A Guided Tour through the Siemens Business Services Knowledge Management Framework

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Abstract: This case study illustrates the knowledge management framework that was designed during the introduction of knowledge management instruments at Siemens Business Services GmbH & Co. or SBS, as it is known. The knowledge management framework will give the reader an understanding of the holistic approach to knowledge management and the different stages of implementation. It also introduces the key learning processes experienced by Siemens Business Services (SBS) during the various implementation phases. The knowledge management (KM) requirements, challenges and solutions within the service business are highlighted. The case study also shows the challenges and objectives of knowledge management (KM) programs, in general, and at Siemens Business Services (SBS), in particular. Based on the experience of the implementation of KM at SBS, the case study closes with critical success factors for other KM implementations, both within and outside Siemens.

Keywords: Information Systems, Knowledge Management

Categories: H.2, H.3

1 Introduction

SBS was part of one of the first Siemens' core business-driven service units There was, consequently, a clear understanding of the importance of people-oriented knowledge management. Many groups within SBS, however, work in the field of tools, which means that tools - not people - are the focus of many discussions about the KM program.

In parallel with the internal activities, the SBS KM team combined KM competencies from the technical side with the management consulting side in an SBS-wide knowledge management Community of Practice.

In many discussions, both internal and external, the team learned exactly how difficult KM issues are to discuss. The whole field of KM is very complex and has many links to other areas, such as HR, project management, etc. Slides - many of them - were needed to explain the team's understanding of and approach to KM. It was rather like building the tower of Babylon.

In order to change the direction of those KM discussions, the team developed a KM framework that allowed them to discuss the creation of a common understanding through the use of only one diagram, rather than a whole set of slides. Utilizing this framework as a basis for understanding KM, KM at SBS aimed primarily to develop an understanding and a transparency of the knowledge and competencies of the employees. The next step involved personal and organizational learning through

experiences within projects and the creation of reusable knowledge modules that present knowledge for new projects in a structured and precise way.

When SBS was established in 1995, a number of core units emerged from units within Siemens Nixdorf Informationssysteme AG. Within those units, the CEO, Gerhard Schulmeyer, had successfully pursued an extensive process of "culture change". As a result, it was possible to base KM at SBS on a corporate culture that was already familiar with and receptive to the subject. In direct contrast with their competitors, the challenge of a KM initiative at SBS did not involve finding a "classic" consulting culture as the basis for KM. Instead, it required the change of a corporate culture that was still strongly shaped and molded by past products and industries.

The aims and the general cultural conditions supported the view of an integral KM approach and fostered a lasting impression that the specified objectives could not be achieved just by KM solution that was mainly just tool-oriented.

Tool-oriented solutions often take the form of "stand-alone" solutions, which rarely meet the requirements of the business and often result in huge problems of resistance in both management and employees. Furthermore, many tool-oriented KM initiatives present problems when it comes to discussions of benefits.

Another challenge facing SBS was a rapid and strong organizational growth - as high as thirty percent in some units. The fundamentals of KM also needed to be imparted to these new employees to lay the foundation for a knowledge-based culture.

A description of the KM framework will be provided as a guide to presenting the individual method modules that form the complex world of holistic KM at SBS.

2 Corporate structure

In the current fiscal year (1999/2000), SBS has a turnover in excess of eight billion German marks and more than 34,000 employees in over sixty countries around the globe. It is one of the leading full-service providers, supplying consulting services, system integration, operational services and outsourcing on an international level. Within the Siemens group of companies, SBS was one of the first units whose core business was solely comprised of services.

3 Introduction to the KM framework

The objective of the KM framework, as described earlier, is to develop a standardized KM understanding based on the presentation of the dimensions and operation of an integral KM model. Its special feature is that it is compressed into one single image. The framework is used both internally and externally as a method of describing KM instruments and judging the comprehensiveness of their customers' KM programs and the way in which the instruments interact.

The framework must be read from the outside in for a complete understanding of this KM approach.

The core of the framework describes the basic principle of successful KM: the knowledge market, where the knowledge sellers (knowledge providers) and the knowledge buyers (knowledge users) meet.

We now have enough background knowledge to start on our guided tour of the ten steps.

Let's start with step 1.

3.1. Knowledge management meets business strategy

An important success factor in designing KM programs is their relationship to business strategy and their integration into the core processes.

In concrete terms, the business strategy for KM at SBS involves better equipping other service units to provide for the needs arising out of its interaction with Siemens and external customers. In the event of above-average growth, the KM strategy will allow SBS and the corporate culture to keep pace with this growth.

On the one hand, SBS, having grown out of Siemens Nixdorf Informationssysteme AG, already has successfully completed the paradigm shift from a product-oriented to a service-oriented company. On the other hand, KM for SBS as a pure service company, relates directly to intellectual capital management in that its corporate value is not reflected by the balance sheet value of, say, the fixed assets, but is based primarily on the intellectual assets. These assets, in turn, are represented by the processes, the structures and the relationships SBS has with customers, partners and employees.

From this point of consideration, then, we derived the guiding principle:

manage knowledge as a corporate asset.

From the strategy used at SBS and in the individual units as KM carriers, the team then developed the objectives and the timeframe for each of the steps in the form of a roadmap. In so doing, it was important to consider which modules were already in use and needed only to be developed further, specifically for KM.

This strategy had two important results:

- the enhancement of individual KM initiatives that were designed to add value in the relevant business areas
- and the description of the core competencies.

This meant that SBS had to concentrate on KM in the area of projects.

On our tour, this strategy thus forms the framework for further KM activities and we can now move on to Step 2.

3.2 Knowledge culture and organization

Of all the elements integrated into the KM strategy, it is the corporate culture and prevailing company values - in particular - that determine the success of a KM initiative.

In order to evaluate the initial situation within the organization, the team carried out interviews and surveys to get an idea of how ready employees were to accept KM. In this context, the team discovered that the values of "sharing" and "trust" were particularly crucial for the success of KM. This posed a huge challenge, one that still exists, to maintain KM values during times of rapid organizational growth and constant internal development.

Given the importance of project work at SBS, the culture of teamwork and cooperation within the organization are also extremely important for the success of KM activities.

If you analyze the status of an organization with a view to implementing KM, a important question is: How can the employees be motivated to share knowledge?

The exchange of knowledge, in the long term, should ideally be a basic concern of every single employee (an intrinsic motivation), as is already the case with some consulting firms. In the short term, however, the team had to resort to using extrinsic motivation. An example of this would be where the consultants get a percentage of their variable income based on KM results (sharing and re-use of Knowledge in management consulting).

On the other hand, the results of the initial research indicated that time was seen as a demotivating factor - a huge obstacle to KM. The team, therefore, tried to design "windows of time" for employees, in which they could dedicate time to exchanging knowledge or creating new knowledge within a specialized subject area. The extent to which this goal has been achieved is measured in terms of a cost-benefit relationship. By successfully satisfying these requirements, employees can determine part of their variable income.

KM has also been incorporated into the annual staff dialog, in which it is possible to assess how an employee is getting on with knowledge as a resource (among other things), as part of 360-degree feedback or full feedback from employees, colleagues and superiors. This can also result in the implementation of certain measures, including changes in the employee's future career plans. In this way, incentives are used not only in a positive sense but also negatively, when they lead to the development and enforcement of sanctions.

A particularly important property of every KM reward and recognition system is specific support for the relevant KM program by making adjustments to the program as problems occur. In the long term, however, the design of the KM program should persuade employees of its benefits. In other words, they should be encouraged to exchange knowledge not only for financial rewards but simply because they are convinced it is a good thing in itself.

In addition to the incentive systems, the team also had to consider the organizational implementation of KM at this level. This involved, first and foremost, the networking of employees within the organization, as well as support for employees in projects, for example, by setting up a central knowledge center.

The networking of employees has given rise to Communities of Practice of various degrees of maturity. Simple networks, for example, between programmers within the organization, are quite unsophisticated. These are fairly loose networks that are not very institutionalized or structured. Here, the members have regular face-to-face meetings and have set up forums on the intranet where they exchange knowledge. However, even at this level, the network is not dependent on the

organization and is therefore very flexible when it comes to making organizational changes.

In addition to the network Communities of Practice (CoP), in which participation is voluntary, SBS has introduced Communities of Practice (CoP) in the Management Consulting unit as well, which represent the four large consulting areas within the unit. Here, each consultant is a member of a practice. A variety of windows are available and these can be used to develop the topic, to gain entry to events and even to develop portfolio elements.

There are distinct roles in each practice - from the practice leader to the knowledge broker - which will be described in more detail later. In addition to virtual cooperation between the members of a CoP, regular meetings are also held. During these meetings employees focus on the exchange of knowledge based, for example, on project experiences, or on working out new facets of the topic. Central objectives of the practices also include the incorporation and subject-specific induction of new employees.

Practices at SBS that attain the highest maturity level are those in which the corporate knowledge and competencies are bundled into six basic topics. This is worth noting because this model was introduced using the matrix organization of SBS. This means employees from all corporate units and countries work together in Communities of Practice to offer the market these six basic topics.

Work in these practices is very highly institutionalized. There is a core team who devote more than half of their working time to practice work. There is also an operational team whose members invest up to 25% of their time in practice work. Then there is a full team, who do not have to satisfy any specific requirements regarding time. The members of the communities are each elected by their units. Forums are available on the intranet for successful — and virtual — cooperation. The forums will be discussed in more detail under knowledge technology.

The need for knowledge centers that are fundamentally orientated towards the needs of the relevant business areas was identified. Project management's knowledge center, for example, has a team of employees who work to support the active project manager, by identifying best practices and adapting them as reusable knowledge modules. Here, too, there are networks for specific topics at expert level in the individual phases of a project.

Against the backdrop of these strategic, cultural and organizational conditions, the core of the SBS KM model, namely the market principle, will be examined in the next step of our tour.

3.3. The market principle

In an organization like SBS, there are both knowledge providers and, at other locations, knowledge buyers. The initial situation at SBS was characterized by knowledge buyers who had little or no knowledge about the providers of the relevant knowledge. For example, they did not know who had performed a business process optimization in a certain area within a car manufacturing company, or who had had other experiences to offer. The reverse was also true. There was very little transparency about those who had canvassed the same customer for business, or in the

same industry and what the status of this activity was with this customer and what kind of business was entailed. And, of course, there was no chance of developing or transferring a specific methodology between the various teams.

The provider and buyer model does not mean their positions are fixed. On the contrary, providers and buyers can switch positions so that a provider of specific knowledge, for example a lesson learned in industry, can be a buyer of knowledge on another topic the next day. Within the framework, they are therefore referred to as *professionals in the role of* the knowledge provider, for example.

3.4. The knowledge broker

One of the first solution modules involved establishing knowledge brokers. A knowledge broker, for example in SBS Management Consulting, is a consultant who spends a specific weekly *knowledge window* in this role.

To some extent, a *knowledge broker* is the *spider* in the web in the organization. He or she can also be regarded as a *human search engine* that can be accessed whenever anyone in the organization has a question about a specialist area, or is looking for an expert. The knowledge broker is also responsible for certain KM processes about which we will learn more later. He or she is responsible for

- the classification, categorization, storage and management of the relevant information and knowledge (librarian)
- · coordinating or doing research
- monitoring the results of expert forums
- acting as a change agent for further cultural development
- introducing new platforms or functions.

During the implementation phase the team was faced with the decision of whether to introduce *full-time brokers* into the organization, to use the knowledge brokers as *a function*, or define being a broker as *a role* (i.e. a consultant spends part of his/her weekly working time as a broker). After weighing up the options, they opted for the role model, since the interaction between consulting practice - the direct source of empirical knowledge - and the management of knowledge promises to add significant value.

In this model, the time investment amounts to about 0.5 days per week. To ensure that a consultant working in this role is not at any disadvantage, the team has adapted the individual sales targets to correlate with the time he or she spends on KM activities. An independent evaluation model was developed to assess this. Nevertheless, a few questions still needed to be answered, for example:

What qualities should a good knowledge broker have?

• Should he or she, ideally, be a junior consultant or one with a lot of experience?

The solution to the latter question was found midway between these two alternatives: he or she should thoroughly understand the subject area in which he or she practices the role and must be able to provide support through his or her own consulting experiences in the area. The answer to the former question - What

capabilities should a knowledge broker have in addition to satisfying the technical requirements? - was not easy to find since there were no empirical values to refer to. The following answers come closest.

- He or she must be sociable and approachable and have an open personality.
- He or she must be self-assured and convincing in the relevant subject area.
- To impart knowledge in the expert networks, he or she needs a very good understanding of how to present information and good analytical capabilities, as well as an enthusiastic approach to his or her pivotal role in the technical network.

Special training, strategic participation in projects and networking in a separate Community of Practice provide the designated brokers with the experience they need to fulfill this role.

In addition to these nominated knowledge brokers, all the other people in the organization must also assume the role of brokers. Anyone who is confronted with a query to which he or she does not have a simple answer but knows someone who can help, acts as a broker - in the sense of competency - by establishing the connection between the problem and the solution. To put this approach into practice effectively, participants should be motivated to share and use knowledge supplied by others. Once again the underlying importance of a knowledge culture is clearly obvious.

An important principle that the team developed during the construction of the SBS's marketplace was the concrete integration of knowledge management instruments into the business model, or into the business processes. In this way, the marketplace combines products, solutions, services and projects not only with customers and partners but even competitors.

The framework needs further explanation and an examination of the marketplace.

3.5 Goods available at the knowledge marketplace

What goods and knowledge are available on the market? How mature are the goods that are traded and what are they actually worth?

From the interviews at SBS in the early stages of the KM implementation, it soon became evident that both implicit (tacit) knowledge and explicit knowledge would be traded. The question was: How can implicit knowledge be traded unless it becomes explicit? In this context, implicit knowledge is made up of competencies. The implicit knowledge that is eventually traded is the link to a specific competence, i.e. by linking a colleague in another group with specific experience, expertise and skills. In addition to the knowledge held by an individual, other important components include the knowledge contained in a project team or in another group working in close cooperation.

Explicit knowledge comprises documents, processes, methods, business patterns, and so on, and must therefore be dealt with in a much more concrete way. Nevertheless, we are, for example, still faced with the question as to the maturity level of a document. This is basically determined by the degree to which the knowledge can be re-used - the higher the degree of reusability, the higher the value of the document. This posed a further challenge – how to extract the lessons learned from a document

as just a few projects could lead to thousands of documents. A search on the document merely as text would not lead to a useful result - it would be like an unspecified search on the Internet. One would not be able to judge document quality in detail, or assess the quality and maturity of a specific checklist to find out if the policies used proved to be good or bad practice. And more importantly, there would be no way of refining this knowledge through practical use or theoretical engineering.

In order to trade the documents on the knowledge market, to learn from experience, and to identify and use knowledge assets in a methodical manner, explicit knowledge had to be divided into non-validated and validated knowledge (knowledge assets).

SBS defines knowledge assets as the elements that represent its knowledge and experience in value-added processes. These elements can be samples, examples, checklists, case studies, templates, architectures, business frameworks, practice guides or even a methodology component developed from practical experience gained in projects.

When evaluating knowledge asset candidates, SBS has learned to keep the assessment as simple as possible, and to avoid a complex and complicated system of criteria. Trusting its experts' judgment, the SBS team chose a pragmatic approach that simply differentiates between validated and non-validated knowledge. The knowledge assets – along with a short synopsis of their contents and context – are stored and submitted to a knowledge asset creation process. This procedure also ensures that knowledge assets are up-to-date. (The knowledge creation process will be dealt with in more detail in the section dealing with processes.)

However, even with validated knowledge assets, which are stored separately from non-validated project documents, a full text search, for example, is still only partly successful. It is much more meaningful to provide structured access.

SBS has thus dealt with and developed a number of structures, some of which are specific to certain units. One example is the structure of the SBS Proposal and Knowledge Base. Here, the topic-specific contents are incorporated into the standard processes of the project work by the knowledge center and specific knowledge modules (knowledge assets) are displayed for each individual project step. Project managers, as well as those responsible, for example, for creating proposals, quality management, and so on, can find important method modules for completing their tasks, as well as networks of experts working on the same topic.

3.6. Knowledge maps

Another content-related element was, for example, the development of the methodology for creating knowledge maps - not in the sense of Yellow Pages, as they are often understood, but the graphic display of knowledge flows and competency networks.

Different colors describe various competency implementations, while connectors show the intensity of the knowledge flows. The size of these networks is shown, the interfaces to partners and, for example, schools and special, possibly critical, node points in the organization. Knowledge maps have made the implementation of expert networks (Communities of Practice) in organizations possible.

3.7. Knowledge measurement and KM metrics

The purpose of the models developed in this complex topic is to determine the maturity level of an organization for KM and the Return On Investment (ROI) of KM programs, and to measure the success of KM projects and approaches to intellectual capital management, using balanced scorecards. (The view of the individual models is beyond the scope of this case study and others will be dedicated exclusively to this topic.)

3.8 Knowledge processes

The integration of KM into the corporate processes is a critical success factor for every successful KM implementation. Based on the differentiation of the flow of tacit and explicit knowledge, the project team looked at and extended numerous processes within the context of KM at SBS. A few very knowledge-intensive processes will now be examined.

In order to make implicit knowledge (for example, lessons learned) acquired in particular projects available to other colleagues and to identify the knowledge assets described earlier, the team defined a *KM project debriefing process* for the systematic evaluation of individual and group lessons.

This was integrated into SBS's project-delivery process, and is now automatically part of the project process. A project debriefing is held when a specific project milestone is reached, or at the end of a project. It examines both relations with the customer and the development of the individual project employees, as well as the collective learning results. This debriefing makes a huge demand on the corporate culture so that everyone involved may learn from problems encountered in the course of the project. The questions asked at a debriefing relate particularly to the progress of the project and possible deviations from the project plan.

This kind of workshop offers an opportunity for systematic reflection on the newly completed project, benefiting SBS consultants. They also learn ways in which they can improve their performance in future projects, by being made aware of certain patterns. It is essential that these workshops take place shortly after the conclusion of a project so that experiences specific to the project do not become confused or overlap with new ones.

The knowledge broker of the practice concerned is responsible for initiating this project-debriefing workshop. The project leader, the project members and the practice leader (or another member of the best practice team) participate. The knowledge broker facilitates this workshop with a predefined structure, which can be tailored to the specific circumstances of the project. The objectives of this workshop are to:

- review the approach chosen for the project (what was conducive and what was obstructive to the project delivery process)
- review the project results in terms of the business value achieved
- identify the lessons learned and best practice in the project
- draw conclusions and develop measures to help repeat past successes and make improvements for future projects

- document the experience, and convert implicit knowledge to explicit knowledge
- identify knowledge asset candidates.

The results of the project debriefing are then communicated to every member of that practice. The workshop itself is not open to everyone, as it was found that conflicts or bad experiences within the project team (if there have been any) are better resolved in a confidential setting.

To capture and further develop knowledge, the project team defined *a knowledge asset creation process* that is linked to project debriefing, or the processes within its Communities of Practice that are, in turn, linked to one another.

Process owners are necessary to advance the process, and roles must be defined with specific responsibility for output. The knowledge broker, as discussed earlier, acts as the process owner. Once the knowledge asset candidates have been validated through this process, their quality and maturity are considered proven. Knowledge assets can then be reused in other projects, thereby integrating them into a cycle of constant reuse and further development. Knowledge assets are also important for SBS's own business development. Through expert counseling or by providing clients with a case study, knowledge assets are used to present expertise in a specific field.

3.9. Knowledge workers

To promote the KM process, the project team defined other roles for KM workers besides that of knowledge broker. These further roles were mostly defined within its Communities of Practice (or "Practices").

All SBS Practices have a practice leader and several KM review members per practice. Each consulting employee is a member of one Practice. The Practices define a best practice team consisting of subject matter experts (SMEs), the practice leader and the technical editor. The team is responsible for measuring the business value and defining the life cycle and maturity level of knowledge assets. They also check the knowledge assets for methodology components, which can be gleaned from them. The technical editor is responsible for the quality, consistency and design of the documentation, and for improving the quality of the material affected. The projects are discussed more openly in small groups, like the practice team, where people already know one another very well.

3.10. The role of technology

The description of the other parts of the framework may underscore the importance of the right cultural environment for KM, but the special role that technology plays should not be overlooked.

When studying the time frame needed for the transformation of a corporate culture into a knowledge-oriented corporate culture – where knowledge sharing and the collective creation of new knowledge is part of everyday work – it is clear that

this takes a long time. On the other hand, the successful provision and introduction of an intranet-based tool takes only a few weeks or less.

Similarly, if you look at the possibilities for the exchange of knowledge between global organizations through the Internet/intranet technologies, two important roles of technology can be deduced: to be drivers and enablers of KM.

A successful KM program must therefore plan the individual program components in such a way that each employee recognizes the personal benefit he or she could get from KM in the overall architecture (e.g. through the provision or optimization of a tool).. Technological solutions support the success of the entire program and can thus be used as "quick hits" in KM projects. (Only a brief overview of this topic is given, since the description of the technologies used in KM falls outside the scope of this case study.)

The most important differentiation required relates to the stored knowledge. While document management systems can be used to store explicit knowledge from conventional documents, Yellow Pages or skill databases achieve transparency about the competencies within the organization.

The technologies used at SBS can be described in four clusters:

- Knowledge libraries: project and knowledge repositories based on documents.
- 2. *Knowledge mapping*: portals, search engines, knowledge maps, Yellow Pages, skill databases, etc.
- 3. *Communities of Practice*: collaboration applications, virtual teaming applications, etc.
- 4. All linked together by *knowledge flow applications*: newsboards, workflows, and e-mail.

It should always be borne in mind, however, that knowledge management programs should not be driven by technology, but are enabled by it.

This ends our tour of the ten aspects that comprise the holistic approach to KM at SBS.

4 Critical success factors

As part of project planning at SBS, it was possible to deduce a number of critical success factors for a successful KM implementation, which could then be confirmed in the external consulting projects.

- 1. KM requires problem-based trading. KM should not start with a solution-based model, but with an in-depth examination of the initial situation in the unit, or the entire company, in order to develop solutions for specific problems (e.g. cultural barriers).
- 2. KM requires support and clear communication of the objectives by management, as well as active staff approval. This critical success factor describes the importance of management's role in a successful KM implementation. This cannot be limited to a role as sponsor, but requires an active presence and participation.

- 3. To achieve successful KM implementation the kind of knowledge that is critical and its origin must be identified and KM defined as an integral part of the business process. The SBS unit identified project delivery as its core business process, and project experience as its most valuable knowledge.
- 4. Process owners must be defined and given clearly defined roles and specific responsibilities for output.
- 5. **Processes** for the way in which knowledge is captured **must be defined** in the sense of **best practices**, as well as for the achievement and retention of the required maturity (filter processes).
- 6. The economic value of knowledge does not lie in possessing it, but in using it. When the KM implementation reaches a certain stage of maturity, actually having information is no longer the decisive factor for success. It comes down to the manner in which the interpretation and application of this information is utilized. The following comparison illustrates this clearly: the books in a library obtain their value through the readers who read them and use them to increase their knowledge base.
- 7. *The completeness of the KM program.* To achieve success, it is necessary to look at and implement KM in its entirety, as in the sections described earlier.
- 8. The integration and further development of topic-related projects. In many groups within a company there are highly knowledge-intensive projects, such as e-business topics, the success of which can be increased by looking at them from a KM point of view. In this context, KM topics should not be run in parallel with such projects, but should be integrated into the projects.
- 9. Knowledge management programs must be aligned to corporate goals. KM cannot be run as an end in itself, but must be clearly aligned to the strategic objectives of the company in question. At Siemens, for example, these objectives involve supporting the paradigm shift from a product company to a solution and service-driven company.
- 10. The provision of a technical platform based on existing architectures. KM must not appear simply as a "new" tool to the employees involved; existing Information and Communication architectures must also be looked at as part of KM project planning.
- 11. The pilot projects must have clearly-defined, measurable objectives that can be achieved in less than six months. However, the changeover to a knowledge-based company involves a change process that can span several years.

Planning the pilot projects, in particular, is an important task for the successful implementation of KM. The pilot projects set in motion a process of change, spanning a number of years, which is required to bring about a lasting cultural change. This implies that the relevant employees must understand the benefits of the KM program over and above their intrinsic motivation, even at the pilot-project stage. Furthermore, the pilot groups must be selected in such a way that the results can be multiplied in other groups or at other locations.

5 Perspectives

As a result of the further development of the organization, the huge growth and the marked international orientation of SBS, KM as topic will also be faced with further challenges in future. Achieving a certain status is only the basis for motivating employees to attain other goals and to continue developing SBS into a knowledge-based company.

In addition to this internal view, it is important to position KM as part of the SBS portfolio along with topics like e-business, Supply chain Management or customer relationship management, etc. Another important factor is the successful incorporation of KM into projects, as is already happening, for example, with customers from the insurance or automobile industries.

6 Conclusion

There are three steps to achieving KM goals. The first step is to determine what kind of knowledge is critical and useful to your business, and how it will best support your strategy. The second is to identify where this knowledge is created, when it is most useful to share it and how this can be done within the context of your organization. Finally, KM processes must be defined as an integral part of business processes. By institutionalizing these KM processes, learning, knowledge creation and knowledge sharing become part of normal, everyday business activity. This means that you no longer have to constantly wonder how you and your company should manage knowledge.

Although SBS is mainly an IT-focused company, it considers KM as a holistic management approach. Institutionalizing the IT aspects must coincide with change management activities. To a large extent, your organizational context will determine whether a specific element, for example, an incentive scheme, is necessary in your company to encourage the implementation of KM. Bear in mind that incentives can only encourage implementation, but will not have an enduring effect on how KM is actually "lived out" by employees. Knowledge can only be managed as a natural part of everyday cooperation. This everyday cooperation is typically represented in business processes where individual knowledge-sharing and knowledge-creating processes take place. Rather than creating a KM solution that is implemented on the periphery of the company, SBS's approach has been to integrate this demanding task into its daily business activity.