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The Benefits of Knowledge Management - Results of the German Award "Knowledge Manager 2002"

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Abstract: In the paper the applications to the 2002 Knowledge Management Award are discussed in relation to measuring the benefits of KM. It is concluded that benefits of KM initiatives depend on the KM approach taken.

Keywords: Knowledge Management, Balanced Scorecard, Measurement of benefits
Categories: A, H

1 Introduction

In 2002, the award created by the German "Commerzbank" in cooperation with Financial Times Germany and Impulse revealed that Knowledge Management is no longer regarded as a passing business fad and that managers are aware of the benefits it can provide. In total, 50 German enterprises of different industries applied to become the "Knowledge Manager of the year 2002". These companies have introduced Knowledge Management over a year ago and have demonstrated an improved performance and competitiveness in a lasting way. In January 2003, a prize of each € 10,000 was awarded to the three most successful companies in implementing KM.

Knowledge managers of the year 2002 are: Buergel GmbH bad & heizung, Nienburg (www.buergelgmbh.de), LHI Leasing GmbH, Munich (www.LHI.de) and Sartorius AG, Göttingen (www.sartorius.de).

In the following we present an evaluation based on 34 applications who fulfilled the award criteria (for further details go to www.wissensmanager-des-jahres.de).

The participating companies were divided in three categories. Small firms with less than 50 employees, medium-sized companies with no more than 250 employees and large-scale enterprises with more than 250 employees. The majority of the participating enterprises employ more than 250 people and are mainly dealing with IT services, financial services and consultancy. Those businesses have an extremely high need for good information flow as knowledge is what they are selling in the first line. Knowledge Management plays an important role within companies with more than

250 employees because there the access to tacit knowledge of all employees cannot be guaranteed by itself [Davenport and Prusak 1998] [North 2002].

The evaluation of the applications focuses on the following issues:

- Benefits for employees, customers and the organization itself
- Implementation of KM initiatives considering IT, human resource management and organizational aspects
- Improvement of competitive ability

2 Benefits in five perspectives

In order to value the benefits for employees, customers and the organisation, all mentioned benefits were grouped in different categories based on the four balanced scorecard perspectives: Learn & Growth, Business Processes, Customer Satisfaction and Financial Results [Kaplan and Norton 1997]. A fifth perspective was added to cover the benefits for employees explicitly.

Perspectives	Absolute number of improvements
Business Processes	67
Employee Satisfaction	59
Customer Satisfaction	55
Financial Results	17
Learn & Growth	11

Figure 1: Improvements due to KM mentioned by 34 applicants

As figure 1 shows, benefits can mainly be identified in the business processes as well as in the customer satisfaction and among employees. We will look into each perspective in more detail:

Improvements of *business processes* can be recognized in the acceleration of processes as well as in better transparency of knowledge, the reduction of errors, avoidance of redundancies, timesavings in doing routine work and a better re-use of internal knowledge (see Fig. 2). Small companies experienced all benefits to the same extent whereas medium-sized companies underline especially the re-use of internal knowledge and the avoidance of redundancies. Large-scale enterprises highlight the acceleration of internal processes and don't experience the potential of reducing errors and saving time in doing routine work as much as the other company groups do.

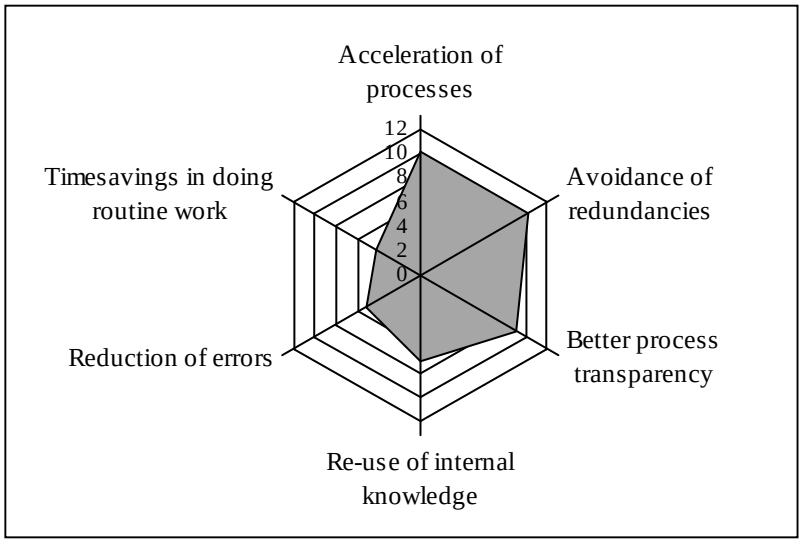

Figure 2: Benefits in the area of business processes (absolute numbers)

An increase in *customer satisfaction* becomes obvious in a better response time for customer enquiries, improvements in product and service quality, a better customer communication and customer retention as well as increased information content (see Figure 3). These benefits also vary depending on the company size. The main benefit for all company groups is definitely the quality increase in products and services. Small firms mention as well a better flow of information through Knowledge Management whereas medium-sized companies stress shorter response times and a better customer retention. Large-scale enterprises particularly witness improved process quality due to their KM efforts.

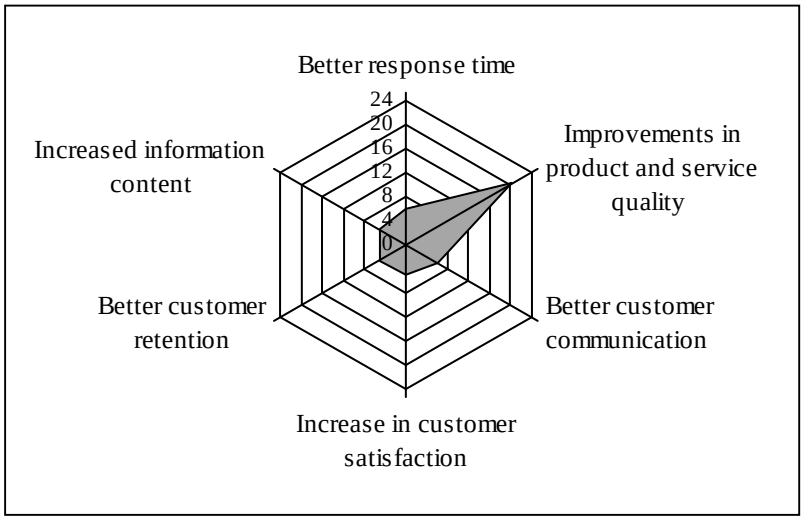

Figure 3: Benefits concerning customer satisfaction (absolute numbers)

Further effects of KM can be ascertained in the perspective of *employee satisfaction*. Among others, the main benefits are: improved team work, increased motivation, shorter training periods, development of competence, increase of personal market value and enhancement of personal knowledge (see Fig. 4). In small firms only the increased motivation of employees, shorter training periods and the development of competence can be identified. Medium-sized companies underline the enhancement of personal knowledge. For large-scale enterprises better teamwork and shorter training times are the main effects of KM in this perspective.

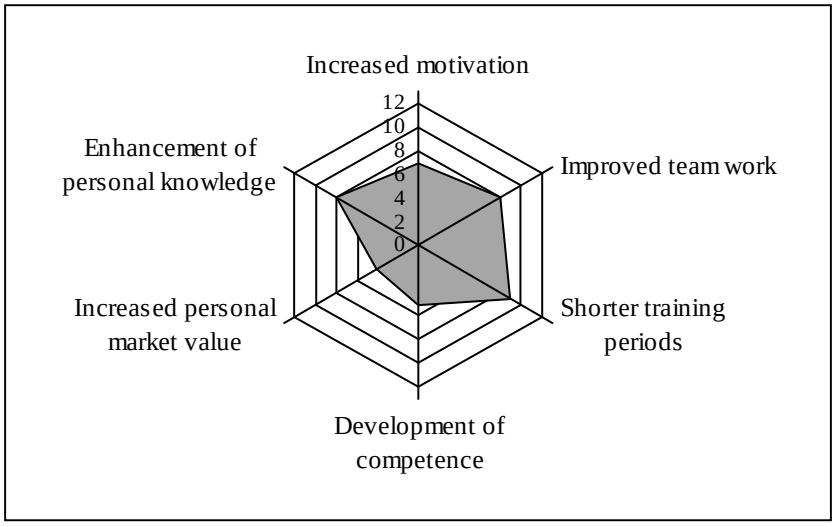

Figure 4: Benefits concerning employee satisfaction (absolute numbers)

The benefits of the last two perspectives aren't that obvious. In the *Learn & Growth* dimension only a few benefits are mentioned. Just one small firm uses KM to improve its R&D function. Medium-sized companies reinforced the utilisation of new technologies and some of them created new business fields as well as new products and services (see Fig. 5). Therefore these companies show the highest potential in this perspective. Large-scale enterprises also confirm the usage of new technologies and the development of new products and services as a result of the KM initiative.

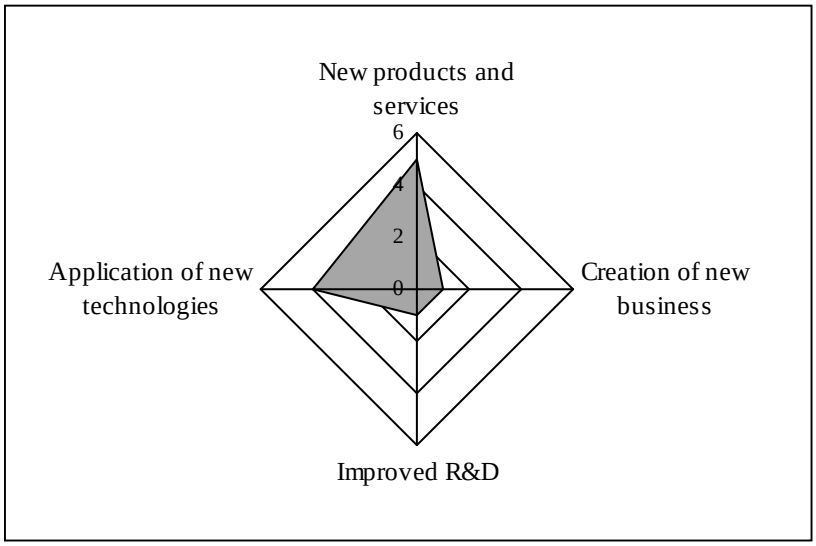

Figure 5: Benefits mentioned in the learn & growth perspective

Effects on the company's *financial results* can be hardly experienced so far. Benefits mentioned are related to higher market shares, increasing sales, a better analysis of risks and a reduction of administration costs (see Figure 6). One reason for the weak identification of potentials in the financial perspective could be that companies aren't yet familiar with the valuation of Knowledge Management activities.

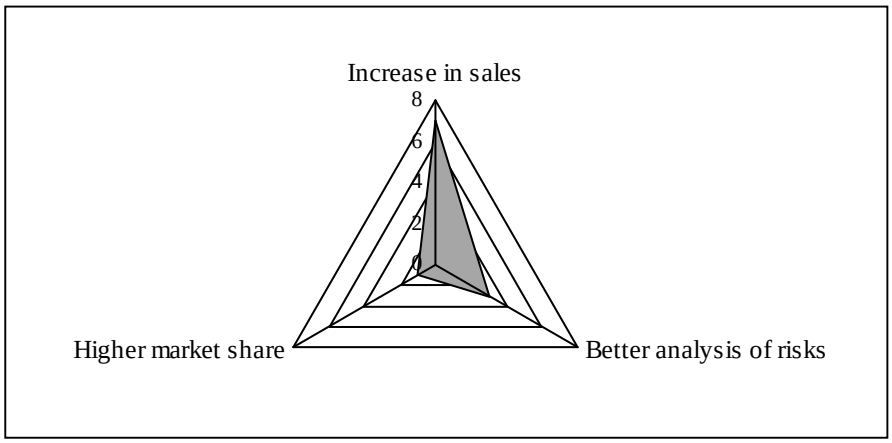

Figure 6: Effects on the financial results due to KM initiatives (absolute numbers)

Another reason might be the lack of a causal chain. As a direct link between KM activities and the entrepreneurial success is difficult to track, "the causal chain" is the only way to justify KM initiatives in a microeconomic view. The Cause and Effect Hypothesis established by Kaplan and Norton describes the linkages between the perspectives [Balanced Scorecard Institute 2002]. According to their theory the learning and growth of employees is the foundation for innovation and creativity. Skilled, creative employees question the status quo and work to improve business processes. Improved processes then lead to improved products and services for customers. And last but not least, satisfied and loyal customers lead to an increase of revenue. If the established management ratios in each of the perspective fail to have effects on each other, effects of KM on financial results cannot be retraced.

Another fact to consider is that the majority of companies initiated their KM programmes only about 18 months ago. As many effects of Knowledge Management are long term, it might be too early yet to relate KM to improved financial results.

Not every company confirmed benefits in each of the perspectives but they all agree about the positive effects on their competitive ability. Among different arguments, a better reaction on market changes and on the competition has been pointed out by 35% of all participants. Besides, a higher degree of flexibility accelerates the process of decision-making. That way, employees are more motivated to bring in new ideas and create new innovative products or services, which satisfy the consumer's needs. Only on that condition a business can be run successfully today.

3 Stages of maturity of KM initiatives

In the second part of the analysis a closer look was taken on the different concepts of KM initiative. We distinguished four stages of maturity of KM initiatives:

1. IT-centred approach
2. KM solutions applied to specific problem areas
3. Professional Knowledge Management
4. Integrated knowledge based management

More than one third of the applicants for the award still believe KM can be implemented successfully by just applying IT tools in order to facilitate the transfer of information (see Fig. 7). About 27% of the analysed companies developed KM solutions applied to specific problem areas. Special knowledge such as customer knowledge, service knowledge or knowledge about human resource management is available in these problematic units. Support is given via help-desks and experts.

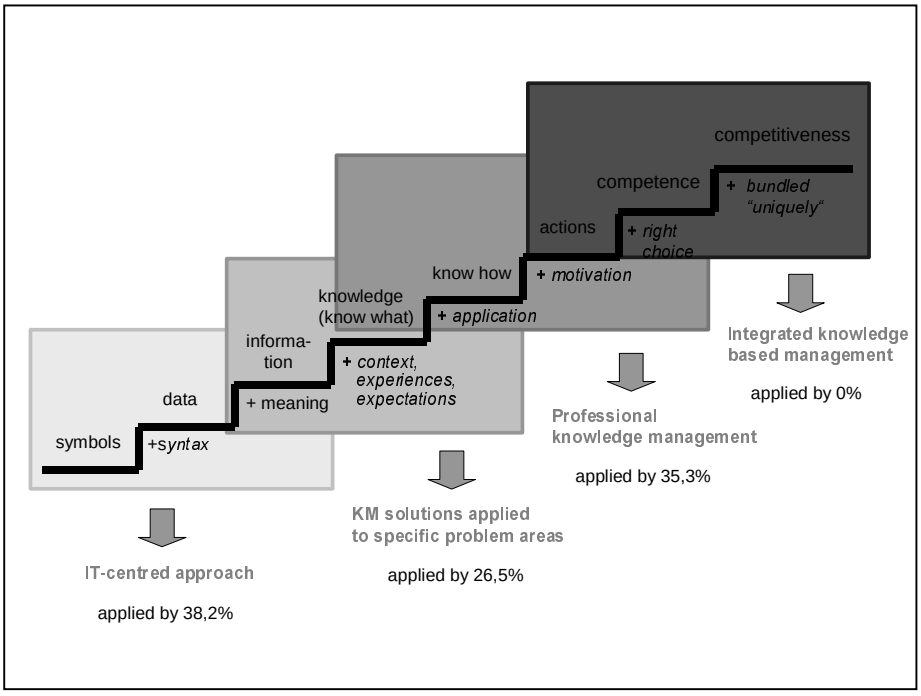

Figure 7: Stages of maturity on the competence ladder

Professional Knowledge Management is applied by about 35% of the participating companies. This means an IT infrastructure is established to secure the flow of information and keep the knowledge of former employees within the company. Also, incentive systems are implemented in order to motivate the employees to share their knowledge. The KM activities are integrated into all business processes as well as all projects and „Communities of Practice“ and „Competence Centres“ support the transfer of knowledge. At this stage the value of KM is often measured rudimentary.

The fourth stage of maturity hasn't been achieved by any company so far. Within an integrated knowledge based management the KM activities are called in consequently and the company is learning from the inside as well as from the outside (e.g. customers, competitors).

Dependant on the chosen concept, the mentioned benefits of Knowledge Management can vary (see Fig. 8). In general, KM programmes based on IT-centred approaches have the highest effects on internal business processes. If a KM solution applied to a specific problem area is implemented the benefits will depend on the predefined goals. By applying professional KM the benefits are spread equally over the five perspectives.

	IT-centred approach	**KM solutions applied to specific problem areas**	**Professional KM**
Business Processes			
Better process transparency	5	1	3
Acceleration of processes	4	3	3
Re-use of internal knowledge	1	3	3
Avoidance of redundancies	4	2	4
Total	**14**	9	**13**
Employee Satisfaction			
Increased motivation	1	1	5
Improved team work	1	3	4
Shorter training periods	4	1	4
Total	6	5	**13**
Customer satisfaction			
Improved product/service quality	5	7	8
Better customer communication	0	1	5
Total	5	8	**13**

Figure 8: Benefits depending on the KM approach

4 Conclusions

The competition "Knowledge Manager of the year 2002" showed that managers are aware of the value of knowledge and the various benefits of Knowledge Management. Positive effects on business processes, customers and employees could be proofed whereas the effects on a company's financial results and on the learn & growth perspective are still to be explored in more detail.

In order to root Knowledge Management in organizations and to increase its reputation among managers it is necessary to measure the effect on KM activities continuously.

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