Some thoughts about a education of Social-Science Literacy for Nuclear Engineers and Scientists

- Who I am
- Why I'm here
- What I think about the education

Etsuko Yokouchi
Graduate School of Frontier Sciences,
Department of Human and Engineered Environmental Studies,
The University of Tokyo
Who I am...

Now...

- I am a master course student of the Department of Human and Engineered Environmental Studies from April 2008
- My core interest is how companies manage, are adapted and contribute environmental issues
- I belong to the lab of Professor Iwata whose specialty is data science, design science on materials and nuclear fuel engineering
- I joined this GoNERI program from July 2008

Until March 2008...

- I worked in IT company as a system engineer(SE) and a fieldworker who refereed ethnography
- I have an experience to install social science capability to engineering business and created educational programs with research laboratories
Why I'm here...

I'm interested in what happen when engineering meets social science because...
- I guess often there were the more better way to install social science capability to engineering
- My field, Environmental Studies, is trying to beyond the border of sciences
- I'm just interested in nuclear energy

Today I introduce one case of “engineering meets social science”

Similarity with GoNERI...
- System engineering is a kind of engineering and ethnography is a kind of social science
- The project starts engineer approaches to social science
Case: SE meets Ethnographer

Background...
• It was needed a new viewpoint, which different from IT based analysis, for delivering solutions of business optimization

Outline...
• At first, Ethnographer trained SE.
• Then, SE developed the systematic method of FW

Work style gaps between SE and Ethnographer...

<table>
<thead>
<tr>
<th>SE</th>
<th>item</th>
<th>Ethnographer</th>
</tr>
</thead>
<tbody>
<tr>
<td>implement solution</td>
<td>purpose</td>
<td>describe cultural something</td>
</tr>
<tr>
<td>defined</td>
<td>hypothesis</td>
<td>open-end</td>
</tr>
<tr>
<td>largely pre-determined</td>
<td>deliverables</td>
<td>no determination beforehand</td>
</tr>
</tbody>
</table>

What I think about the education

I hope to get specific “souvenir” from GoNERI educational program...

- Not only case studies, also templates of method, process or output
  - It is an ideal condition that class members create “souvenir”
- It is one way for making “souvenir” to focus the particular field of social science after the overview lecture

Course variation...

- It is better to separate member class and manager if we target manager
  - It is important manager understands the capability of social science in this field
Fine