Knowledge Pipeline: A Task Oriented Way to Implement Knowledge Management

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Where shall we get knowledge?

I just want to know how to design graphic display for a nuclear power plant.
Concept of Knowledge Pipeline

There are many pipelines named by tasks or business processes in an organization. Knowledge contributors put knowledge to its corresponding pipelines. A maintenance team could keep the knowledge in pipelines clear and valid. Users could get knowledge just like opening a faucet in terms of their tasks or business processes.
Infrastructure of Knowledge Pipeline

Fine-grained knowledge management

- Knowledge management is not document management

Linkage among knowledge and business processes

- Find out relationships or connections

Automatic pushing service

- Present the proper knowledge to some one who needs it
Infrastructure of Knowledge Pipeline (Cont.)

**Personalized service**
- Do not disturb or distract users

**Heritage feature**
- Make knowledge consistent in similar pipelines

**Version control**
- Keep knowledge up-to-date and traceable in pipelines
Contents in Knowledge Pipeline

What

How

Why
Illustration of Knowledge Pipeline

- **User Roles**
  - Knowledge Contributor
  - Maintenance Team
  - End User

- **Knowledge process**
  - Creation
  - Sharing
  - Finding
  - Learning
  - Validation
  - Maintenance
  - Disposal
  - [Combination]
  - [Transformation]
A Demo of Knowledge Pipeline

Know What

Know How

Know Why
## Conclusion

<table>
<thead>
<tr>
<th></th>
<th>Subject 1</th>
<th>Subject 2</th>
<th>Subject 3</th>
<th>Conventional Method Average (7 Samples)</th>
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</thead>
<tbody>
<tr>
<td>Working experiences</td>
<td>5 years</td>
<td>2 years</td>
<td>6 months</td>
<td>3 years (0-7 years)</td>
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<tr>
<td>Pre-job training time</td>
<td></td>
<td></td>
<td></td>
<td>3 Hours</td>
</tr>
<tr>
<td>Self-learning &amp;</td>
<td>4 Hours</td>
<td>2 Hours</td>
<td>3 Hours</td>
<td>20 Hours</td>
</tr>
<tr>
<td>practicing time</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Working time</td>
<td>4 Hours</td>
<td>5.5 Hours</td>
<td>9 Hours</td>
<td>4 Hours</td>
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<tr>
<td>Completion</td>
<td>91%</td>
<td>100%</td>
<td>83%</td>
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<td>Accuracy (Based on</td>
<td>71%</td>
<td>75%</td>
<td>80%</td>
<td>75%</td>
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<tr>
<td>completion)</td>
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</tbody>
</table>

According to the statistic, the pre-job training time was decreased by about 88%, while self-learning and practicing time was decreased by 85% in comparison with those colleagues who finished the same work by means of conventional face-to-face training.
THANK YOU

THE END