SNS Reaal / Hooge Huys

Development of a standardized test method

SNS Reaal Group is a fast growing Dutch Insurance bank with a total balance of 32,0 Billion Euro and 5800 employees. SNS Reaal Group has a complete package of bank-, stock- and insurance-products for private and business customers. She uses two main brands to sell these products: SNS bank and Hooge Huys.

SNS Reaal Group whishes a standardized test method for IT-development within the whole group. This method has to improve control of the test process: reduction of overruns (delays) on the planning, the Acceptance test should no longer be the "ultimate safety net" and reduction of the total number of defects found in production. In 2000, these were the goals for the project "SNS Reaal Group Test Approach". Within this project a specific test approach based on TMap has been defined for each of the 4 development methods (mainframe, client/server, internet and Component Based Development). Within this project a large number of templates, checklists and standards for test activities have been defined.

Method of implementation

Through realization of the new "SNS Reaal Group Test Approach", better control of the test process has not been achieved yet. To achieve that, the new method has to be put into practice. To guarantee better control, a phased implementation has been chosen:

- Phase 1: Test process improvement at Hooge Huys.
- Phase 2: Test process improvement at SNS Reaal Bank (partially parallel to phase 1).
- Phase 3: Standard test approach within entire SNS Reaal Group.

Prior to the implementation at Hooge Huys, an assessment was conducted. This assessment not only provides the guidelines for the implementation, but more importantly it created commitment for acceptance of the changes.

Based on the assessment, the prerequisites for phase 1 were determined:

- The "SNS Reaal Group Test Approach" is the basis for all actions.
- Two projects within the department for business customers have been identified as pilot projects to implement the new test approach.
- The implementation is focused on the System test.
- After successful completion of the pilot projects, the implementation will be started within the departments.

The implementation has been approached as a project. Project management is conducted by the team leader ITF test management. To keep track of progress and as a means to escalate problems, a "steering committee" has been introduced consisting of members of the management with sufficient decision power.

'The incremental implementation of the test method is already showing promising results.'

Implementation at ITF Insurances

The introduction of the new standard test approach for System testing within the department for business customers has been conducted using the following steps:

- Optimization of the available test method and procedures for the pilot projects.
- Dedicated test training for all employees of ITF Business Customers.
- Kick-off with project leaders and project members of pilot projects.
- (Baseline) Evaluation of present test activities using a questionnaire.
- Implementation of the test approach within the pilot projects.
- Weekly evaluation of experiences and, if necessary, adaptation of the approach.

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- Continuous evaluation using the baseline-questionnaire.

At present, 25 of the 150 employees have been trained and over 10 employees have gained experience in using the new test approach.

Achieved results

At present, the following results have been achieved by implementing the new test approach :

- Improved quality of the System test.
  During the Acceptance test the users find significantly less (50%) technical defects. Reactions of users towards ITF: "It is obvious more thorough testing has been done. The Acceptance test is no longer the ultimate safety net for technical defects. We are now able to concentrate on proper Acceptance testing". The improvement of the image of ITF increases job satisfaction for ITF-employees as well.
- Improved quality of functional documentation.
  By performing a testability review on the functional documentation, defects are found at an earlier stage.
- Improved control of the test process. Documented test plans, test scripts and test reports provide better insight and control.
- Improved re-usability of test ware.
  Re-testing of defects is faster using previously documented test cases. Reduction on preparation time for re-tests is around 50%.
- Reliable estimation of test projects.
  Metrics are collected for estimating test projects. Within the pilot projects the activities have been performed according to estimations.

Lessons learned

Hooge Huys has chosen an incremental (step-by-step) implementation. Although the process is not completed at this moment (July 2002) valuable experience has been gained with respect to implementing test improvements:

- Support from employees is vital. Test training, performing kickoffs and baseline evaluation before, and continuous coaching during the test project have proven to be very valuable.
- Resistance against the new method was heavy from the start. Planning and specifying test cases was found to be unnecessary (overhead) by development. By selecting the proper check-lists and templates and by implementing a "light" version at the start, resistance was mostly overcome.

'It is obvious more thorough testing has been done.'

- Accessibility of the test method is a critical element for success. The standard test products should be easy accessible and easy to use. The management of ITF stimulates this further by encouraging the actual use of the products, instead theoretical discussions.
- Keeping the test method up-to-date is crucial for continuous application of the method. A central group, like ITF test management, available for questions and (pro-active) updates of the test method is a prerequisite.
- Communication about the implementation results creates interest and willingness to implement changes within other departments. ITF test management recognizes that more attention has to be paid to this.

Conclusion by Hooge Huys and follow up

Hooge Huys concludes that: "the incremental implementation of the test method already shows promising results. The positive experiences gained by the user departments, involved in the pilot projects, is sufficient proof for the other departments and management to start implementation within the other departments as well. After the pilot projects, two new projects have adopted the new test method as well. In the remainder of 2002 the other departments of ITF at Hooge Huys will follow.