expert.

All noncompliance issues were resolved through issue management. Because of this, users could capture why certain steps were taken for a situation or how a solution had been found, creating an automatic knowledge repository and database for further reference.

Direct monitoring of knowledge shared by experts and users moved others to share more information as they saw their knowledge being appreciated and used widely across the organization, creating an environment of shared and captured knowledge.

Assessments provided a visible compliance and conformance score on each task, as opposed to a static checklist, which improved the efficiency of team or design review meetings. Therefore, experts could focus on real issues and not just basic compliance, which increased overall productivity.

Continuous evaluation of knowledge created with Assessments led to a database of information and values, which could be referred to at later stages across development projects, processes, and various other requirements of product design life cycles.

This led to a significant reduction in design iteration and time spent in cross-functional team reviews at various GAT points of development and manufacturing, capturing most of the downstream issues in the virtual build process itself.



RESULTS

- **REDUCED THE DESIGN CYCLE BY ADDRESSING ISSUES DURING THE VIRTUAL BUILD STAGE**
- **REDUCED DEVELOPMENT & TESTING COSTS REQUIREMENTS**
- **ASSISTED WITH PREVENTING RECURRING ISSUES AND COMMUNICATION OF PROVEN DESIGN PRACTICES**
- **PROMOTES STANDARDIZATION OF REQUIREMENTS ACROSS SYSTEMS & SUBSYSTEMS**

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We have a set of design standards that we constantly update. Design standards are the first line of defense. If you know that you have realizable design standards, you certainly want to repeat those over and over again. We have what we call a 'checklist,' where everything that we learned from a mistake in the past and we create a countermeasure to it goes into that checklist, and we go through a series of checks in the very early stages, in terms of the making sure we have right design and right content.”

Tier 1 Supplier

