

PITSS.CON and Scrum

Agile software development for efficient project
management

PITSS.CON 12.3.1

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1. Introduction

Over recent years, Scrum established itself as an essential method of project management in agile software development. For this reason, Scrum is consistently applied within software development processes in the latest release of the ALM (application lifecycle management) tool PITSS.CON. In a unique approach, information on all user stories is derived retrospectively from existing legacy applications in the preparation of a migration project, thereby filling an initial product backlog.

2. The importance of PITSS.CON

PITSS.CON is a repository-based, source code-spanning tool for software development and modernisation in the Oracle environment. Through its comprehensive functionality, PITSS.CON automatically automates Oracle Forms and Reports projects across all stages of development. This extends the lifespan of Oracle Forms applications developed in-house as well as adapted Oracle E-Business Suite and Oracle Retail applications while ensuring these applications conform to the latest technical standards such as ADF, APEX, Java and SOA.

3. The advantages of agile software development

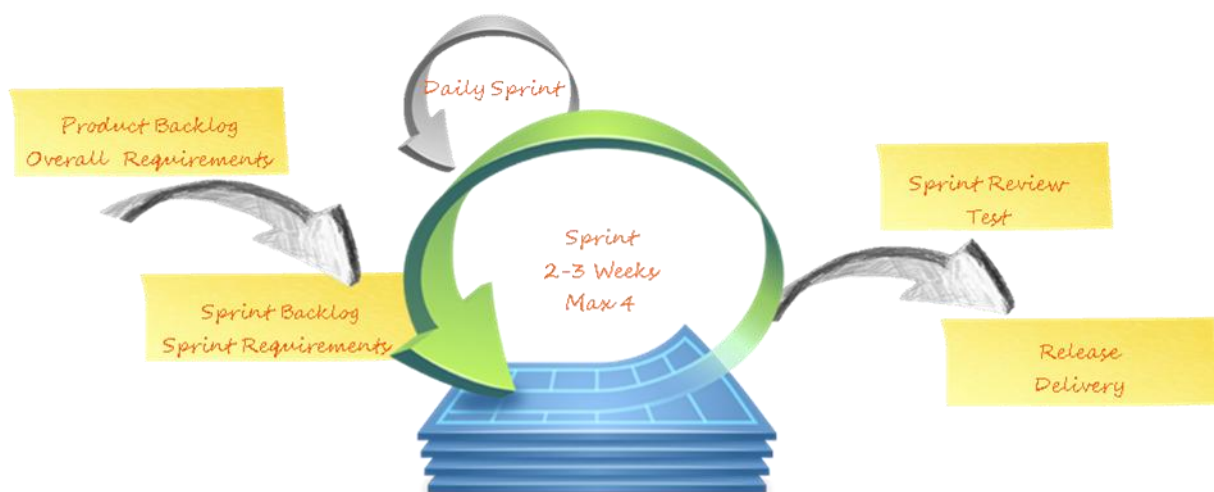


Diagram: Agile software development with product backlog, sprint backlog, sprints, review and release

Having become established in software development, agile procedural models are proving highly popular. Rather than draw up and meticulously work through a wide-ranging scope statement or specification, a version of the product with added value for the customer can be presented in very small and short cycles known as sprints. In close collaboration, the client helps to determine the content of the various sprints by defining user stories (i.e. in which role the user wishes to use which function for which purpose). Functionality created in this way is considerably faster than that produced using classic development methods.

In the case of new developments, the developer purposely specifies user stories, maintenance of the product backlog and the definition of sprints in collaboration with the department in question. Where the majority of user stories are located in the existing legacy application, however, modernisation and migration projects become more difficult. Assuming a currently utilised business process is mapped in the current software and highly similar to the business process of tomorrow, the user stories in the legacy system will again provide an excellent template for the future application.

4. Identifying rather than implementing processes

A classic analysis of the application based on the source code can show all the objects and functions that were implemented to cover a process. However, there is no combination of source code artifacts to form a single user story, and it is not possible to tell from the code whether the user is still using certain functions at all.

In the case of Oracle Forms applications in particular – which are clearly showing their age and have attracted full support throughout extensive development – functions are still delivered via code no longer used by the departments.

5. Knowing what applications contain and how users use it

PITSS.CON counters these restrictions through its unique function of mapping user stories within existing applications.

Firstly the application is loaded in the repository and broadly expanded to include recording functionality. Users can then start mapping a user story at any point in their application. PITSS.CON notes the point in the source code that belongs to the user story before subsequently allocating it to metadata entered by the user when saving.

In a second iteration, PITSS.CON is able to identify all such points, and to verify if a user story has been forgotten or whether these points are genuinely no longer part of a business process.

6. Evaluating user stories and artifacts

Quite incidentally, PITSS.CON determines hotspots in the application, i.e. source code locations in the software used in a high number of user stories which entail a high general risk to the application if changed.

On the basis of recognised software metrics such as Halstead (similar to the ‘function point’ method used by many major service providers), the objects involved in a user story are evaluated so that the developer team can gauge the weight or number of story points linked to a migration.

7. Starting with the migration of key functions

The user stories recorded are assessed by the product owner according to their importance in terms of added value to the company. This approach makes it easy to determine user stories for the first sprint while identifying stories that no longer play an important role or which could be reformulated in relation to the business process.

The true assets of the application are pinpointed and purposely channelled for migration or upgrading to new technologies or SOA-compliant business processes.

8. Entering and systematising backlog of 1,000+ items with PITSS.CON

A four- or five-figure number of user stories can thereby be quickly produced from an Oracle Forms application with several hundred dialogs. In this case, it is not possible for the product owner to set priorities across all user stories. For this reason, PITSS.CON hierarchically classifies user stories into three categories in which priorities can be set. All user stories initiated from a module are grouped and assigned to a cluster at the highest level. A cluster is a technically functional unit conforming to the intended software architecture which ideally supports the future system environment as regards such aspects as serviceability.

PITSS.CON derives this cluster or system formation from the application flow, a graph produced by calling up Forms modules. The interlinking of modules, which expresses call action and frequency, determines or specifies the most rational division or classification of clusters. This results in a modern modular application that satisfies the highest requirements.

9. Time is money: Realise departmental requirements faster with PITSS.CON

PITSS.CON not only assists software development through the initial filling of the product backlog, but also by supporting the developer team in the fine-tuning phase of migration. The necessary artifacts for the relevant sprint can be generated from the user stories and the team can monitor when a story has been completed and accepted. PITSS.CON tracks the progress of development, thereby determining lead times for user stories and the velocity of the developer team.

In line with agile software development, content can be defined by the product owner before each sprint; rather than take over an existing user story, for example, this can be replaced or expanded in response to an amended requirement. As a result, it is no longer necessary to freeze an application during migration.

With PITSS.CON, you simplify the step towards agile software development and convert the investment in your existing Forms application in unique fashion.

About PITSS

PITSS is the leading supplier of fully integrated solutions for effective management of Oracle Forms applications. The PITSS Group was established in 1999 and has gained international recognition with over 1,000 customers and a multitude of successful Oracle projects. PITSS is an Oracle Gold partner and, as a member of the Oracle Modernization Alliance (OMA), is the only Oracle Forms Migration partner for automated migrations. With sites in Stuttgart (HQ), Munich, Bielefeld (Germany), Milton Keynes (UK) and Troy (USA) as well as certified international partners, the company successfully provides support for IT projects of medium sized companies, large enterprises and public contractors across the globe.

PITSS.CON

The high performance software solution PITSS.CON has been convincing for years in all areas and phases of Oracle Forms projects through a high level of automation, speed, efficiency and reliability. The repository-based PITSS.CON tool provides support from analysis with exact project estimation, code revision and processing of business logic, right up to documentation and quality assurance. The savings are 30 % on average and often reach 90 %. With the upgrade of older Forms versions on WebLogic Server 11g as well as technologically driven migrations, PITSS.CON meets the requirements for Oracle Forms & Reports, SOA, ADF, APEX to any GUI.



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