

## **KOTEL 131: OPTIMIZING COST AND RELIABILITY THROUGHOUT PRODUCT LIFECYCLE**

### **1. PROJECT DEFINITION**

#### **Project background and present state**

Cost & reliability optimization are important subjects in companies. It is challenging to find the optimized solution, costs are as low as possible and reliability level is kept enough high.

### **2. PROJECT GOAL**

#### **Project Goal(s)**

- Cost cut actions
  - Mapping and ranking value add vs non-value add cost cut actions (e.g. lower cost components, volume purchase discount)
  - How cost cut affect reliability?
- Actions to maintain reliability
  - Mapping and ranking value add and non-value add reliability actions
  - How reliability affect costs?
- Optimized combinations are found for cost and reliability

#### **Project restriction**

- Not considered: VMI (Vendor Manage Inventory)
- Focus: R&D phase and target group is R&D personnel

#### **Information gathering process**

- Brainstorming and discussions during workshops using generic case as a platform for the project

#### **Participants**

- Minimum 5 companies. Cost per participants á 4000eur (+VAT)

#### **Project length**

- 1 year

### 3. PROJECT PHASES AND RESULTS

Project is divided into 8 work packages (workshops):

- Work packages
  - WP1: Project construction
  - WP2: Product requirements
  - WP3: Reliability actions
  - WP4: Cost cut actions
  - WP5: Optimizing actions to a generic case
  - WP6: Verification actions
  - WP7: Recommended actions
  - WP8: Project and handbook review
  - Project (internal) seminar
- Miscellaneous
  - Main work method: brainstorming & discussions during work package meetings based to theory & practical experiences
  - Why, what and how questions are answered in every work package
  - Generic case: Chosen example product is used as a generic case. This reduces company confidentiality challenges, when turning this project results into practical actions. (To consider, if possible to purchase a real product to use as an example.)
  - Handbook is written during all work packages

### 4. UTILIZATION OF THE RESULTS

Utilization from the point of view of work output:

- Workshops
  - Gathering and forming best practices
  - Co-operative discussions to increase participant and company competence
  - Increase knowhow of what key information exists (theory, tools, best practices)
  - Helps to understand how theory and practice are applicable for an example company (generic case)
- Handbook: Easy readable and usable, fast to implement

Benefit for company: project participation vs. purchasing ready handbook from KOTEL

- Participating to the project
  - Learning by doing, discussions and brainstorming in each workshop
  - Participant can affect to the output of the project and handbook
  - Fast access to the final handbook and draft version for quick utilization
  - No 'time of competitive restriction' (direct access)
  
- No project participation (purchasing ready handbook from KOTEL)
  - No learning by doing, no company external discussions, higher probability that utilization of handbook subjects is not successful to the company (compared if participating to the project)
  - No possibility to affect on the project or handbook content & output
  - No fast access to draft documents
  - Possible delay due to 'time of competitive restriction' (e.g. 1-2 year delay after the project is ready)

## 5. RESOURCES AND ORGANISATION

KOTEL work groups will participate in the project. VTT is responsible of the production of the practical handbook. A management group and a responsible leader are set for the project.

## 6. TIMETABLE

Project is implemented between Q1 2014 – Q1 2015. More precise timetable will be written after the first project meeting and updated project plan.

## 7. RISKS & RISK MITIGATION

- Risk: Project doesn't contain enough valid information => Mitigation: Participants requirements/proposals, active participants to gather required information, limitations in project plan, clear plans for each work package
  
- Risk: Project resources and management => Mitigation: Company participants, named project responsible, follow-up
  
- Risk: Project not ready when planned => Mitigation: deadlines for work packages, strong project management

## 8. COST ESTIMATE AND FUNDING

Preliminary cost estimate for the project is 20 000 €

COST ESTIMATE is without value added tax (VAT)

VTT Expert Services Oy

Handbook (with general expenses)	<u>18 000 €</u>
Overall	18 000 €

KOTEL ry

Management (overall)	<u>2 000 €</u>
Overall	2 000 €

Overall	<b>20 000 €</b>
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FUNDING

KOTEL ry (100 %)	20 000 €
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Overall	<b>20 000 €</b>
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Company funding shares: 5-7 companies á 4000€+ VAT

Example distribution of costs of 1 participating company (with 5-7 paying companies in the project):

2014: 4000 €(+VAT)

If less than 5 companies will participate, participating cost will be kept the same. Focusing and reducing of the content will be discussed together with the participating companies to fit to the new project budget.