

## User Acceptance Testing and the Application Lifecycle

User Acceptance Testing (UAT) is an important part of the development process. If carried out as early as possible and as regularly as possible, it not only alerts the development team to aspects that don't yet meet the requirements of the users, but also gives governance a better idea of progress. If UAT is delayed, defects become expensive and troublesome to fix. Sophia Segal gives an experienced summary view of UAT

A software application can be robust, scalable, easily maintained, and easy to use, but if it doesn't do what the customer needs then it is useless. The success of a new product or software application is at the mercy of how precisely it fulfils the requirements of its users. Even if a company has successfully gone live with an innovative product, but has failed to ensure that it meets the requirements of the end users because its suitability was never properly checked, the consequences will be likely to be failure, poor consumer experience, brand deterioration and major financial loss because of having to identify defects and fix them. Despite all this, there is little enthusiasm in the industry for User Acceptance testing (UAT), and project governance continues to make the repeated mistake of undervaluing the process, whether using Agile or Waterfall methodologies.

Why UAT is critical to Software Application Projects.

Without effective UAT (User Acceptance Testing), the chances of the success of a development project are severely diminished. That it is why it is such an important part of the delivery process. UAT can be carried out using an agile approach. In Agile, it is not an independent phase, but instead an iterative collaboration between all the project stakeholders, ensuring continuous test and feedback cycles.

For User Acceptance testing, a Requirements Subject Matter Expert (Requirements SME), or Business Domain expert, ensures that the requirements continues, throughout the delivery process, to be correctly understood and documented within the delivery team. These can then be verified by means of UAT. It is a small investment to make to maximize their revenue and increase brand reputation in the market. It removes unpleasant surprises after release and deployment, and gives Governance a far better idea of development progress. It takes care to ensure that business processes that are essential for the business or which carry a risk of financial or reputational loss are rigorously checked.

User Accepted Testing (UAT) is a structured testing process that makes sure that all user requirements are performing as the user wants and expects. Does the product follow the company's business regulations for new registration? Does the vendor product screen display under ten seconds when the user selects it? Do the online forms support a department's legal obligations? Does the business flow handle exceptions and alternative flows? These are all valid UAT requirements which need to be fleshed

out meticulously with their corresponding acceptance criteria. The software or product must satisfy these criteria, before the customer or user will accept it.

Requirements SME, who possess direct knowledge of end-to-end business processes, are a key part of the governance of an IT project. They can manage stakeholders to simulate accurate business scenarios, understand the key system functionalities, are able to lead training efforts and can accurately assess the severity of defects and risks on the business.

They will also have a critical role to prepare UAT and to design the overall structure of the tests, by means of a series of concise unambiguous requirements, which form the base for test cases. By shepherding real business users through the process of running these tests, UAT reveals all the shortcomings of the application under development. This is only effective if there are concise user requirements, which will evolve over time as they are reviewed and refined in software projects.