Chapter XI

Becoming Knowledge-Powered:
Planning the Transformation

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In this article, Dave Pollard, Chief Knowledge Officer at Ernst & Young Canada since 1994, relates the award-winning process his firm has used, and which many of the corporations that have visited the Centre for Business Knowledge in Toronto are adapting for their own needs, to transform the company from a knowledge-hoarding to a knowledge-sharing enterprise. The article espouses a five-phase transformation process:

- Developing the Knowledge Future State Vision, Knowledge Strategy and Value Propositions
- Developing the Knowledge Architecture and Determining its Content
- Developing the Knowledge Infrastructure, Service Model and Network Support Mechanisms
- Developing a Knowledge Culture Transformation Program
- Leveraging Knowledge into Innovation

The author identifies possible strategies, leading practices, and pitfalls to avoid in each phase. He also explores the challenges involved in identifying and measuring intellectual capital, encouraging new knowledge creation, capturing human knowledge in structural form, and enabling virtual workgroup collaboration.

KNOWLEDGE: DEFINITION, TYPES, AND EXAMPLES

Ask most business leaders if knowledge is important to their company’s future and they’ll say “yes” without hesitation. However most of these leaders can’t articulate why it’s so important, or how they plan to optimize their organization’s knowledge to competitive advantage. The purpose of “Planning the Transformation” is to help business leaders and knowledge officers answer these questions and start to implement the answers.

Our working definition of knowledge is any intangible resource of a business that helps its people do something better than they could do without it. Using the models...
developed by Hubert Saint-Onge1, Dr. Nonaka2 and others, we can say that an organization’s knowledge (i.e. its intellectual capital) consists of:

1. Tacit Knowledge (Human Capital)—the skills, competencies, know-how, and contextual knowledge in people’s heads
2. Explicit Knowledge (Structural Capital)—the knowledge that is captured or codified in the company’s knowledge-bases, tools, catalogues, directories, models, processes and systems
3. Customer Knowledge (Customer Capital)—the collective knowledge about, and of, the company’s customers, their people, their needs, buying habits etc.
4. Innovated Knowledge (Innovation Capital)—the collective knowledge about as-yet undeveloped or unexploited markets, technologies, products, and operating processes

As Dr. Nonaka3 has shown, knowledge creation is largely a result of the process of converting Tacit Knowledge to Explicit Knowledge (or to Customer Knowledge or Innovated Knowledge), and back again, as shown in Figure 2.

And, as knowledge-focused business games like Celemi’s Tango and Apples & Oranges4 have shown, the value of the organization’s knowledge is the incremental discounted cash flow that comes to the organization from applying this knowledge. These games also make it clear that the amount and balance of investment of the company in each type of knowledge (versus alternative financial and physical investments), and its ability to use (and reuse) this knowledge effectively, will determine its success in leveraging knowledge and creating value for the organization beyond its net tangible book value.

Here are some specific examples of the four types of organizational knowledge, to give you an idea of how difficult it often is for companies to decide which, and how much, knowledge to invest in:

**Tacit Knowledge Investments:**
- Salaries for new expert hires
- Training programs
- Mentoring and retention programs
- Profit sharing programs

**Figure 1: Types of Knowledge**

Balance Sheet Capital

<table>
<thead>
<tr>
<th>Physical Capital</th>
<th>Financial Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory &amp; Fixed Assets</td>
<td>Cash, Net Receivables and Investments</td>
</tr>
</tbody>
</table>

Intellectual Capital

<table>
<thead>
<tr>
<th>Human Capital (Tacit Knowledge)</th>
<th>Structural Capital (Explicit Knowledge)</th>
<th>Customer Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competencies of Individuals and Teams</td>
<td>Intelligence in Databases, Tools, Products &amp; Processes</td>
<td>Relationships with &amp; Solutions for Customers</td>
</tr>
</tbody>
</table>

Knowledge Transfer: Codification & Re-Use, Learning & Sharing, Application of Knowledge

Innovation Capital

<table>
<thead>
<tr>
<th>Physical Capital</th>
<th>Financial Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Tools, Products, Processes, Solutions &amp; Customers</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Types of Knowledge
Related Content

Identifying Emerging Topics and Content Change from Evolving Document Sets

ICT for Educational Excellence in Jordan: An Elusive Objective
Atef Abuhmaid (2013). *Information Systems Applications in the Arab Education Sector* (pp. 119-135).
[www.irma-international.org/chapter/ict-educational-excellence-jordan/68674/](www.irma-international.org/chapter/ict-educational-excellence-jordan/68674/)

Making Knowledge Management System an Effective Tool for Learning and Training
[www.irma-international.org/chapter/making-knowledge-management-system-effective/23802/](www.irma-international.org/chapter/making-knowledge-management-system-effective/23802/)

Intention to Knowledge Sharing: From Planned Behavior and Psychological Needs Perspectives
[www.irma-international.org/article/intention-to-knowledge-sharing/105177/](www.irma-international.org/article/intention-to-knowledge-sharing/105177/)
Knowledge Worker Profile: A Framework to Clarify Expectations
www.irma-international.org/chapter/knowledge-worker-profile/41691/