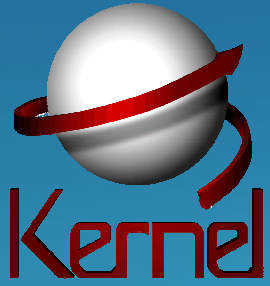


TSP in small software enterprises

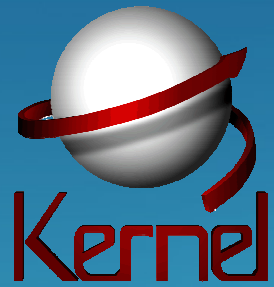
Roberto Ramos – Software development Manager
Kernel Technologies Group



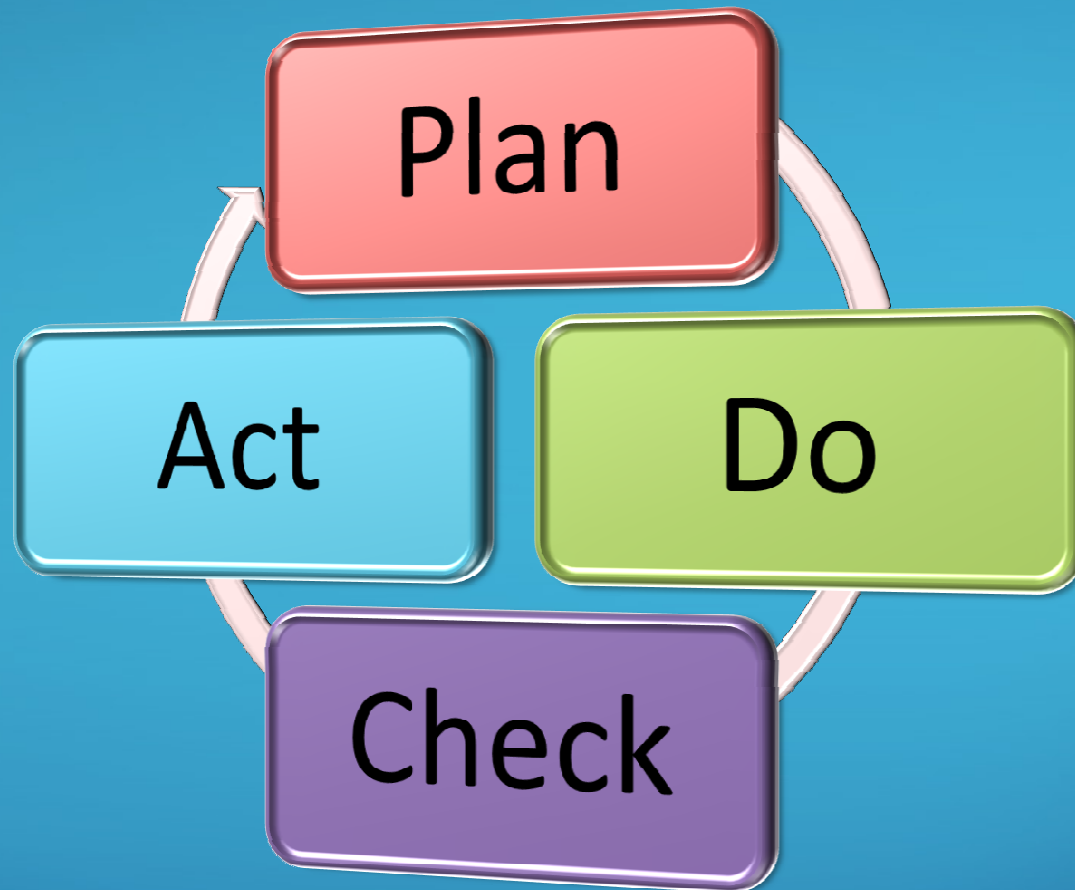
Agenda

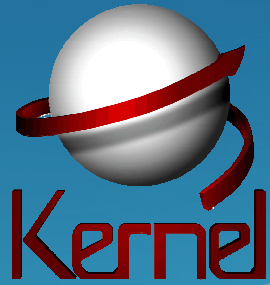
- What to do
- Where to start
- Which project to choose
- How to perform
- When and what to measure
- Problems and solutions
- Sales strategy



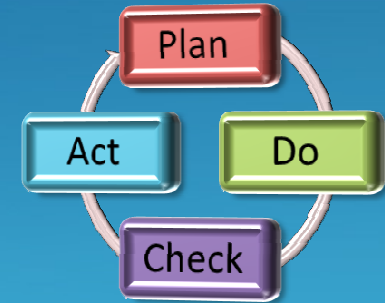


What to do

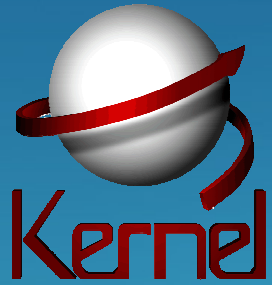




What to do



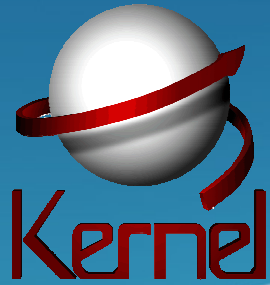
- Plan for small achievable changes.
- Do what you plan to do and don't try to change on the flight, wait for the following steps.
- Check the results, review what worked and what didn't.
- Act and improve according to the performed analysis.
- Repeat for the next small achievable changes.



Where to start

Project management

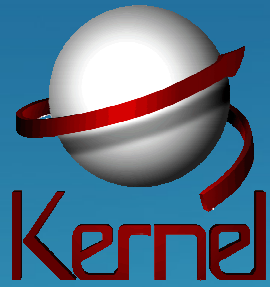




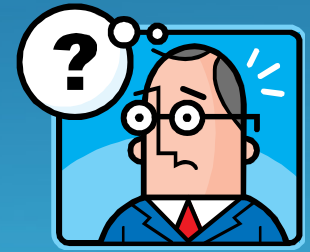
Where to start





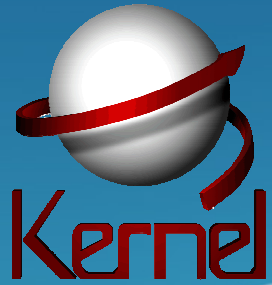
- Attack the problem from the place it creates more impact.
- Don't try change everything at once.
- Start with the development team
- As your process matures, start spreading it to the phases of the development cycle.



Which project to choose



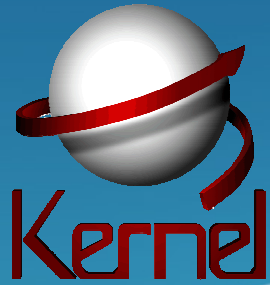
- Type of project
 - New technologies or type of software is not recommended. 
 - Even if people are well trained on PSP, TSP has its own challenges for the team.
- Type of customer
 - Important clients are a perfect fit to the TSP even if you are new to it. 
 - TSP will give you the tools for a better management in many ways.
 - Client with a low sense of quality importance are not recommended for initial TSP projects.



How to perform

- Training
 - Do not hesitate on this subject.
 - Start training the developers and its upper levels
 - Every person that is going to apply the TSP must be PSP trained

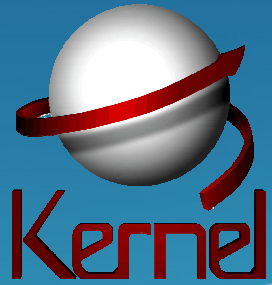




How to perform

- Team structure
 - Coach and Team Leader must be not lightly selected.
 - Coach for the first TSP project
 - You must select an experience TSP Coach. (outsource one if needed)
 - Planning and process managers need especial attention.
 - Team leader for the first TSP project
 - Your current best leader is not necessarily the best option.
 - look for leaders who are convince of the methodology and leaders who are open to changes on the way they lead their teams.

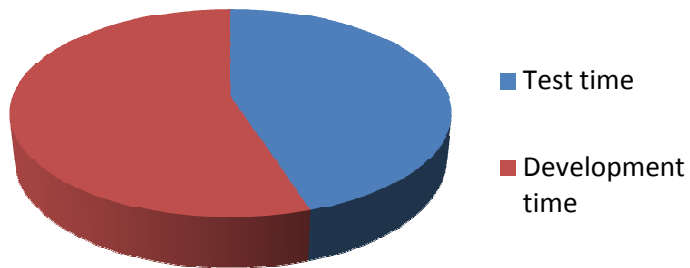




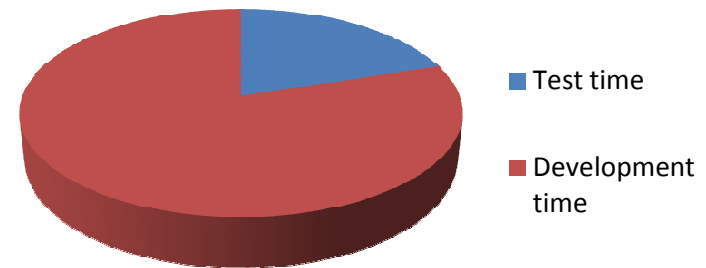
When and what to measure

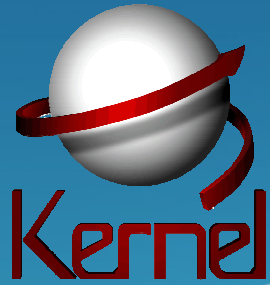
- For a small enterprise, the cost of deviation in a project's effort could mean the end of the company.
- The productivity of your teams becomes a subject to keep an eye on.
- In order to get a better productivity we must focus on quality.

Project without TSP



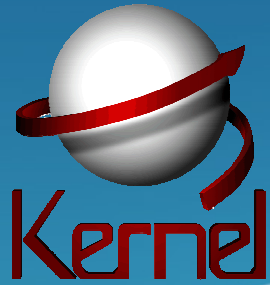
Project with TSP





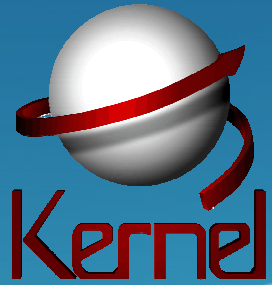
When and what to measure

- Instruct the coach into putting an extra effort on focusing on quality.
- Measure PQI and yields following standard TSP procedures
- Make sure the subject is addressed every week in the team meetings and management reports and every 3 to 4 weeks at higher levels.
- Look for a Process Quality Index higher than the usual .4 in your first projects because the performance on your reviews and inspections will take time improve.
- Try to identify every single reusable part from the beginning



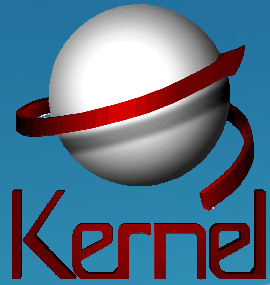
Problems and solutions

- Team members inclusion
 - TSP projects usually faces two main issues.
 - The training and the inclusion of on the team per se.
 - Plan carefully members inclusion in small groups and with enough hiring anticipation
 - Consider the recommendation of this training to be “PSP Fundamentals” and not “PSP for engineers”
 - The inclusion on the team per se.
 - Follows all the standard TSP procedures.
 - Including re-launches if necessary.
 - There have been nothing worst to a TSP project than including a not trained member to it.



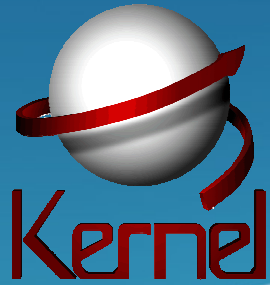
Problems and solutions

- Initial estimation deviations
 - When working for the first time with TSP, deviations on the estimation are usual, and could be drastic.
 - Don't spend a whole lot of time on the problem and focus on the solution.
 - The key element for this is to keep the team owning the plan.
 - A common mistake is the desire to intervene.
 - Let the team decide how are they going to get back to their committed dates.



Problems and solutions

- Resistance to change
 - Correctly train all people that is going to be involved in TSP projects.
 - Try to avoid conflict.
 - Use simple convincing phrases like “the past strategy have not work for us, lets try this for this project and see the results”.
 - Try not to spend too much effort on the convincing part and let the work do the talking.



Sales strategy



- Not only focus the strategy on quality, the customer already expects that from you.
- Focus also in how the use of this strategy helps the business.
- TSP allows you to develop in increments, which can allow your client to have complete functional deliverables in short periods of 3 months.
- Relate the methodology to the technology you are going to implement