Abstract

Workshops can be an effective means to share and accelerate team activities such as product specification, design or business strategy.
Purpose of a Workshop

- Share
- Cross-fertilize
- Understand

- Vision
- Drivers
- Insights
- Problems
- Solutions
### Example Subjects

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Customer Needs</th>
<th>Integration</th>
<th>Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadmap</td>
<td>Specifications</td>
<td>Logistics</td>
<td>Strategy</td>
</tr>
<tr>
<td>Synergy</td>
<td>Design</td>
<td>Life-Cycle</td>
<td>Business</td>
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<tr>
<td>Research Needs</td>
<td>Research Potential</td>
<td>Application</td>
<td>Specification</td>
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<td>Design</td>
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<td>Architecture</td>
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<table>
<thead>
<tr>
<th>Alignment</th>
<th>Organization</th>
<th>Suppliers</th>
<th>Sites</th>
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<tbody>
<tr>
<td></td>
<td>Disciplines</td>
<td>Partners</td>
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**Workshop How To**

version: 0.1
March 6, 2013

**WHTsubjects**

**Embedded Systems Institute**
Workshop How To

version: 0.1
March 6, 2013

Workshop timeline

start

prerequisite

goal

owner

leader

facilitator

conception

preparation

workshop

consolidation and follow-up

cr 10 weeks

date reservations

preliminary program and invitation

definite date

venue

participants

(optional) distribute presentations

allocate roles

anticipate problems

program workshop format

invitation

Workshop How To

Gerrit Muller
Roles

owner
- needs
- benefits from workshop results
- will use

facilitator
- guides owner and leader
- facilitates workshop
- executes operational duties

leader
- provides direction
- has vision
- focus on contents

participant
- provides expertise
- contributes to workshop
- benefits from workshop

why
what
how
who
when
where

invitations
reservations
orders catering
flip over handling
minutes

Workshop How To
5  Gerrit Muller

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WHTRoles
Different Workshop Types

1. Problem understanding by exploration and simple models

2. Analysis by
   + exploring multiple propositions (specification + design proposals)
   + exploring decision criteria (by evaluation of proposition feedback)
   + assessment of propositions against criteria

3. Decision by
   + review and agree on analysis
   + communicate and document

4. Monitor, verify, validate by
   + measurements and testing
   + assessment of other decisions
Most Subject Progress Outside Workshop

- Problem understanding
- Analysis
- Individual digesting and processing
- Shared vision
Example of Active Workshop Format

- discussion and analysis in small break-out teams (active)  
  - 10..30 minutes
- information broadcast (passive)  
  - 40..90 minutes
- plenary sharing and integration (active)  
  - 30..60 minutes

1 day

wrap-up & evaluate
Formulate Seed Question(s)

pose compact and open question(s)
avoid bias by question formulation

What are the top five design issues?

Illustrate every design issue with 2 specific examples.

avoid generic motherhood statements
stimulate specific discussions via examples

Start with 5 minutes individual preparation

enable every individual
prevent too early narrowness
Media

- low-tech means can be very effective
- yellow notes
- flip over
- use high-tech when appropriate
- brown paper
- tape
- excel
- power point
Use Techniques in a Creative Way

**mix and match of techniques is possible**

- individual brainstorm
- group brainstorm
- Question & Answer exploration
- clustering
- voting

**brainstorm process**

- guided discussion
- list of specific questions
- time-boxing
- role-play
- rotation of participants over teams
- intermediate exchange of results market

**specific analysis**

- story telling
- use case analysis
- quantitative analysis

**standard techniques**

- hazard analysis
- FMEA

*N.B. the value is in the discussion and the interaction, not in the outcome*
<table>
<thead>
<tr>
<th>Wrap up</th>
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<table>
<thead>
<tr>
<th>short summary and conclusions (leader or facilitator)</th>
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<tbody>
<tr>
<td>don't repeat discussions</td>
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<table>
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<tr>
<th>follow-up (leader or facilitator)</th>
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<tbody>
<tr>
<td>who, what, when</td>
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<table>
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<tr>
<th>evaluation; ask for balanced feedback (facilitator)</th>
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<tbody>
<tr>
<td>for instance benefits &amp; concerns</td>
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<tr>
<td>plenary or individual on yellow notes</td>
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<tr>
<td>Category</td>
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<td>----------------------------------</td>
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<tr>
<td>Minimize the number of participants</td>
</tr>
<tr>
<td>Individual contribution</td>
</tr>
<tr>
<td>Interpersonal relations</td>
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<tr>
<td>Availability</td>
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Carefully select Participants
Rules During the Workshop

- Constructive attitude (no head seeking missiles)
- Allow contribution by all (also the more quiet persons)
- No cellphones
- No laptop (except for workshop related application)
- Full-time presence
Venue Requirements

- open seating formation
- sufficient walking space
- ask for a room for 2* #participants
- plenary area
- break-out rooms

**plenary area**
Secret Workshop Success Factors

- active: >70% of the time active
- short intro, short broadcasts
- focused: clear scope and goal
- format: timely invitation
- well-prepared: seed presentations
- seed questions: full-time present
- involved participants: no cellphone
- no e-mail