Knowledge Management Strategy in PLIVA
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Abstract
The goal of this paper is to give an overview of the knowledge management initiatives in the pharmaceutical industry and the knowledge management strategy in PLIVA. The paper presents the progress pharmaceutical companies have made in the knowledge management area in the last few years, critical success factors for knowledge management and the commonest reasons for failure of different initiatives. It gives an insight into the Knowledge Management Project in PLIVA and explains the history of and reasons for starting up the Project.

Knowledge Management Strategy in Pharmaceutical Companies

The pharmaceutical industry is a highly intensive knowledge industry, which explains the fact that Knowledge Management has been a frequently discussed topic of the Management Board over the past few years. Pharmaceutical companies require knowledge reuse and knowledge acquiring/sharing for the integrated use of the sense-making tools and expertise. Considering the "conservative" culture of business that pharmaceutical companies deal with (highly confidential), they need to invest a great deal of time in developing a knowledge sharing culture and in recognition and rewarding principles that will motivate the employees to share their expertise.

![Pie chart showing current stage of Knowledge Management initiatives in pharmaceutical companies](image)

Figure 1. Current stage of Knowledge Management initiatives in pharmaceutical companies (Source: Scrip Report, 2002.)
With the emergence of the knowledge era, it has become widely recognized that the intangible assets of an enterprise are key to both its ability to create a competitive advantage and to grow at an accelerated pace. As a result, more and more organizations are increasingly focused on creating the value through knowledge leverage. Our understanding of what creates the value in organizations is changing radically; long-term prosperity largely depends on the ability to leverage intangible assets or knowledge capital, and the flow of knowledge across the enterprise serves as the basis for the acceleration of learning and the systematic development of organizational capabilities. Since the KM initiatives in pharmaceutical companies usually developed as a result of clear business needs, most of them are not integrated and the companies do not have a clear KM strategy.

![Pie Chart](image)

*Figure 2. Percentage of pharmaceutical companies with a corporate Knowledge Management strategy (Source: Scrip Report, 2002.)*

**Critical success factors for Knowledge Management**

There are several critical success factors for Knowledge Management:

- **Leadership and vision**
  There has to be the support from the Management Board for knowledge sharing and learning, and the Knowledge Management process has to be recognized as the process of continuous business improvement. The management and employees have to be committed to building the culture based on trust. It is recommended that the "Knowledge Management organisations" with KM champions/coordinators be established at key points throughout the organisation.
• **Strategic fit into organisational goals**
  Knowledge Management goals have to be linked to the corporate strategy. Every company has a different culture and, therefore, they must select the approaches most appropriate for their organisational culture. Knowledge Management should be recognized as an enabler and a driver.

• **Organisational development**
  Non-hierarchical structures are recommended.
  The appropriate motivations, rewarding and recognition principles should be developed. It is wise to appoint dedicated Knowledge Management roles.

• **Projects**
  Projects should be focused on the business units and priorities should be set according to business benefit (select projects to optimise business benefit and KM learning). There has to be business ownership of the project and process (the projects should not be driven by the Knowledge Management project).

• **Demonstration of the value**
  Pilot projects should demonstrate the value to business and individuals and help access to the tools.
  KM strategy and benefits should be clearly communicated.

• **Info structure**
  Knowledge mapping should identify business-critical resources (focus on what will make a difference).
  Excellent information management (IM) architectures, policies and practices and appropriate IT and IM tools for sharing should be put in place.

The Knowledge Management projects have often failed to live up to the hype which the companies have received from vendors and consultants. This is not due to any fundamental problem with the nature of the goals of the KM processes, but rather to the common mistakes such as:

    ➤ failure to ensure an executive sponsor;
    ➤ driving projects from the top-down, without low-level input;
    ➤ funding human component of the project;
    ➤ failure to establish a business purpose context;
    ➤ failure to measure the progress;
    ➤ ignoring the issues of motivation, process ownership and responsibility, and
    ➤ the "KM equals IT" attitude and nothing more. The research shows that a good IT infrastructure accounts for only 20-30 % of the overall solution and even though it is a pre-requisite, particularly in the geographically dispersed companies, it is far from being a complete solution.
In addition to the problem of inadequate infrastructure, security risks (employees are not sure what they are supposed to share) and the lack of clear ROI, many companies have experienced cultural resistance to sharing knowledge and a low priority of knowledge sharing on their “to do list”. The company needs to seriously consider establishment of the knowledge sharing culture. Knowledge sharing has to become the norm, people need to be encouraged to work together more effectively, to collaborate, share their knowledge and make organizational knowledge more productive. Changing the culture is difficult, it requires a lot of time and patience. What people really need is to understand that they are creating a "micro-culture" in their departments wherefrom they should start assisting cultural change. The most effective way of creating knowledge sharing culture is to begin practicing it at your level.

The research has shown that most knowledge workers are not satisfied with the capabilities that the Knowledge Management in their companies offers and that the majority of companies are still a long way from implementing the best Knowledge Management practices.

*Figure 3. "Knowledge workers in my enterprise are generally satisfied with the knowledge workplace capabilities provided to support their work" (Source: Gartner Research, 2002.)*
Figure 4. "My company is advanced in its use of KM practice and technology" (Source: Gartner Research, 2002.)

Knowledge Management in PLIVA

Roots of the Knowledge Management

Knowledge Management is not a new concept in PLIVA. The first KM initiatives were developed in the late 1990s. At that time they were not called Knowledge Management and there was no overall Knowledge Management strategy. Before that knowledge sharing had had different forms, such as weekly scientific presentations, cross-functional project team meetings, internal newsletters and scientific journals, financial incentives for innovators, etc. Early 1990s marked the internal networks (Apple Talk) and e-mail systems implementation and Intranet development. Continuing employee education was then, and is still, PLIVA’s common practice.

At the end of 1990s PLIVA started expanding beyond the borders of Croatia, which made "face-to-face" communication very difficult. That triggered several IT initiatives such as:

- development of the Laboratory Information Management system (connecting more than 400 work stations, 150 laboratory instruments and 300 researchers);

- online access to database and documents stored in the Research Information Centre (only in 1Q of 2003 more than 5,900 direct end user online accesses);

- Central Chemical Warehouse support and Chemical database entities;
ChemClient, BioClient and Pharmatox client development for end user access off the common scientific results;

- several hundreds of scientific and technical journals for direct online access on the users desktop;
- installation of the CoBrain IT tool and deployment of KM portal with hundreds of knowledge bases, and
- other local KM initiatives (based on Intranet), etc.

Two new departments were established: Intellectual Property Department and Innovation Office.

Recent initiatives

Over the past four years the global Document Management System, Management Information Portal, Management Knowledge Portal and document semantic analysis were developed. There were also several "public" knowledge sharing initiatives, including "PLIVA Health" Portal (portal for general public) and "PLIVA MedNet" portal (portal for healthcare professionals).

PLIVA Health Portal was launched in September 2001 and on the average has 230,000 visitors per month. Since its launch it has become one of the best and most visited and acknowledged healthcare portals in Croatia and South-Eastern Europe. The awarded VIDI Web Oscar in Health and Sports Category, EMC festival and BUG Top 50 are the evidence of its quality.

PLIVA E-business staff along with the external partners (clinical doctors) has answered to more than 10,000 questions of the portal visitors, making it a very valuable tool for building trust between PLIVA and its current and future customers.

PLIVA MedNet Portal, launched in September 2001, has over 4,500 registered users from Croatia (doctors and pharmacists), which is approximately 25% of all medical professionals in the country. The biggest strength of plivamed.net is its co-operation and partnership with the leading academic institutions, magazines, hospitals and opinion leaders.

Innovation Office gave several initiatives to motivate knowledge- and idea sharing:

- establishing the communities of practice aimed at supporting learning, knowledge sharing, developing new solutions and avoiding "the reinvention of the wheel" by connecting the people with similar interests and practice;

- sharing of the ideas through "Click on innovation" (there were 155 ideas in 2002; 91% of them are already implemented or under implementation), and

- "Paper Click" - 1,711 ideas of our customers.

Globalisation of PLIVA made Knowledge Management initiatives development and coordination even more complex and the need for corporate Knowledge Management project even greater. Consequently, relevant Project was initiated in 2002.
Drivers of the Knowledge Management Project

Major drivers of the Knowledge Management project were:
- globalisation;
- better synergies of acquisitions (better integrations);
- developing strong global internal benchmarking;
- improving knowledge sharing across the operational units;
- improving competitive response;
- reducing loss of intellectual assets;
- learning from experience;
- increasing the efficiency and effectiveness due to the common knowledge repository within the company;
- increasing the reuse rate of the existing corporate knowledge;
- improving knowledge sharing culture;
- improving communication (information/knowledge) between PLIVA companies, and
- developing wide employee networking (connecting the experts and employees with similar interests).

Knowledge Management should make our learning and thinking capacities superior to our competitors’.

Description of the Knowledge Management Project

Prior to any work on the Knowledge Management project, it is recommended that the company creates a SWOT matrix based on the critical inputs for the Project success. The SWOT matrix is a good basis for recognising the projects to be initiated at the early stages of the Project.

The main weaknesses and threats in PLIVA SWOT relate to the variety of cultures, languages and different IT info structures already in place in different countries (lack of globally available and integrated info structure).

Table 1. Knowledge Management project SWOT matrix

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<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tr>
<td>Knowledge Management initiatives appeared early.</td>
<td>Numerous local languages (people communicate easier in the local language).</td>
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<tr>
<td>KM project is appointed and supported by Management Board.</td>
<td>Lack of global and integrated info structure.</td>
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<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
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<tr>
<td>Dramatic improvement of effectiveness and efficiency - raising competitive response. Integration of internal and external knowledge.</td>
<td>Global company cultural issues (different counties have different cultures - Croatia, Germany, Poland, Czech Republic, USA, etc.).</td>
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<tr>
<td></td>
<td>Expectation management. “On time” communication (many sites).</td>
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A long-term strategy and sub-project prioritisation scheme were developed on the Project SWOT matrix. All project initiatives do not have the same level of priority in time and importance. They are prioritised according to several criteria. Some of them are:

- Do they address strategic/critical knowledge?
- Do they fit into the overall KM strategy?
- Is there a clear business need?
- Do they have visible benefits (i.e. time to market, savings, efficiency and effectiveness improvement, culture change, etc.)?
- Are the roles and responsibilities and project ownership unambiguous?
- Are we dealing with a long-term or a short-term initiative?

![Diagram of PLIVA Knowledge Management Project phases]

**Figure 5. PLIVA Knowledge Management Project phases**

The first phase of the Project called Knowledge Management Fundamentals includes:
- developing global info structure;
- improving collaboration across the departments and site;
- scouting every department (unit) for the KM workers (network of KM workers) as the nucleus for sharing the ideas about KM;
- developing the rewarding system for knowledge sharing;
- sharing the knowledge of global (corporate) interest (who knows what, best practices, person/department/site, areas of expertise, etc.);
- sharing knowledge for several specific and crucial areas, and
- developing taxonomy for categorisation of the internal and relevant external information and knowledge.
The second phase will include setting up of different project teams for the selected critical knowledge areas (cross-functional and cross-site collaboration). The third phase will focus on the development of the new strategic knowledge (through Communities of expertise and Knowledge Events) and integration of the internal and external knowledge.

Knowledge sharing culture has to be developed and supported throughout all project phases (success stories, global experts, rewarding system, etc.). We see Knowledge Management as a key factor to future success, especially in the area of global and cross-functional collaboration (project collaboration and best practice sharing across the sites and functions), in retrieval and retention of the internal knowledge (including increase in the efficient use of resources).

The Knowledge Management project has two main streams: general stream and business-oriented stream. The former deals with global knowledge management initiatives that improve communication, motivate employee collaboration and influence the knowledge sharing culture in general. Some of the sub-projects in this stream are:

- **The Blue Pages** (the employees share their individual skills and interests, working and project experience and knowledge on their "personal pages"). This sub-project will help to develop wide employees' networking and strategic communities of expertise.
- **Project Management support** (methodology, experience, similar practices, etc.).
- **Sharing of knowledge** that the employees acquire at conferences and through training.
- **Sharing best practices** and building internal competencies through e-learning and internal coaching (mentor and apprentices practice).
- **"Ask the expert" initiatives** (if someone cannot locate the company expert, he/she asks the question and knowledge brokers locate the expert for the particular area).

The latter stream is oriented towards clear business benefits and deals with the projects that are the response to either articulated business need or sharing of strategic knowledge (knowledge needed to leverage in order to fulfil the company's goals and visions). Both streams apply the same principles and technology: they connect the individuals who need to know with those who know on the one hand, and collect what is learned from these connections on the other hand in order to facilitate the access to others. Major part of the most valuable knowledge exists only in the minds of our employees, which makes development of the wide employee network one of the top priorities. All knowledge management initiatives requiring IT support will be based on the Intranet technologies such as:

- Document Management;
- Frequently Asked Questions;
- Content Management;
- E-learning;
- Expertise location;
- Collaboration tools (discussions, forums, on-line meetings, etc.);
- Personalisation and subscription, and
- Knowledge (enterprise) portal.
All systems have to be integrated so that different content can be recommended to the users, based on their activities and interests (anticipating users' needs).

**Knowledge Management Rewarding System**

There is still much diversity in the company's attitudes toward rewarding the employees for knowledge sharing. Nevertheless, some companies have gone too far in this and either do not reward any form of knowledge sharing or reward every contribution, regardless of the knowledge quality and applicability. The rewards are of different types: from the announcements of the company's "knowledge sharing person of the year" to free vacation for the employee and her/his family. We strongly believe that prior to exercising any global initiative, a rewarding and recognition system has to be developed and the rewards given for the improvements in everyday work and personal development (conferences, trainings, books, magazine subscriptions, etc.).

Having experienced the failure of certain Knowledge Management initiatives, many companies admitted that one of the causes was the absence of the rewarding practice. If the employees realize that sharing of their knowledge helps them do their job more effectively, that it helps them keep their job and aids their personal development and promotion, they will adopt this practice which should also be incorporated in the policy of each company.

The company must send a clear message showing that it recognizes the value of knowledge sharing, which it encourages, rewards and demands, and the top management should be the models for this kind of behaviour.

**References**

Mobilising **Knowledge: The pharmaceutical industry approach** by Sandra Ward and Angela Abell, TFPL LTD, 2002.


