Practical process improvements
- applying the LAPPI technique in QA and testing

10.12.2014

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Smilehouse
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<tr>
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Sogeti is a global specialist in Quality Assurance and Testing.

We deliver our Managed Testing Services using our Distributed Delivery Model - Rightshore.

- Three years operational in Finland
- Annual Growth 40-50%
- At a moment ~100 consultants are working for Finnish clients
Quality Assurance and Testing Services are the Core Competence of Sogeti in Finland

Consulting Services
- Test Process Improvement (TPI)
- TMap consulting
- Quality Assurance consulting
- Requirements Reviews

Professional Services
- Test Management, Software Testing
- Test Automation (HP, IBM, Oracle, Microsoft, Open Source)
- Performance Testing
- Agile Testing
- Package based Software Testing (e.g. SAP, Oracle)

Managed Services
- Managed Testing Services (MTS)
- Test Tools as a Service (TTaaS)
- Testing as a Service
- Test Environment Management
- Test Data Management
Introductions

- Name?

- Experience in software process improvement and QA?

- Your expectations for the afternoon, why are you here? 😊
Agenda

13:30  Introduction
14:00  The LAPPI technique
14:30  Modeling exercise: Roles and information flows
15:00  Applying LAPPI at Smilehouse
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SPI and QA

- Same or different?
- Improved process -> improved product quality?
- Where do these things fit in?
LAPPI: Light-weight Technique to Practical Process Modeling and Improvement Target Identification

- LAPPI is a light-weight technique for process modeling and improvement target identification.
- Suited to organizations of all sizes, and can be integrated with various SPI initiatives.
- Developed incrementally in multiple academia-industry collaboration projects and by industry actors themselves.
The LAPPI technique

- LAPPI has been used in over 30 companies with excellent results
- Enables modeling the current process and identifying the points of improvement in the process
- Based on LAPPI’s results, it is easy to start implementing practical improvements
LAPPI’s 13 steps

- Modeling workshops I and II are the key steps
  - I: roles and responsibilities
  - II: the process
- The steps can be combined/removed where needed
  - Agile and adaptable
2.2 Design

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<th>Issue</th>
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<tr>
<td>Preceding actions</td>
<td>Planning and deciding on new software features.</td>
</tr>
<tr>
<td>Description of the phase</td>
<td>Designing the development of new feature.</td>
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<tr>
<td>Goal/outcome</td>
<td>New features ready for coding.</td>
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<tr>
<td>Roles participating in the phase</td>
<td>Management</td>
</tr>
<tr>
<td></td>
<td>Programmer</td>
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<tr>
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<td>Designer</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
</tr>
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<td>Documenter</td>
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<td>Tester</td>
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Using LAPPI, an example of QA improvement

- Testing process modeled using LAPPI
- As-is situation before improvement efforts
- Streamlining needed?
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Modeling exercise: general guidelines

- **Aim is to make a software testing process visible using LAPPI**
  - Model a test process from your company or think of a general process
- **Exercise 1: Roles and information flows**
  - Which roles are participating?
  - What information flows between the roles?
- **Exercise 2: Test process model**
  - Where does the test process start?
  - Where does the process end?
  - What happens in between?
- **Choose which role you present, e.g. project manager, tester, developer**
  - Make sure the information from your role is visible
  - What steps do you participate in?
LAPPI Modeling exercise: Modeling workshop I

- Model the roles and information flows of a testing process
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15:00 Applying LAPPI at Smilehouse
15:30 Modeling exercise: Modeling the process
16:00 Modeling results: Group presentations
16:30 Summary and Q&A
17:00 Workshop ends
Applying LAPPI in practice

AT SMILEHOUSE
- 15 years of experience in B2C and B2B eCommerce
- Focus 100% on eCommerce, online business models and related solutions such as eServices, PIM, DAM etc.
- Owned by its personnel and employs around 60 ecommerce professionals in Finland.
- Overall solutions for eCommerce
  - Professional Services
  - Process design
  - Architecture Design
  - Implementations
  - AMS
  - Hosting
  - Further development
Enhancement areas

Processes and work agreements to be up-dated
Gaps in communication to be identified
Enhancement initiatives to be prioritized
Why?

- Organization is in change
  - New people
  - New roles
- Work is changing
  - Scale
  - Criticality
  - Co-operation with 3rd parties
- Company culture
  - Multiple roles
  - Customer service approach
How?

- Small groups
  - Find focus
  - Find time for modelling workshops

- "Super fast LAPPI"
  - Combined workshops
  - Select 1-3 points for improvement
  - Repeat

- Keep process improvement alive
  - Visualize the flows
  - Share flip board images in Yammer
  - Facilitate the change
Next steps

- New processes to be ”LAPPIfied”
  - Evaluation of PWD process
  - Sales process

- Make it work
  - Assign ownership
  - Follow
  - Repeat
Usual process improvement challenges

- Process improvement is slow
  - Results obtained within 1.5h in identifying the key points
  - Select only few improvement points to start with

- Process improvement is difficult
  - You know your work - you also know what works and what is not working
  - Facilitator has experience in software process improvement and can help with insightful questions

- "Nothing works!"
  - Concentrate on identifying the missing roles
  - Concentrate on communications
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Modeling exercise: Modeling the process

- Model the steps of your testing process

Diagram:
- Step 1
- Step 2
- Step 3
- Step 4
- Step 5
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Please share your modeling results!

- Main roles, information, process steps
- Problems detected
- Improvement ideas?
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# QA issues detected using LAPPI, summary from three companies

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<th>Improvement suggestion</th>
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| The level of **unit testing** varies significantly | - Define minimum level of unit testing  
- Specify test cases  
- Provide training in testing |
| All repercussions of **code changes** are not known | - Streamline the usage of defect tracking system  
- Specify test cases |
| **No exit criteria** defined for testing           | - Define and document exit criteria                                                   |
| Lack of proper **test case specification**        | - Consider software testing already in the requirement specification phase  
- Specify test cases |
| **Test automation** is not integrated with manual test process | - Integrate test automation with the manual test process |
| **Documentation** processes are vague             | - Improve and enforce documentation                                                   |
## QA issues detected using LAPPI

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<td>Customers’ <strong>defect reports</strong> are often poorly documented</td>
<td>- Streamline the usage of defect tracking system</td>
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<td><strong>Areas of responsibility</strong> are unclear</td>
<td>- Define the roles and responsibilities</td>
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<tr>
<td><strong>Short cuts</strong> are taken in the test process</td>
<td>- Improve communication and enforce following the process</td>
</tr>
<tr>
<td><strong>Slow pace</strong> of the test process</td>
<td>- Improve communication and enforce following the process</td>
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<tr>
<td></td>
<td>- Provide more test resources</td>
</tr>
<tr>
<td></td>
<td>- Provide training in testing</td>
</tr>
<tr>
<td><strong>Pressure to deliver</strong> incomplete applications to the customer</td>
<td>- Enforce following the process</td>
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<td>- Prioritize</td>
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Q&A

- Questions?
Join the LAPPI modeling technique Linkedin group!

- https://www.linkedin.com/groups?home=&gid=8217527
Thank you!

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Päivi Brunou  paivi.brunou@smilehouse.fi
References


