# 11<sup>th</sup> International Research/Expert Conference "Trends in the Development of Machinery and Associated Technology" TMT 2007, Hammamet, Tunisia, 05-09 September, 2007.

# KNOWLEDGE MANAGEMENT AND BALANCING OF KNOWLEDGE

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### **ABSTRACT**

The logistics of knowledge means managing the need for knowledge, as well as the supply and transfer of knowledge. The transfer of knowledge occurs between generations, in a regional innovation system and today, with increasing frequency and importance, across international borders.

A company's balance sheet of knowledge gives important arguments in support of material property, which is important for establishing a knowledge rating. The goal of rating is to evaluate, by using a standardised procedure, the economics position of a company – its credit worthiness. Such a method of intellectual capital valuation enables an investor (for instance, banks) to foresee the future solvency of a debtor (company) and thus obtain a risk assessment. Improved rating leads to lower interest expenses and at the same time increased profits to increase in a part of company's own capital.

**Keywords:** knowledge management, measuring knowledge, knowledge logistic

# 1. INTRODUCTION

Knowledge and knowledge management are essential for an organisation in order to gain a competitive advantage in today's business world. In the Information Society, intellectual capital also makes an integral part of a company in addition to the traditional factors of production, such as means of production, and financial and immovable assets. Co-worker's knowledge is an inexhaustible reserve for the success of a company and we should not allow active knowledge to remain unused if we want to compete more efficiently on the global market.

Basic competences (knowledge) represent a basis for planning and transfer of innovation projects, thus establishing close links between innovation management and knowledge management. Innovation management transforms knowledge into money. In practice, innovation processes are implemented in 4 stages: searching for ideas, testing of ideas, realisation of ideas and usage of ideas. Knowledge is a basis for innovation, it is related to individuals, always dynamic and resulting from a cognitive process; *empirical knowledge* has a particular significance for learning.

Knowledge management, among other, means establishing framework conditions in organisations: it is necessary to single out individual knowledge and to network it in the best possible way. A knowledge-based network organisation encompassing competent partners in Slovenia and Austria is best seen through examples.

# 2. TYPES OF KNOWLEDGE

In general, the following characteristics can be attributed to knowledge:

- o it is created dynamically (through changes to cognitive structures),
- o it is intrinsically linked to people, and
- o it is a prerequisite for human action.

One possible – and often useful – categorisation of knowledge is by knowledge psychology, articulability and knowledge holder (Figure 1).

Knowledge psychology differentiates between declarative and procedural knowledge. Whilst declarative knowledge refers to facts (issues, processes, etc.) and objects (persons, things, etc.), procedural knowledge concerns the way cognitive processes and actions are performed. Declarative knowledge is also described as knowledge of something (knowing), or "know what". Procedural knowledge is also described as process knowledge, or "know-how" [1].

Structuring knowledge according to articulability focuses on whether or not the knowledge holder is consciously aware of the knowledge and can thus articulate it. This results in a differentiation between explicit and tacit knowledge. A categorisation according to knowledge holder differentiates between individual and collective knowledge.

The term experience is often used in connection with knowledge and learning. Experiential knowledge is often created through observing or carrying out actions and is therefore closely linked to procedural knowledge. Repeatedly carrying out a particular action or actions will lead to a refining of procedural knowledge. Experiential knowledge is primarily tacit and, in most cases, transferring this knowledge requires a huge amount of effort. Experiential knowledge comes from personal experience of situations. Experiential knowledge is also primarily individual knowledge, since it is by nature strongly linked to subjective feelings and emotions [5].

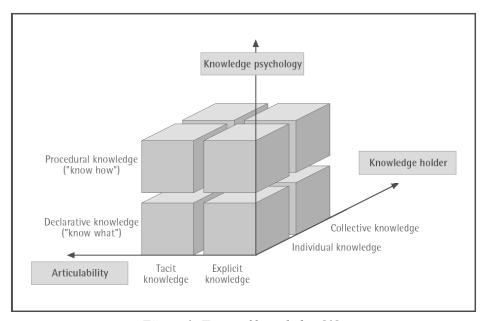


Figure 1: Types of knowledge [1]

#### 3. CORPORATE CULTURE AND STRATEGIC KNOWLEDGE MANAGEMENT

Corporate culture includes all the values, traditions, rituals, standards and beliefs that determine how people act in an organisation. Indeed, management is in a unique position to create, steer and change corporate culture [2].

A strategic orientation in knowledge management should not only ensure that all related activities are based on general corporate goals; it should also help to continually improve and institutionalise the knowledge management processes themselves. This requires the following steps:

- Setting knowledge management goals,
- o Establishing and implementing design measures,
- o Initiating change processes,
- o Periodic assessment reviews.

All these activities form part of a typical management process. To ensure knowledge management activities are fully integrated into actual working practices, management must continually observe any cause-effect relationships. In practice, evaluations based on the business indicators "effectiveness" and "efficiency" has proved highly successful.

Using effectiveness as an indicator of the dynamic relationship between knowledge management goals and design measures determines the strategic gap (i.e. if the correct measures have been implemented).

### 4. STRATEGY IMPLEMENTATION WITH THE INTELLECTUAL CAPITAL REPORT

The process selected for the implementation of an intellectual capital report will depend very much on the way an organisation currently operates (management approach, business indicators, etc.). However, the first step will always involve examining existing business processes to identify any relevant (and documental) input. Emphasis should be placed on those business processes that most affect the defined stakeholders. The indicators selected for these processes describe the output. The effect of this output on the stakeholders can also be illustrated using relevant indicators or qualitative descriptions. These initial steps establish the intellectual capital report model for the organisation in question.

When implementing strategy, it is important to evaluate the individual main areas of focus and establish activity (efficiency index) and quality (effectiveness index) indicators. If the intellectual capital report is to be used as a steering instrument, output indicators that affect the total result of each individual selected area (e.g. product quality, reliability) must be chosen to calculate the activity. Activity is thus an aggregated value made up of selected contributory factors from the individual business processes (output).

In the same way, only selected process indicators should be used to determine the quality indicator. To consolidate the indicators for each area, the individual business processes are weighted according to their contribution to building up expertise in a particular field [1].

#### 5. INTELLECTUAL CAPITAL REPORT MODEL

There is no longer any doubt of the increasing importance played by knowledge in value- creating processes. The challenge now faced is how to make the most effective use of intangible assets. This requires both representation and measurement of the organisational knowledge base, which in this case includes not only human capital, but also other factors such as existing organisational structures and customer relationships. The intellectual capital report has already established its suitability as a representation and measurement tool and is an effective method of communicating corporate goals, strategy and business activities to both external and internal audiences. However, its more important application lies in its use as a strategic instrument in the steering of key organisational areas and in supporting personnel development.

Figure 2 shows a basic model for producing an intellectual capital report focusing on the following components: general requirements, input, work processes, output and effect. General requirements can be set externally by stakeholders and market requirements and internally by corporate strategy and goals. They influence the focus of the key areas of corporate activity and also have an effect on any personnel development measures directly related to these activities [2].

The input indicated in the model represents the intellectual capital available to an organisation to carry out its business objectives. Intellectual capital is divided into human, structural and customer capital and each of these three categories are generally described either in terms of quantity (using indicators) or quality. These assets are actively applied in the company's business processes. If key processes have already been defined (e.g. as part of quality management procedures), they will generally only need to be marginally adapted for use in an intellectual capital report. The results are then allocated as output to the individual processes and are usually described quantitatively using indicators. The input is then compared with the relevant output to draw conclusions on how efficiently the company's intellectual capital is being put to use.

The effect of this output on society, industry and the environment is represented by impact indicators, collected, for example, through surveys or by measuring customer and stakeholder satisfaction. This is probably the most difficult and time-consuming factor to assess. It is represented in terms of quality, e.g. the subjective opinions of customers, and is measured using a standard scale.

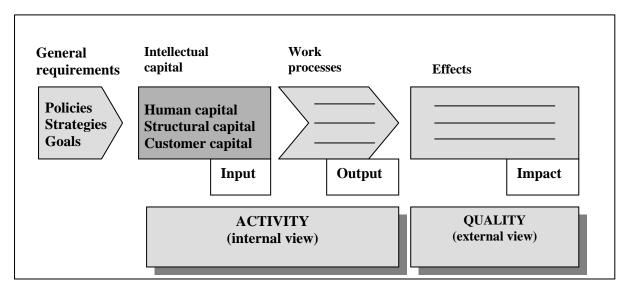


Figure 2: Basic model for an Intellectual Capital Report

## 6. CONCLUSION

The calculated activity can be combined with defined employee skills and plotted on a knowledge map or included in an activity/quality portfolio. This type of aggregation offers organisations a means of breaking down their strategic goals to a departmental or individual employee level. Appropriate changes in the activities carried out or quality levels achieved in individual areas can also be initiated. For example, existing staff may need further training or additional staff may need to be recruited to increase activity in a particular area. To improve quality, customer satisfaction must be measured and the results analysed to identify appropriate measures.

Practical hints for implementing and using an intellectual capital report:

- o Chose a simple, clear and transparent model for the intellectual capital report
- o Integrate and use it in existing management systems
- o Involve as many employees as possible in the development process and communicate results throughout the organisation
- o Avoid multiple collection of the some data
- O Don't simply use the method to produce a report once a year, use it internally in day-to-day work.

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