A methodology for assessing the coherence of companies' knowledge strategy

Alberto F. De Toni
Department of Electrical, Managerial and Mechanical Engineering
University of Udine
Via delle scienze, 208 - 33100 - Udine - Italy
E-mail: detoni@uniud.it

Fabio Nonino*
Sapienza University of Rome
Via Ariosto 25 - 00185 - Roma - Italy
E-mail: fabio.nonino@uniroma1.it

* Corresponding author

Matteo Pivetta
Human Resources Department, Illycaffè S.p.a.
Via Flavia, 110 - 34100 - Trieste – Italy
E-mail: matteo.pivetta@gmail.com

Purpose – Companies’ knowledge management can be viewed at least through four perspectives. The first one focuses on defining the processes which characterize knowledge management, for example as knowledge is created, developed, stored and reused within a business environment (e.g. Alavi and Leidner, 2001; Dewett and Jones, 2001; Zhara and George, 2002, Argote et al., 2003; Alavi et al., 2006; Rodriguez-Elias et al., 2008). A second perspective is related to the analysis of the tools (especially ICT) that support Knowledge Management (e.g. Binney, 2001; Tyndale, 2002; Tsui, 2002; Lindvall et al., 2003; Wijnhoven, 2003; Merono-Cerdan et al., 2007). A third perspective concerns the evaluation of Knowledge Management and of intangible assets in general. In this view, intangible assets are divided mainly into three types of capital: human capital, structural capital and relational capital (Edvinsson, 1997, Roos et al., 1997; Sveiby, 1997).

Finally there is an ultimate perspective: the analysis of companies’ knowledge strategy (Hansen et al., 1999, Zack, 1999, Beckett et al., 2000; Bierly and Daly, 2002, Choi et al., 2008). This approach considers knowledge management as a strategic choice that lead to a major competitive advantage against competitors (Zack, 1999). In literature, the concept
of Knowledge Strategy was treated with lesser extent and in a fragmented way if compared to the first three perspectives. However, this standpoint is crucial because the real competitive advantage from knowledge management remains only potential if it is not linked to the strategy that drives business (Hansen et al., 1999, Zack, 1999; Halawi et al., 2006) and to the firm’s competitive environment and organizational context (Wang, 2001; Droge et al., 2003; Thornill, 2006; Merono-Cerdan et al., 2007).

The present work aims to propose a methodology to quantitatively assess the coherence of a company’s knowledge strategy to its business strategy and to its competitive and organizational context.

**Design/methodology/approach**

We identified three main strategies in the literature of knowledge management by referring mainly to the seminal contributions of Zack (1999), Hansen (1999) and Beckett et al. (2000): (1) the knowledge exploration, or development (internal or external), (2) the knowledge sharing (codification or personalization strategy) and (3) the knowledge exploitation (internal or external).

The analysis of literature allowed us to define a model that links the three knowledge strategies, and the six related policies, with some variables which can describe a company’s competitive environment (2 variables), its business strategy (6 variables) and its organizational context (13 variables).

![Figure 1: A model for assessing the coherence of companies knowledge strategy](image)

We tested our methodology for assessing the coherence of a company’s knowledge strategy on the case of illycaffè, an Italian company operating in the area of coffee with a premium brand.

The methodology was divided into three distinct phases: the data gathering through structured interviews, the data processing and the analysis of results. In particular, structured interviews were conducted with 12 illycaffè managers representatives of all corporate functions. The average length of interview was approximately 75 minutes. The questionnaire contained items found in the literature and based on a Likert scale with scores ranging from 1 (completely disagree with the statement) to 5 (completely agree...
with the statement). In particular we have focused our investigation on the four dimensions of our model:

1. competitive environment;
2. business strategy;
3. organizational context;
4. strategies for knowledge management.

The competitive environment and business strategy were investigated only from the standpoint of the organization as a whole, while the other two dimensions were investigated in relation to the single function.

The data obtained through the phase of interviews were processed and analyzed using the model previously described (Figure 1) to obtain three sets of values, called:

- *As is state*: representation of the current state of knowledge strategies (and policies);
- *Ideal as is state*: representation of the ideal current situation that should describe the company in terms of knowledge strategy due to the competitive environment, business strategy and organizational context that currently characterize the firm;
- *Ideal to be state*: representation of the ideal future state in which the company should be in terms of knowledge strategy due to the competitive environment, business strategy and organizational context that, according to the responses of managers, will characterize the firm.

Finally we designed an *ad hoc* instrument, we called the knowledge strategy diagnostic matrix (Figure 2) to visually analyze the results of our analysis: the as is state, the as is ideal state and the ideal to be state.

![Figure 2 - Graphic representation of the diagnostic matrix](image)

The origin of the axes of the matrix corresponds to the as is state, i.e. the current state of one of the knowledge strategies. Positioning along the axes is in reference to the as is state.

We have determined for any knowledge strategy, the as is state, ideal as is state and ideal to be state (using the model set out above based on the answers of respondents in relation to current and future context and strategy); consequently we placed the illy’s knowledge strategies on the matrix, calculating the x-axis as the difference between the ideal as is
state and the as is state and y-axis as the difference between the ideal to be state and the as is state. In this way the position of the point on the matrix showed us how a certain illy’s knowledge strategy has to be improved or decreased to be aligned with the context and strategy current (x-axis) and future (y-axis).

**Originality/value**
The first part of the research, the theoretical one, allowed us to propose a model for assessing the knowledge strategies of a company in relationship with the characteristics of the context in which it operates (competitive environment, business strategy and organizational context). The model has been applied in a three step methodology which arises from the need to adapt the implementation of a knowledge strategy to the unique characteristics of a company.

The second part of the research, the empirical one, has validated this methodology through the application in a real case study, the illycaffè Group. The results of this study are shown in Table 1.

**Table 1 Results of the data processing and determination of the position on the diagnostic matrix**

<table>
<thead>
<tr>
<th>Knowledge Strategy</th>
<th>Model of coherence assessment</th>
<th>Position on the diagnostic matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As is state</td>
<td>Ideal as is state</td>
</tr>
<tr>
<td>Exploration (or Development)</td>
<td>Internal</td>
<td>4.05111</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>2.77111</td>
</tr>
<tr>
<td>Sharing</td>
<td>Codification</td>
<td>2.47333</td>
</tr>
<tr>
<td></td>
<td>Personalization</td>
<td>3.55333</td>
</tr>
<tr>
<td>Exploitation</td>
<td>Internal</td>
<td>3.56944</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>1.96444</td>
</tr>
</tbody>
</table>

**Practical implications**
The application of the methodology for assessing the coherence of companies’ knowledge strategy highlights how a company operates, and, in relationship with that, how manages the knowledge. Furthermore the proposed assessment model has a general applicability and can be a valuable tool for an in-depth organizational analysis of knowledge management.

**Keywords** – Knowledge Management, Business Strategy, Knowledge Strategy, Case Study.

**Paper type** – Academic Research Paper / Practical Paper
References


