DRIVE – DIRECT INTELLECTUAL VALUE ENHANCEMENT APPLICATIONS,
EXPERIENCE AND NEED AMONG AUSTRIA’S TOP 500

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Abstract

During the last 6 years Ti-KOM has been developing and applying DRIVE (Direct Intellectual Value Enhancement), a method delivering solutions for the identification and evaluation of ideas for product developments, for the generation and transfer of knowledge, and for the development of human resources.

The method itself and an example are presented. Also the results of a survey among top level managers in Austria regarding their view on knowledge management and the applicability of the presented method are shown.

Keywords: innovation process, knowledge-management survey, DRIVE-method, industrial applications.
Abstract

During the last 6 years Ti-KOM has been developing and applying DRIVE (Direct Intellectual Value Enhancement), a method delivering solutions for the identification and evaluation of ideas for product developments, for the generation and transfer of knowledge, and for the development of human resources.

The method itself and an example are presented. Also the results of a survey among top level managers in Austria regarding their view on knowledge management and the applicability of the presented method are shown.

Keywords: innovation process, knowledge-management survey, DRIVE-method, industrial applications.

Suggested track: L (Practitioner's Track)

1 Introduction, issues

In order to investigate the status quo of knowledge management in Austria’s Top500 companies we have interviewed more than a hundred, mainly top-level managers. The survey as well as our experience show three important things:

1. Knowledge management is leaving the restricted scientific environment or limited parts of the economy – namely very big and/or new economy firms – and starts to gain importance more generally, e.g. in medium sized traditional companies

2. Knowledge management is still associated with measures in the area of information technology. The introduction of more comprehensive knowledge management measures – measures affecting identity, strategy, structure, people, functions and business processes of organisations – is often regarded as expensive and associ-
ated with high risks. Investments in software solutions appear to be rather harmless compared to the introduction of new business processes or to the reorganisation of a company’s innovation strategy.

3. Unless knowledge management is broadly accepted among the industry, comprehensive measures are only applied if they are based on approved methods. It is security that we think is the missing link, the trigger to propagate comprehensive knowledge management in industry. Decision makers welcome knowledge management in general but avoid being used as test grounds for new methods. What they look for is proven methods.

As a contribution to the propagation of knowledge management, Ti·KOM has been developing DRIVE (Direct Intellectual Value Enhancement), a method delivering solutions for the identification and evaluation of ideas for product developments, for the generation and transfer of knowledge and for the development of human resources.

1.1 DRIVE – development and objectives

DRIVE is based on Ti·KOM’s innovation program and the company’s consulting experience. It can be implemented to cope with eight specific challenges. The eight challenges, the view of top-level managers on their actual significance and their relevance on organisational subsystems are shown in figure 1.

The eight challenges that can be addressed with DRIVE are:

- improvement of communication and development of networks between different units of companies,
- transfer of knowledge,
- innovation, creation of ideas for product developments,
- the development of employees’ soft skills,
- integration of new staff,
- motivation of staff,
- commercialisation of ideas and the
- creation of knowledge

In the survey carried out in the course of the development of DRIVE, top-level managers from Austria’s Top 500 companies (for details see section 4) were asked about the relevance of the eight challenges for their companies. At least 69% stated to be
currently confronted with seven out of these eight challenges. Even the exception, the challenge "commercialisation of ideas", is seen as an actually important topic by 49% of the interviewed managers. For over 80% (!!) of Austria’s Top 500 the motivation of staff (82%), the integration of new staff (81%), the transfer of knowledge (81%) present actual challenges. For the details of the remaining challenges see second column in figure 1.

All eight challenges are substantial for the cultural subsystems of organisations (identity and strategy), their social subsystems (structure, people, climate, functions) and their instrumental subsystems (only processes). Consequently DRIVE had to be designed to interact with all these organisational subsystems.

![Fig. 1: DRIVE objectives and relevance](image)

### 2 Method

After the successful application of DRIVE there exists an established program (see figure 2) in the target company. In this program topics are identified and teams are formed for a limited period of time, usually for about five month. During this time each
team works on one topic and presents the results of their work to a selected audience at a final presentation. Valuable results are pursued in a systematic way.

Fig. 2: The sub-processes of a DRIVE-program and examples for tasks of the DRIVE-organisation

This DRIVE-program – the process described above combined with appropriate working techniques – usually takes place periodically, e.g. once every year with different topics and/or teams.

As the companies’ objectives differ, conception and implementation of such a DRIVE-program must be individually designed:

**Evaluation:** First the applicability of DRIVE is evaluated. The situation within the company is investigated, objectives are defined and a concept is developed. The latter provides a sound base for a management decision about the continuation of the activities at this early stage. Moreover, it is a precise definition of the commitment of the management and provides a frame for the conception details to follow.

**Design:** Given the commitment of the management, a team, responsible for all organisational aspects of the DRIVE-program, is formed. This organisation team designs the DRIVE-process and accompanies the individual programs. Examples for relevant tasks are communication, process development, conflict management.

The DRIVE-process is split up into the sub-processes: identification of topics, formation of teams, content creation, presentation and evaluation and adding value. For the design each sub-process is considered individually. The multitude of objectives that can be pursued with DRIVE is reflected in the diversity of shapes of the five sub-processes.
For instance, in a DRIVE-program for the improvement of communication channels between different units of a company, the individual teams will consist of representatives of the company’s units to be connected. In a DRIVE-program for the creation of knowledge in a specific field, the teams will consist of the most qualified people available, no matter what part of the company they come from.

**Integration:** In a third step the DRIVE-program is embedded into the company, namely in its strategy, its processes and its organisational structure (see figure 3).

![Integration in the company's strategy](image)

Integration in the company's strategy
- Commitment of the CEO, managing director
- Commitment of the top management of the involved units
- How tight is the DRIVE-process integrated?
  - Independent parallel process
  - The 5 modules of DRIVE are the company's core process
- Who is the DRIVE-process-owner?
- What time resources, budgets are available?
- What are the roles, functions of the DRIVE-program and DRIVE-organisation teams?

Fig. 3: The three levels of integration of DRIVE within a company

There are three ways to link the DRIVE-process to the business processes: It can be implemented parallel to the core-processes, as support process or as a primary process. If it is implemented as a parallel process it will be treated in a similar way as e.g. the innovation process in many medium sized to small companies – the process will continuously fight for resources. The best integration can be reached by implementing DRIVE in the core-processes. This makes sense if DRIVE is used for instance as the central innovation process. In most cases DRIVE is implemented as support for the value adding core processes.

DRIVE-programs have many similarities with projects: They are not carried out on daily or weakly basis, their beginning and their ending can be clearly defined, the people involved may change regularly. One way to cope with a process featuring characteristics of projects within line organisations is to implement a staff position that co-ordinates the
different DRIVE-programs. It should include members of the DRIVE-organisation team and report directly to the CEO, managing director or CIO.

**Implementation and development:** Once the organisational framework is established and the DRIVE-program is designed, it can be implemented. It is possible to start with a small, less risky configuration (e.g. with only a few teams that are formed by employees from one single department) and develop this seed carefully towards a fully grown program. This development process must be planned and pushed forward by the responsible organisation team – a challenging task that demands persistence as the development is a continuous process taking several years.

3 Results – example for a successful DRIVE implementation

3.1 Objectives and organisation

Ti·KOM defines itself as a knowledge company. The DRIVE-program is an essential part of the company’s respective strategy. As an example for a result of the application of DRIVE, Ti·KOM’s innovation-program is described. It was introduced in 1997 and designed to:

- institutionalise the creation of knowledge
- identify business relevant topics and developments at a very early stage
- push the innovation process
- improve the transfer of knowledge

During its development over the last six years it has also gained importance as a channel for Ti·KOM’s marketing and public relations.

The DRIVE-process represents the central innovation process but is embedded parallel to the core-processes. Two people are responsible for the organisation and development of the DRIVE-program: the managing director who is in charge of the program’s design and development, and a lead consultant responsible for the organisation of workshops, events, documentation and marketing.

Every year one cycle of the DRIVE-program is organised. All employees except from the managing director and the business development manager take part. The efforts for the program are highly appreciated by the management. Resources – time and money – are given. However, all customer projects have priority. Which means that extra ef-
forts – sometimes after working hours – are necessary for the generation of excellent results. Therefore the teams’ motivation is a critical success factor for the program.

3.2 Process design

Identification of topics: Every participant is asked to prepare two topics of his choice. The participants present their proposals at the kick-off workshop. The final topics are then chosen in a mixed topic identification and team formation process.

The ideas for topics must be innovative and possibly saleable within the next two years. Through this fairly high freedom of choice, the whole creative potential of all participants is activated and the base for motivated teams is prepared. Few things are more motivating than being allowed to work on the topics of ones own choice.

The saleability requirement tunes the degree of innovation and consequently the risk and the ROI that can be expected. To produce more innovative ideas this restricting condition must be widened or completely omitted. To produce results that will most certainly be saleable, the restriction must be tightened. The risk a company wants to or is able to take is a strategic question. The search for something completely new bears high risks – many ideas will turn out to be useless – but it might also produce the big splash that yields very high profits.

Formation of teams: After the presentation of the proposals in the kick-off workshop all participants appraise the topics and form teams. The only rules for this formation process are:

- two persons are not allowed in the same team in subsequent DRIVE runs
- neither two project managers nor two junior consultants are allowed in the same team
- the originator of an idea has the right to be part of the team formed around his idea

The first rule assures that people are trained to be able to work with different characters and effectively adapt to new situations and teams. The second rule hinders the formation of teams with unequal potentials and prospects.

Content creation: This is where the main work is done. The teams have five month to get familiar with each other, get organised, do research, refine their idea, work out results and prepare a presentation. The participants are highly motivated: they get a chance to train their project management skills, to show their abilities, to work on a topic of their choice. Another important factor for the motivation is the presentation of the results. It takes place in front of a selected audience of Austria’s top-level manag-
ers. In order that this demand is not too high for participants with little presentation experience, they are coached and trained for the presentation.

**Presentation and evaluation:** For the presentation and evaluation of the results an exclusive gala dinner is organised. The guests, that is to say the audience are top-level managers and journalists. A well known television presenter guides through the evening where the results are presented, discussed and evaluated. The best contribution is awarded – the winning team gets a challenge cup, trophy money and/or a voucher for an exclusive weekend trip. For the appraisal of the presentations a highly qualified external juror is invited. His ratings count for 50 percent. The remaining 50 percent come from the reciprocate ratings of the teams. The criteria for the rating are:

- degree of innovation (40%)
- saleability (25%)
- rhetoric, presentation technique (15%)
- consistency, persuasiveness (10%)
- graphical quality of the charts (10%)

This presentation is – probably nation-wide – a unique occasion where several innovative ideas are presented and discussed with the most important decision-makers of the industry in a very concentrated and effective way. It would probably be impossible to get a single appointment with one of the high ranking managers to discuss such ideas. It would also be impossible to organise a gala event which attracts so many top-level managers, if they would not be offered high quality presentations of innovative and business relevant ideas concentrated within two to three hours on one evening. In the end only few of the presented ideas are put into practise. But every presentations provides the matter for discussions that lead to valuable contacts between Ti·KOM and its clients, business partners and advisors.

**Adding value:** Each idea that is put into practise and each business contact made in the course of a DRIVE-program adds value to the company. And each run of the DRIVE-program adds value to the organisational knowledge of the company:

- knowledge is created in a directed and effective way through the whole process
- an twofold, intensive transfer of knowledge takes place: during the content creation period and through the presentation and discussion of the results technical/professional knowledge is transferred between team members, between teams and between teams and audience. Equally important is the transfer of knowledge
about the abilities of the participants: during a DRIVE-program new tasks are carried out in teams that are composed in an unconventional way. Many teams are for instance without an official project manager. Lower ranking consultants get the possibility to train and show their management abilities. In common projects mainly project managers present results to customers and respond to questions. At the DRIVE-presentation others get the possibility (and the training) to present in front of an important audience. Given this knowledge a very effective promotion customised to the individual employees abilities and inclinations is possible

- a program, opening such a diversity of possibilities for ones personal and professional development, is a very important motivation
- the employees soft skills – e.g. project management skills, presentation skills -- are trained and their self confidence is developed

The value adding elements must be continuously and actively pushed forward by the DRIVE-organisation. Otherwise good ideas are not intensively pursued and do often fall into oblivion. Opportunities for the development of employees soft skills are missed because the teams organise themselves in a habitual way and nobody makes an effort to train new skills.

During the whole period the quality of output is monitored by the managing director. Therefore the outcome – summary of all outputs – is guaranteed.

4 Selected results from the survey

In the course of the development of DRIVE Ti·KOM commissioned the Austrian market research company market® to carry out a survey among Austria’s Top 500 companies. In telephony interviews 102 top-level managers were interviewed in September 2003. As contact the company’s knowledge manager, the managing director or another top level manager with an overview on the company’s knowledge management activities was demanded.

The results regarding the present relevance of the eight challenges addressed by DRIVE where already shown in section 1.1 (see figure 1).

The opinion of the managers about the importance of “comprehensive” knowledge management for their companies is shown in figure 4. Whereby comprehensive knowledge management was explained during the interviews as:
“Knowledge management aims at a systematic and controlled development of all the knowledge and experience that is at an organisation’s disposal to carry out its tasks and solve its problems. They form the base for an efficient adaptability to changes in the economical environment and therefore save its long term competitiveness.”

<table>
<thead>
<tr>
<th>Interview question</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Knowledge management aims at a systematic and controlled development of all the knowledge and experience that is at an organisation’s disposal to carry out its tasks and solve its problems. [...]”</td>
</tr>
<tr>
<td>“How important is this comprehensive form of knowledge management for your company?”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All companies</th>
<th>Companies that do already live knowledge management</th>
</tr>
</thead>
<tbody>
<tr>
<td>„The relevance of knowledge management is …“</td>
<td>„The relevance of knowledge management is …“</td>
</tr>
<tr>
<td>very high</td>
<td>very high</td>
</tr>
<tr>
<td>52%</td>
<td>100%</td>
</tr>
<tr>
<td>rather high</td>
<td>rather high</td>
</tr>
<tr>
<td>37%</td>
<td>0%</td>
</tr>
<tr>
<td>rather low</td>
<td>rather low</td>
</tr>
<tr>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>very low</td>
<td>very low</td>
</tr>
<tr>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>no statement</td>
<td>no statement</td>
</tr>
<tr>
<td>4%</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Companies working on their knowledge management</th>
<th>Companies for that knowledge management is no issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>„The relevance of knowledge management is …“</td>
<td>„The relevance of knowledge management is …“</td>
</tr>
<tr>
<td>very high</td>
<td>very high</td>
</tr>
<tr>
<td>56%</td>
<td>6%</td>
</tr>
<tr>
<td>rather high</td>
<td>rather high</td>
</tr>
<tr>
<td>40%</td>
<td>44%</td>
</tr>
<tr>
<td>rather low</td>
<td>rather low</td>
</tr>
<tr>
<td>3%</td>
<td>31%</td>
</tr>
<tr>
<td>very low</td>
<td>very low</td>
</tr>
<tr>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>no statement</td>
<td>no statement</td>
</tr>
<tr>
<td>1%</td>
<td>29%</td>
</tr>
</tbody>
</table>

**Fig. 4: The importance of comprehensive knowledge management for the company of the interviewed person**

The results are remarkable: Nobody rates the relevance of comprehensive knowledge management as “very low” and only 7% as “rather low”. On the other hand see 37% the relevance of comprehensive knowledge management as “rather high” and 52% as “very high”.

The better the knowledge management of a company is developed, the higher the rating of its relevance. However, 6% of the companies for that knowledge management is no issue, regard comprehensive knowledge management as “very high” and 44% as “rather high”. A clear indication for need for action.
The status-quo of Austria’s Top 500 companies with regards to knowledge management activities is outlined in figure 5.

<table>
<thead>
<tr>
<th>Interview-question</th>
</tr>
</thead>
<tbody>
<tr>
<td>„What knowledge management topics or projects are discussed or were carried out in your company?“ (open question, multiple answers possible)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 1: characters, data, information</th>
<th>carried out</th>
<th>planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>intranet, internal IT solutions, DMS, databases</td>
<td>28%</td>
<td>22%</td>
</tr>
<tr>
<td>research &amp; development, product development</td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>Information systems for news, new knowledge</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>process documentation</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>archives, storage systems</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 2: knowledge/skills/actions</th>
<th>carried out</th>
<th>planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>standardised transfer of knowledge to new staff</td>
<td>12%</td>
<td>1%</td>
</tr>
<tr>
<td>improved communications, new mail systems</td>
<td>12%</td>
<td>2%</td>
</tr>
<tr>
<td>regular training</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>institutionalised meetings for the transfer of knowledge</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>staff survey, workshops</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>extended market observation, closer customer contact</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>implementation of knowledge-platform</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>external consulting</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>products: standardisation</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

| no projects, no measures | 1% | 14% |
| other | 8% | 13% |
| no statement, don’t know | 7% | 22% |

**Fig. 5:** Currently discussed topics and knowledge management projects carried out by Austria’s Top 500

The results show a clear picture: without going into detail becomes clear, that most measures associated with knowledge management are investments in software-solutions and classical research and development activities:

- databases, document management systems (DMS), intranet solutions (28%)
- classical R&D activities (16%)

Only few invest in more sophisticated knowledge management measures, e.g. like:

- knowledge transfer to new staff (12%)
improved communication (12%)

5 Conclusion

Almost 90% of the managers from Austria’s Top 500 rate the importance of comprehensive knowledge management as high. Even more, 90% think that its future relevance for the strategic success of companies will increase (see fig. 6). At the moment only 8% live comprehensive knowledge management. Most companies (76%) are about to implement knowledge management. The need for action is high.

![Fig. 6: The future relevance of knowledge management and current situation in Austria’s Top 500](image)

Knowledge management is still associated with measures in the area of information technology. More comprehensive knowledge management measures – measures affecting identity, strategy, structure, people, functions and business processes of organisations – are needed. Unless knowledge management is broadly accepted among the industry, comprehensive measures are only applied if they are based on approved methods. With DRIVE – direct intellectual value enhancement – Ti-KOM offers one such method.