To Modify or not to Modify: a Credit Bureau's Question


When Annabelle and Jean Tigana made an offer on their dream house, and the sellers accepted their offer, the delighted Tiganas dashed down to DaBank and applied for a mortgage. DaBank immediately requested a credit check from CreditSwift, one of the major nationwide credit bureaus. After an anxious three days, the Tiganas received a call from DaBank. CreditSwift’s report had arrived and showed that Jean had an outstanding lien on a fishing boat in Baton Verde, Louisiana. Therefore, DaBank could not approve their mortgage application. The Tiganas were incensed – neither of them had ever set foot in Louisiana, or fished, let alone bought a boat anywhere. They were advised that if they wanted their dream house, they have to clear their problem fast since another potential buyer wanted to make an offer and the seller couldn't wait longer than 48 hours. Jean knew that the law allowed anyone to get details of his or her credit reports and suggest corrections. He immediately contacted Marcio Santos at CreditSwift who researched the problem and discovered that another Jean Tigana, a man from Rouxville, Louisiana existed in their file. This Jean was 72; the other Jean was 36. By the time Marcio corrected the database and issued a new report to DaBank, the Tiganas dream house had been sold to the other buyer. Annabelle and Jean were left with uneasy feelings. Their record at CreditSwift had been fixed, but what about their record at the other credit bureaus? Marcio was also concerned and told the story to his good friend Bryan Robson, the director of systems analysis and design at CreditSwift. Bryan approached his superior, the chief information officer (CIO), and suggested that while the simple coding scheme used to identify a record for retrieval worked fine for a small database, it was clearly inadequate for the large database that existed now. It needed to be modified so that the mistakes of the type faced by the Tiganas are eliminated. Upon the CIO’s direction, Bryan conducted a full cost benefit analysis and found that the cost of modifying the system was around $1 million. The modification would save the company $125,000 per year mostly in the form of reduction of lawsuits and claim settlements resulting from the system's errors. Bryan concluded that the gain in reputation and increased customer satisfaction was enough to justify the modification. The CIO, on the other hand, considered the errors a small problem, and based on the cost–benefit analysis, he was against the change. Besides, he pointed out, the whole system was going to be upgraded in five years anyway. The dispute is referred to the Steering Committee.

Analyze the actions of Bryan Robson and the CIO using the ACM/IEEE-CS Software Engineering Code of Ethics and Professional Practice. Make specific references to its parts.