

Software Quality Assurance For eRetail System.

Overall

The eRetail System contains several modules, which were developed by third party team, thus the first step is to identify risk areas, and then setup

Risk One: Information exchange risk.

Since the partner does not know “our” procedures, it’s difficult for them to establish effective developing life circle and when meet problems, they do not know the post quality assurance actions ‘privileges. On another hand, the trust relationship also can be the risk when against information exchange. To minimize this kind of risk, we need to setup a strong contract.

First step, we need to contract with outsource team, establish information exchange contract. In this contract, the main point is to prevent outsource team to leak any information that belongs to our company but let them have information pulling privileges towards projects they’re working on. Such as our milestone, our design goals, etc.

Second step, besides contract, we also need human contact. We could ask one or more staffs to directly join the development procedure, thus the risk of information exchange risk can be minimized.

The time and cost are low to minimize this risk area since it only requires a good design contract and a knowledgeable lawyer. For staff, they can be volunteer to avoid additionally salary cost.

Risk two: Monitoring lack risk

As I said in risk one, this kind of risk is similar to risk one. The core problem is trust relationship between outsource team and “our” team. Thus, the easiest and most effective way is to make contract.

Step one, similar to risk one’s solution, but add requirement to monitor their milestone and ask outsource team to report progress weekly even daily.

This solution can actually combine with solution to solve risk one, so the cost/time/effort is the same as solution of risk one.

Risk three: Code Maintaining Risk.

Since the code is written by outsource company, thus the code maintaining problem is the most difficult problem and has most potential to produce disaster defects in this area. Suppose the development is complete, but there're defects happen, we need to solve them ASAP and minimize the cost.

Thus, to minimize this kind of risk, we need to make sure the code has correctness, reliability, maintainability, flexibility, testability, portability, and interoperability.

First step is to make maintenance contract with third party team. In this contract, we must give measurable factors to make sure the code has those features, such as identify required infrastructure, setup unit testing package, setup service level agreements, clarify coverage etc.

Second step is to ask third party to deliver API document and connect document staff with their team to make sure we get detail development document.

Third step is to make enhancement and fix expectation contract.

These three steps can cost additional money and effort. But the benefit is very huge since we can prevent any future disaster defects. The benefits are bigger than cost so these steps are recommended and even, required.