Thinking Style Requirements for Project Managers*

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Problem
Cognitive approach to practical experts has focused on their tacit knowledge. But our argument is that tacit knowledge is only one of major resources of highly skillful actions. Expert practitioners have to cope with the prescribed multiple tasks as well as unexpected events and troubles which almost daily emerge. They are expected to acquire an useful style of practice to govern multiple tasks. The style must be tuned to the particular job. This study investigated this kind of style of practice that is required for IT project managers by applying Sternberg-Wagner Self-Assessment Inventory. The purpose of this study is to find the styles that senior managers of IT business department expects his subordinate project managers practice, the styles that the project managers possess, and the relation between the styles and the effectiveness of those project managers.

Method
Participants
17 effective (age: 35-47; the mean job experience: 19 years; the mean project manager experience: 7 years) and 17 less effective (age: 35-45; the mean job experience: 18 years; the mean project manager experience: 6 years) project managers and their eight super-ordinate managers of an IT business department of a leading electronic manufacturer.

Material and Procedure
Sternberg-Wagner Self-Assessment Inventory (Sternberg, 1997) on three functions and four forms were used to make a questionnaire. The questionnaires were given to the project managers through their division’s manager and were collected by him. The project managers rated each assessment item on a 1(not at all well) to 7 (extremely well). As for the required thinking styles the super-ordinate managers rated the necessity of the each item on a 1 (very highly required) to 8 (very highly inadequate).

Table 1: Mean scores and assessments for the function (RQ: required, INA: inadequate)

<table>
<thead>
<tr>
<th>Function</th>
<th>effective</th>
<th>less effective</th>
<th>RQ/INA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative</td>
<td>5.3 (HM)</td>
<td>5.4 (HM)</td>
<td>6.2 (MR)</td>
</tr>
<tr>
<td>Executive</td>
<td>4.1 (HM)</td>
<td>3.8 (LM)</td>
<td>6.3 (MR)</td>
</tr>
<tr>
<td>Judicial</td>
<td>4.7 (HM)</td>
<td>4.8 (HM)</td>
<td>5.5 (SR)</td>
</tr>
</tbody>
</table>

(HM: high middle, LM: low middle; MR: moderately required, SR: slightly required)

Table 2 shows results of the four forms. Both effective and less effective project managers showed similar thinking styles. They recognize the need to set priorities and view problems from a number of angles so as to set priorities correctly. Both groups satisfy the requirements.

Table 2: Mean scores and assessments for the forms (VL: very low, H: high, L: low; MI: moderately inadequate, SI: slightly inadequate)

<table>
<thead>
<tr>
<th>Form</th>
<th>effective</th>
<th>less effective</th>
<th>RQ/INA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monarchic</td>
<td>3.5 (VL)</td>
<td>3.7 (L)</td>
<td>3.0 (MI)</td>
</tr>
<tr>
<td>Hierarchic</td>
<td>5.3 (VH)</td>
<td>5.2 (VH)</td>
<td>6.8 (MR)</td>
</tr>
<tr>
<td>Oligarchic</td>
<td>3.2 (LM)</td>
<td>3.3 (LM)</td>
<td>5.3 (SR)</td>
</tr>
<tr>
<td>Anarchic</td>
<td>3.4 (L)</td>
<td>3.0 (VL)</td>
<td>4.0 (SI)</td>
</tr>
</tbody>
</table>

References

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