Team Software Process (TSP) Implementation at Nedbank :

From Pilot to Organisational Roll Out

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MAKE THINGS HAPPEN

NEDBANK GROUP TECHNOLOGY

Team Software Process (TSP)

Pilot implementation in Nedbank

- Team Software Process (TSP) is a national pilot programme initiated by Joburg Centre For Software Engineering, South Africa from July 2009 onwards

- Nedbank is the first organisation in Southern Hemisphere to embrace this methodology

- In July 2009, Group Technology launched a pilot for Team Software Process (TSP), in two software-intensive projects. The pilot was initiated in collaboration with the Johannesburg Centre for Software Engineering (JCSE) at Wits University and the SEI (Software Engineering Institute) of the US.

- The pilot was completed in July 2010 and some significant improvements came out of the TSP pilot implementation

Team Software Process (TSP)

Pilot implementation in Nedbank..contd

- The TSP pilot generated accurate data at an individual developer level that has been useful to understand and analyse various aspects of the project performance. Some of these aspects include % of open tasks, the time spent on individual tasks, defect rates, earned value and process performance
- In addition, a significant reduction in defects during system testing and in production was recorded
- The teams demonstrated better management of their project work in terms of estimation, planning and monitoring
- A reduction in the amount of re-work done was also recorded

Team Software Process (TSP)

TSP Roll Out in Nedbank : Based on the results of the pilot, a roll out approach for TSP implementation across Group Technology , Nedbank was approved by the Executive Management.

Team Software Process (TSP)

Group Technology's TSP Implementation Approach

- The TSP roll out in Group Technology will have 3 phases
- In each phase we will progressively scale up the TSP capability and adoption across projects
- Phase 1 will run from November 2010 till December 2011. Phase 2 will run from January 2012 onwards. The details and targets of phase 2 will be defined in the fourth quarter of 2011. We will however train additional coaches during phase 1 to increase TSP adoption capability during phase 2

Team Software Process (TSP)

Group Technology's TSP Implementation Principles

- Roll out will start on a small scale during the first year, as the organisational maturity and expertise is low
- TSP will be implemented on a project-by-project or team-by-team basis
- The implementation cycle will be repeated, increasing scope at a sustainable pace
- TSP implementation will take place as long as there are a minimum of 2 resources (developers & designers) and a team lead
- For every project which implements TSP, there will be a TSP coach allocated to the project. Line managers cannot be the coaches for their respective areas. A coach needs to be someone outside the line
- As we mature with regards to the TSP implementation and the teams have the necessary experience, TSP implementation will eventually be brought forward in the lifecycle from Requirements/ Design phase onwards

Team Software Process (TSP)

Group Technology's TSP Implementation Principles...contd

- Change management needs to achieve a steady pace to ensure a smooth behavioural transition

- Existing TSP trained teams or team members will be reused. The benefits through TSP implementation increase with every successive deployment and reuse of TSP trained teams. This will also ensure that the experience gained through the TSP pilot is retained

- During the roll out we will also endeavour to grow by training new teams and where possible to seed these new teams with existing TSP trained team members

Team Software Process (TSP)

Structure and Governance

To support the implementation of TSP across Group Technology, a TSP Centre of Excellence (TSP CoE) has been created. The TSP CoE has the following mandates:

- Define the vision and strategy for TSP implementation;
- Monitoring and control of TSP implementation;
- Regularly assess the maturity of the Group Technology in terms of TSP adoption capability;
- Define policies, principles and procedures;
- Establish governance mechanisms, checkpoint reviews and executive reporting;
- Set processes, guidelines and standards for TSP adoption;
- Monitor the vitality of the TSP implementation;
- Ensure implementation and adherence to TSP methodology;
- Co-ordinate trainings for TSP needs and associated skill improvements;
- Ensure appropriate change management for TSP implementation.

Team Software Process (TSP)

Benefits from the Roll Out Phase 1

- Reduction in Estimated versus Development time of 41%
- Improvement on Estimation in excess of the set goals
- Scheduled quality goals of implementing 7/10 modules defect free have been achieved
- Data gathered is of a high quality and will assist in the next planning phases
- Defects found during Reviews and Inspections have shown significant reduction
- The teams have shown better focus on producing quality products
- Of the modules completed, the estimation is within 10 % of the actual time taken
- Better team participation
- Teams feel like they can actually make a difference

Team Software Process (TSP)

Benefits from the Roll Out Phase 1

- Team Software Process allows the team members to share accountability and they are focused on what needs to be delivered
- Better commitment to making high quality systems
- Increase in Personal growth
- Better time management

Team Software Process (TSP)

Change Management : A Key to successful implementation

Our aim is to take the TSP community from awareness to commitment and finally to ownership. This journey involves:

- Training and Education
- Stakeholder Management
- Communication activities
- Recognitions and Rewards
- Team Building

Team Software Process (TSP)

Challenges

- Lack of an appropriate enterprise wide tool to support TSP data
- Enterprise wide Change Management and Stakeholder Buy-In
- Capacity issues in projects
- Data Integrity and Protection from Data misuse

THANK YOU