

Case Study:

QA / Testing



CDI's reduces cost of wireless validation testing program by 20% annually.

Client Description:

A large producer of microprocessors and related technology. Other products produced include semi conductors, flash memory, wireless technology, motherboards, chipsets and network interface cards.

Background:

In 2006, our client approached CDI requesting we help create a multi-faceted support model. The goals were to reduce overall costs by 20% and establish meaningful enhancements to the overall validation engineering effort. CDI proposed creating a new support model aimed at saving money and improving the quality of the validation efforts.

Business Issue:

Our client's business needs required a black box solution closely tied to the current internal validation process. On a yearly basis, tens of thousands of tests were being conducted for numerous wireless products. As the number of products requiring validation increased, efficiency and quality of testing became compromised.

Prior to this engagement, our client had been utilizing short-term staffing contractors and their own engineers for test execution. The contractor turnover was causing multiple problems. Due to co-employment rules, contractors were only allowed site access for one year at a time, which resulted in a high cost of training. Secondly, the continually changing team was unable to provide the dedicated process improvement the client expected.

CDI's analysis showed great potential cost savings by reducing the time dedicated towards training and also found opportunities to focus on process improvement by contractually enabling CDI staff to test, develop and implement procedural changes.

CDI Solution:

Our approach to solve the client's issues included the following:

- Provided immediate SOW-based, SLA-driven, outsourced contract support to meet technical needs
- Established a triage for effective prioritization of work requests
- Created a flexible organizational model based on individual customer or product needs
- Cross-trained resources to allow for accommodation of ever-changing test volumes and technical requirements
- Established a methodology for identifying key areas of process improvement and developing a process to anticipate future customer needs

Our solution included splitting the team of 25 FTEs into three parts based on their primary function: Validation Testing, Automation and Engineering Services (Linux and high-level technical marketing collateral).

CDI's function-based approach model allowed us to adjust to the individual nuances of each of the teams we were supporting. Dedicated, non-shifting resources produced a stable team and allowed for a deeper scrub of the overall technical challenges and therefore a higher level support model. Developing this expertise encouraged role evolution and eventual ownership of certain features or processes. CDI continues to "inherit" tasks and duties from our client's employees, which in turn allows them to focus on more grade appropriate work.

Each new product being developed goes through an extensive testing regimen. CDI proactively sets up automation tests and reactively makes adjustments based on product specifics and time line.

Results:

CDI currently conducts tens of thousands of tests per year while providing our client with at least 20% costs savings each year.

Our team grew from the original 10 to 25 within two years. This highlights not only the fiscal success of our team but also stresses the quality of the support provided.

Our original support assignment was to support 1 new product and 2 legacy products. Currently, CDI supports 4 current and 5 legacy products. We have continually moved into higher profile roles as a result of the technical knowledge our resources provide combined with the trust we have built over time.

CDI accomplished the following:

- Delivered 20% price savings based on volume
- Established work efficiencies by creating a pooled resource for approvals combined with individual ownership of specialized tasks or duties
- Moved what was a fragmented, multi vendor support model into a concise, one-stop-shop type of approach

Technologies Used:

- 802.11 Wireless technologies
- WiMAX technologies
- VB Script, Perl, C#