

Validator Complexity

QUALITY ASSURANCE. QUALITY SHOES.

Details A small software company, Chalmers and Johnson Solutions¹ (C&JS), was won a contract to build an integrated inventory control system for a very large national quality shoe² manufacturer, Stack Shoes³. The system will gather sales information daily from shoe stores nationwide. This information will be used by the accounting, shipping, and ordering departments to control all of the functions of this large corporation. The inventory functions are critical to the smooth operation of the system.

After the contract was signed Rosalia Kwaśnik, a quality assurance engineer with Chalmers and Johnson Solutions, reviewed the test plans for the inventory functions of the system and found that they would be insufficient to adequately confirm the functionality of the system. None of the integration testers agreed with Kwaśnik as the testing criteria is quite complex and they do not believe that Kwaśnik had the skill and experience to understand the complexity of the decision points.⁴

Kwaśnik informed the principle architect for the project, Marta Peña. Peña told Kwaśnik that the company will go out of business if they do not deliver the software on time and under budget and the only way to do that is to stick strictly to the contract.

The project went as planned; Kwaśnik oversaw the testing, the test plans did not reveal any defects, that is they passed the contractually agreed testing criteria. Kwaśnik voiced her concerns⁵ again. As no problems arose from the testing and the other testers thought that Kwaśnik was being overly cautious, David Johnson, a principal of Chalmers and Johnson Solutions, sided with the majority opinion and directed Kwaśnik to sign off on the software.

Kwaśnik did not budge and resigned⁶. Kwaśnik informed Stack Shoes' Inventory Sub-system domain expert, Janet Turing that they were leaving the project but did not disclose the reason. When asked by Turing the reason "did you get a better job?", all Kwaśnik would say was that it was for professional reasons.

Kwaśnik left a module called `IWARNEDYOU` buried in the sub-system.⁷

Three days after the system was installed it failed to respond to any queries and printed the error message.⁸

Cast	Role
Deborah Chalmers	Principal, C&JS
David Johnson	Principal, C&JS
Rosalia Kwaśnik	Quality assurance engineer
Marta Peña	Principle architect
Alan Stack	Stack Shoes CEO
Janet Turing	Domain expert

Table 1: V_3 Cast

¹ Principals: Deborah Chalmers and David Johnson.

² Apologies to Mark Knopfler.

³ CEO: Alan Stack.

⁴ The test plans were consistent with the testing criteria in the contract, however.

⁵ Kwaśnik contended that the Inventory Sub-system would fail which will significantly harm their client and its employees.

⁶ They saw their duty to professionalism as greater than their job, as greater than their loyalty to this job. This is in spite of them personally liking Turing.

⁷ `IWARNEDYOU` is the first phrase in all the error messages that would be printed out if the system failed. Each error message documented Kwaśnik's concerns, the responses they received when they raised those concerns, and the directions they were given.

⁸ Three stores from across the country tried to update the same item in the inventory in close succession.