



Ministry of Transport

Development of a new HR Information system

In October 2001 a new HR (Human Resources) Information system has been implemented at the Ministry of Transport, Public Works and Water Management (further referred to as T&W). The reason for this was the ending contract with the supplier of the present system (Comi-P). The maintenance contract stops at the end of 2002. This introduces a risk concerning the continuity of the HR information system. The project "Replacement of HR Information system" is called VIP. The main goal for the project is to ensure continuity concerning the provision of information related to HR. In addition the project VIP improves and increases functionality compared to the present system.

The project has to result in an implemented, tested and operational HR Information system within the entire department of T&W, starting October 31st 2002. The system should remain operable for at least 5 years.

The HR-module of the ERP-package mySAP.com from SAP has been chosen. The implementation will take place at 25 sites, that operate independently and that each have their own operational and infrastructural standards. The partner for the implementation is Pink Roccade / Arinso. Project VIP spends a lot of time on testing the application. A difference has been made between standard (regular) SAP and custom made solutions. Project VIP aims at efficient testing within minimal timelines. Therefore, global agreements have been made between subprojects concerning planning and (re)use of knowledge, test cases and test resources. The test manager of the subproject ERP implementation acts as overall test coordinator.

Testing within VIP

The goal of the test is to give a well-founded advice regarding the implementation, based on clear insight (achieved by testing) into the quality of the system. Based upon the test results a conclusion can be drawn whether the system corresponds to the requirements and whether it is user-friendly and understandable. In addition performance, printing and maintenance functionality is tested.

The preparation

In October 2001 SOGETI was asked to provide a test manager to draw up the test plan. An independent supplier was chosen to prevent conflicts of

interest. The Master Test Plan provided the details concerning the required resources to execute the test. The test plan was reviewed and accepted by different parties involved.

Next, the test team was set up. A proper mix of experienced and less experienced testers, and internal and external testers was introduced. Conformance to the ASAP-method, the implementation method of SAP, was a prerequisite for T&W. TMap proved to fit perfectly without changing either method too much.

'SOGETI provided a healthy 'pressure' on the implementation partner to provide good quality.'

The execution

The test team started by performing a testability review of the blueprints to assess the testability and to detect inconsistencies. Next the test scripts were made for the different test levels: the scenario test, the development test and the integration test. For each test level a standard 'example test script' was made as a reference for the other test scripts. The number of test environments needed was determined and the required test data was set up for each environment. Thereafter, the actual execution of the tests was performed. Finally, a pilot was performed for final acceptance by T&W.





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Achieved results

Testing has provided the following results:

- Result of test strategy within the Master Test Plan. Everybody was surprised by the thorough documentation of all agreements in a test plan. Through this test plan all subprojects had a clear understanding of the required test time and had a chance to participate in the test strategy.
- Improved quality of the blueprint documentation. By performing the testability review of the blueprints, defects and inconsistencies were structurally detected much earlier. For Pink/Roccade this thorough approach was a new but positive experience.
- Insight into the quality of the system.
- The different test levels have provided insight into the quality, risks and quality attributes with regard to standard parameterization as well as custom-made functionality.
- Standards for T&W. A new standard has been determined for SAP-testing within T&W. Future projects can use this standard.

Lessons learned

Valuable experience has been gained with the testing of SAP HR:

- The setup of initial test data for the different test levels is time consuming but vital. Especially for report testing. Use of a test tool can provide a solution.
- The transport-strategy from and to the test environment has to be thoroughly prepared. A large number of checks proved to be necessary to verify whether transports were performed and in the correct sequence.
- Performance is a point of concern, combining SAP with the Internet and large volumes of

data requires changes to the technical infrastructure to get acceptable response times.

- Knowledge of testing commercial software within the test team is more important than SAP knowledge. In general, specific SAP knowledge is easier to learn than test expertise.

Follow-up

The implementation of the HR Information system can be seen as the first step of the ERP implementation within T&W. The possible follow-up is described in higher ambition levels and will lead to the implementation of other SAP modules.

Summary of the project manager

According to Rene Waardenburg, project manager VIP, testing is a profession and testing has to be thoroughly prepared. For implementing commercial software, testing is often omitted. And if testing is performed at all, it is usually done by the implementation partner. This leads to friction between getting an independent quality advice and the objectivity of the implementation partner. Furthermore, test time is often sacrificed for extra development time which leads to extreme time pressure during test execution. This was not acceptable for the project VIP. An independent supplier was required with a professional and structural approach. SOGETI answered to the requirements and took up the testing. SOGETI provided a healthy 'pressure' on the implementation partner to provide good quality. Rene appreciates the pragmatic approach and stresses that all expectations concerning the testing were fulfilled. Testing is an important safety net and Rene advises everybody to pay careful attention to this.

Project facts

Company: Ministry of Transport, Public Works and Water Management
Topic: Testing of SAP HR implementation
Goal: Giving a well-founded advice with respect to the implementation, based on a clear insight into the quality of the system.
Period: October 2001 - June 2002
Size: 577 person days
Result: The tests have been finished successfully and all testware has been handed over to the maintenance organization. The system will be implemented in production on October first 2002.

