Service Navigator – a SME perspective on productivity management of services

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The article describes the concept and the realization of the „Service Navigator“, which enables especially SMEs to evaluate the productivity of their services in a long-term perspective and to manage them systematically.

1. Introduction

Despite the wide attention that has been given service productivity in research and practice, it should be noted that so far there are no comprehensive and widely accepted methods of capturing, evaluating and managing productivity (Baumgärtner; Bienzeisler, 2006, 22). Conceptual approaches in the sense of basic frame of reference, with which the elements and components of service productivity are captured, represent an interesting direction of development (Filiatraut; Harvey; Chebat, 1996; Grönroos; Ojasalo, 2004; Parasuraman 2002). In such approaches, inputs, outputs and processes relevant in the context of service delivery are modelled. However, these existing frameworks need to be defined in concrete terms, because the model components for the specific areas of investigation have a different relevance, a context-specific operationalisation of the existing relationships between them becomes necessary and the influencing factors affecting the inputs must also be captured. An extensive concept for ascertaining and managing the relevant sub-productivities of the services based on such frameworks is also necessary, while it hardly seems possible to ascertain the overall productivity as is the case with the material goods. Contributions for capturing and managing the service productivity can also deliver approaches for performance measurement, such as Balance Scorecard (Kaplan; Norton, 1996) as well as for knowledge management, such as Skandia Navigator (Edvinsson; Brünig, 2000). These represent extensions of traditional key performance indicators and rating systems. In addition to the tangible parameters, such as financial ratios, they also consider intangible parameters, such as quality and customer satisfaction. Sample applications and scenarios have already been developed for the service sector companies as well as SMEs (Johnen; Simgen-Weber, 2006). A comprehensive account of service-specific features, such as the interaction with the customers as well as their integration in the service delivery process, particularly for SMEs, is however not satisfactorily available (Borchert et al. 2011). The development of approaches for
measuring, evaluating and managing the service productivity in SMEs is hampered by the fact that the intangible service-specific parameters, such as service quality or customer integration do not correspond to the traditional understanding of the relation between the quantitatively ascertainable output and input parameters. Due to the dimensionless service-specific intangible parameters, such as customer satisfaction, it is difficult to ascertain sub-productivities. To overcome this problem, it stands to reason to have a wider definition of the concept of service productivity.

Against this background, the aim of this paper is to introduce the conception and development of a comprehensive and key performance indicators aided tool, the so-called "Service Navigator©" in general and also with the help of two examples from the SME sector. This tool is based on a broadened, comprehensive definition of productivity; which should make it possible for the SMEs to evaluate productivity and consequently boost productivity of intangible and product-related services. Since the productivity evaluation ultimately also aims at productivity gains, this examination should yield approaches and potentials for improving the effectiveness and efficiency of workflows (both internally and in relation to the integration of the external factor i.e. the customer) and/or managing the employee qualification, motivation and competence more effectively.

2. Concept of service productivity

As a part of defining the service productivity, one initially falls back on the traditional understanding of productivity (Borchert; Klinkhammer, 2010). Generally, the traditional productivity expresses the "Usefulness of a combination of operational factors" (Gutenberg 1958, 28) and aims at the question of how sensibly are the resources of a company combined and used. For this reason, productivity is one of the important performance parameters for the companies (Nachum 1999, 939f.). The traditional productivity (Productivity I) can be defined as the ratio between the quantifiable performance results (Output) and likewise quantifiable input factors used for the production (Input) in a period (Lehmann 1958, 538). The performance result of a company could indicate products manufactured or services rendered in a period (Corsten; Gössinger, 2007, 132; Lashof 2006, 27). Thus, the output is the result of the transformation process and represents the (quantitative) usefulness of the transformation process (Gerhardt 1987, 73f.). The objective is to ascertain productivity by comparing the effort and the result, compare them with other productivity parameters and make an assessment (target-performance comparison, parameters of comparable companies; Diederich 1988, 63f.). As a part of this traditional understanding of productivity, different sub-productivities were established over time and depending upon the parameters used, such as the work productivity as sales or production volume per manhour and system productivity as production volume per machine hour (Reichwald 1977, 27). The Productivity I is often used to make statements regarding the efficiency of an operation. To that extent, Productivity I represents a practically established
management tool for assessing the current competitive position and own growth. It should be noted, however, that a coordinated set of key productivity indicators is required, because a single, isolated key productivity parameter can only give relatively very little information (Gronalt 2006, 4710f.).

In applying this traditional definition of productivity in the context of services, it becomes a challenge to portray the interaction process between buyer and seller. Adequate consideration and integration of the external factors gives the essential leverage for increasing productivity (Lasshof 2006; Zeithaml; Bitner; Gremler, 2005; Grönroos; Ojasalo, 2004; Johnston; Jones, 2004). The customer has two roles to play in this context. On the one hand, the customer plays the role of a buyer by providing the information concerning him for specifying the needs. On the other hand, the customer plays the role of a co-producer, which can be derived from the necessary contribution by the external factors and the resulting involvement of the customer in the process (Lasshof 2006, 53 ff).

To capture this strategically relevant aspects while reflecting on productivity, the traditional definition of productivity (Productivity I) needs to be broadened. Accordingly, the strategic productivity (Productivity II) is defined as follows: Productivity II includes Productivity I broadened to include external benefit providing parameters in relation to the customers. This means that the strategic productivity includes all aspects that benefit the organization and allows the organization to function better in terms of meeting customer needs. Particularly those external benefit providing parameters are included in the calculations, which help achieve the corporate goals, for example, customer satisfaction (Grönroos, Ojasalo, 2004, 414 f.). As a result, cause-effect relationships are captured, which are to be seen as input-output relations in the context of productivity. In the service sector, one must take into account that there are also other success-related aspects, which are considered as internal benefit providing parameters. These parameters include the development of necessary infrastructure, the modularisation of service process (process-related parameters) (Corsten; Gössinger, 2007, 342-346; Belz; Bieger, 2006: 197), entering into collaborations with corporate partners (strategy-related parameters) (Corsten; Gössinger, 2007, 389; Belz; Bieger, 2006, 198f.) as well as the development of potential factors of the company, for example, enhancement of employee qualifications (employee-related parameters) (Haller 2010: 259f.). These aspects have hardly been considered in the literature so far. But they are of a great importance, since the internal benefit providing parameters represent the internal requirements, which help realize the strategic orientation of the service company and facilitate the implementation of corporate goals. The said parameters often present opportunities for competitive differentiation. For the competitors, modularised processes, competent staff, specialised partners are often difficult or impossible to imitate. Moreover, these parameters are not “available” "just in time" in the immediate service delivery process, but need to be established strategically in the long term and must be constantly available. From the above details it can be seen that to what extent the broadened definition of Productivity II covers the basic aspects of Productivity I. Productivity II accordingly includes everything that might
benefit the organization and allows the organization to function better in terms of meeting the corporate goals. It includes quantitatively ascertainable output-input relations in terms of Productivity I as well as external benefit providing targets in terms of Productivity II, for example, customer satisfaction. Internal benefit providing targets, which are aimed at improving the organizational processes and functions, are also to be considered. The internal benefit providing parameters include process, staff and strategy-related targets. Productivity is thus no longer seen as a quantitative parameter subordinate to efficiency (Lasshof 2006, S. 23; Anderson et al. 1997, 131), but as a control variable in the context of an integrated target, planning and control system with quantitative and qualitative elements in terms of performance measurement.

Besides efficiency parameters, effectiveness parameters are also included in the productivity considerations in the context of establishing cause-effect relationships between inputs and outputs (Grönroos 2007, 235).

3. Service Navigator Model

With the aid of the so-called funnel model, figure 1 shows the Service-Navigator© and its basic design and development logic. As in the original basic model of Balanced-Scorecard, in Service Navigator© also each of the perspectives defines targets, key indicators, specifications as well as measures to implement strategic specifications by combining them. The number of perspectives is thereby limited to six to ensure clarity in the application and to reduce complexity so that one can react to the changes in the company and the environment at an appropriate pace.

The development of Service Navigator© deals with the conception and development of a key indicator-based tool, which supports SMEs in productivity evaluation and enhancement of services, where the long-term strategic orientation plays an important role. Particularly in SMEs, often a faulty or incomplete business strategy is formulated (Keuper et al. 2009, 58). In several SMEs, a systematic job planning and execution are absent; it is mostly improvised or intuitive (Bergmann; Crespo, 2009, 8f; Welter 2002, 17). For this reason, while using the Service Navigator© special emphasis is laid on the development of a comprehensive and target-oriented business strategy so that it could be communicated within the company. The Service Navigator© should therefore contribute towards a uniform target orientation.

As a conceptual framework for the identification of the relevant design aspects, St. Galler management model is an obvious choice as it especially captures the normative orientation processes and links them to the strategic development processes as well as the operative service processes (Bleicher 2004, 80-84). Due to its comprehensive systematic thinking and approach, this model is accordingly suitable particularly as the basis for designing the starting perspective “corporate positioning”. In this perspective, the focus is on the superordinate, long-term aspects of vision as an abstract image of company’s future, the strategy as a path to be thread and the mission as business objectives and targets to be pursued in concrete terms. This perspective
should help ensure that the company is well placed in the competition with special emphasis on the range of products and services offered, strategy formulation and target setting. To ensure that this positioning is also recognised within the company and followed practically in business, one must ensure that it is not only direction giving, communicable and practicable, but also accepted (Kotter 1998).

Fig. 1: “Funnel Model” of the Service Navigator

The corporate positioning can only be implemented if the internal requirements are met. Based on the EFQM model, which captures the prerequisites for achieving the corporate goals over so-called enabler criteria (EFQM 2003), the enabler perspectives are developed in the Service Navigator. With this perspective, all key indicators are captured, which were viewed above as internal benefit causing parameters and which should ensure the ability to render services in the long term.

In addition to the internal requirements, particularly the customers must be taken into account. Besides working out the customer requirements in the respective target segment, the development of appropriate value propositions for the customer must also be captured. A distinction is made here between the customer’s perspective on the company and its services (external customer perspective) and the company’s perspective on the customer (internal customer perspective). With regard to the external customer perspective, particularly those key indicators and measures are analysed, which are significant from customer’s perspective in the customer contact, for example, the quality perceived from customer’s perspective and the customer satisfaction. Those activities and targets, which cannot directly be noticed by the customers, but are specifically targeted at them, are considered in the internal customer perspective, e.g., the percentage of new and regular customers in the total customer base, customer retention schemes as well as exploiting the inquiry potential.
As a part of the “extended service ring perspective” (see Fig. 7), a term is introduced, which has proved its worth in the practical application of service engineering approach for the small enterprises. It is a classification which differentiates between the core and ancillary services in a company (comp. Harms et al. 2009) particularly in the context of hybrid performance package. The term “core service” is not to be equated with “product” alone and “ancillary service” is not to be viewed as “additional service” alone. A distinction is rather made between the traditional services (often a hybrid mix of product and services) and additional services, in the following referred to as “extended service ring”. Thus, the additional services, which are often offered to the customer, should be captured to promote the sale of core services. The distinction between the core and ancillary services is to be made by each individual company.

The financial results are shown in the financial perspective. In this case, the financial performance is captured and expressed, which is realised through the implementation of vision, mission and strategy. The financial perspective assumes here the function of a filter for the respective targets and key indicators of other perspectives. Besides traditional productivity parameters, other absolute and relative financial ratios can also become relevant, e.g. the amount of claims paid late by the customers.

Fig. 2: Service Navigator in the "house display"

Using the funnel model, the individual perspectives can be intellectually pursued, the corresponding issues of the perspectives can be evolved, and targets, key indicators, specifications and measures as well as the underlying cause-effect relationships between inputs and outputs can be derived. To better understand the specific content of
the planned productivity management, it is advisable to shift to a different form of presentation, which is termed as “house display”. With this “House display” (Fig. 2), it becomes clear that the concept of Service Navigator is attached to the three dimensions of a service (potential, process and outcome). This should ensure that all relevant mission-critical, service-specific features are captured along the entire value chain, and supply and demand side characteristics are taken into account. While the corporate positioning, enabler perspective as well as internal and external customer perspective can be classed with the potential dimension, the extended service ring perspective relates to the process dimension. The financial perspective can be classed with the result dimension of a service.

The perspectives defined above provide the basic architecture. The appropriate formulation with relevant key performance indicators (KPI) for measuring and managing the service productivity is always carried out for an individual company. Therefore, in a concrete case, the corresponding targets and KPI for every single perspective must be developed and the targets for the respective KPI defined in order to measure the degree of target attainment and to allow a management control in the desired direction. What is required here is a systematic derivation of the performance and success indicators from the strategic objectives, including the current processes of the concerned company. It seems advisable to have a fine balance between the company and sector-specific KPI, which allow a specific orientation as well as a benchmarking in the competition with the relevant competitors and also enable a temporal and functional assignment. Moreover, a restriction should always be put on exclusive strategically relevant KPI, which have a cause-effect relationship with each other and contribute towards the realisation of the desired corporate image.

In the context of KPI development, the previously worked corporate policy positioning should initially be anchored in the planning on the downstream perspectives with the help of KPI, measurements and targets. Based on the above, the strategic actions should be identified to allow a management control in the desired direction. To start with, approx. 2-4 appropriate indicators should be identified for every perspective in order to concentrate on the indicators that are relevant for the implementation of the corporate policy positioning. To manage Service Navigator as a focussed management tool of a comprehensive service productivity and not as an operational information tool, it is considered advisable to use around maximum 20 key indicators for implementing the corporate policy positioning on the downstream five perspectives.

In the following, the development of the Service Navigator is first explained in general and then with the aid of two practical examples.
4. Development of Service Navigator and case studies

4.1. Procedure model

If one tries to measure service productivity in a real case, one quickly comes across the fundamental problem: How can one separate specific input parameters of this type, especially in terms of earlier presented comprehensive approach to define service productivity and in terms of capturing efficiency and effectiveness, that they can be identified as the sole cause of discrete output states to be examined? This is not easily possible due to the time delay before the input parameters become effective in the service sector and due to the often existing hybrid nature of the services of particularly commercial companies. This problem can however be tackled by a mental exercise: If in selected cases it is possible to attribute a change in the output reflected in the corporate results, at least primarily and principally, to the past changes in the extended service ring and again to the changed orientations with regard to the customers and internal processes, one can at least establish a weak cause-effect relationships in this case. “Primarily” and “principally” implies that it involves companies, which in past five plus/minus years had their biggest strategically relevant changes mainly in the organisational field (for example, customer-friendly order processing processes) or in marketing and sales field (for example, changes in the customer contacts). At least in the small and medium enterprises, our experience shows that one very quickly becomes wise in this respect.

If it were possible to find companies whose corporate growth can be characterised in this way at least for the selected period, then using „ceterisparibus condition” in these cases one could risk the work hypothesis that a positive corporate growth is primarily based on a positive development of service productivity parameters. If one follows this first premise of our mental exercise, in the next step one can conceptualise enterprise-specific Service Navigator, in which the present status quo is reconstructed with the above perspectives. This means that the latest development of the concerned enterprise is examined to see which control variables have intentionally or unintentionally contributed to the present result at the time of control. These control variables are identified and arranged with the said Service Navigator. This is initially reconstructed backwards by examining the central question, what the Service Navigator would have looked like before X (= 5 – 10) years to be able to contribute towards the achievement of the present corporate results. Contrary to the prescribed sequence of flow of different perspectives of the Service Navigator in the funnel model (from the strategic targets to the identification of economic results), the currently resulting financial ratios are used to retrospectively make their development plausible with the progression of the service design. In ideal case, this results in reconstructed cause-effect relationships. On the basis of status quo description by the reconstructed Service Navigator, one can finally look towards the future and the Service Navigator can be formulated for the next development phase (5 – 10 years), which gives it its true function as a management tool. In this connection, the already existing perspectives of the Navigator are adjusted, corrected, supplemented and/or
partly reformulated. This time, the perspectives will follow the sequence prescribed in the funnel model (from the strategic targets to the identification of economic result). In practice, there is a certain learning effect, which is achieved through the previously run reconstruction step. Rather abstract thinking of the Navigator unfamiliar to several SMEs has somewhat become familiar to them with the reconstruction of the actual situation, so they no more find it difficult to get the necessarily vague view of the future. Initially sub-strategic paths are developed, which should be implemented on the downstream perspectives with sub-targets, which have cause-effect relationships with the upstream perspectives. Service Navigator is then finalised for the entire enterprise, by condensing the strategic sub-paths into a desired overall growth.

This will be demonstrated in the following with the aid of two case studies, which have been developed on the basis of qualitative interviews with the experts in the small and medium enterprises. The reconstruction from the past to the status quo is described for a small enterprise, in which the above-mentioned premise (present success of the enterprise is primarily based on the activities in the extended service ring) is satisfied to a great extent. The formulation of the Service Navigator for the future is finally demonstrated for a medium enterprise from the software industry.

4.2. Case study Citybau - Company profile

CITY BAU® GmbH was founded in 1991 in Neuötting purely as a construction service provider. Together with the construction company founded in 1931 by the father of the present owner and one property management group, the group consists of three companies with total 15 employees and a network of specialists ranging from the energy consultants to the interior designers. CITY BAU® offers expertise, which ranges from project planning to turnkey construction projects or modernisation and construction support, to management and brokering services for real estate.

With six service modules, CITY BAU® GmbH covers the complete spectrum of services: Consulting, planning, construction work, turnkey projects, renovation as well as real estate sales. The services of CITY BAU® GmbH are aimed directly at the individual, sustainable and high-quality construction. In addition to the individual architecture, the advantages of houses constructed by CITY BAU® GmbH include the use of ecological materials, high-quality protection against damage due to fire and water besides the use of solar heat and overall a healthy feel-good atmosphere in the house. Very special strengths of CITY BAU® include years of experience, dependability of a well-managed family business, numerous contacts, an intensive construction support, prioritisation of quality and meeting deadlines and a large number of references.

The strategic orientation of CITY BAU® aims at the individual construction of high-quality single family houses and their sales as well as becoming the market leader in the regional sphere. Some of the target groups are explicitly listed below: High earners, businessmen, pensioners above 55, doctors as well as teachers and officials.
To be able to satisfy them and particularly ensure the desired individuality, defines CITY BAU® as its “natural duty and purpose to use the existing knowledge, skills, experience and services to solve customer problems or to satisfy their needs. The services are not intended for abstract business areas (construction, property sales, rental, ...), but for people. [...] CITY BAU® is primarily there to solve the problems and only secondarily to sell products“. This results in a broadened objective, namely, to permanently become the best problem solver in the region, at least for one of the above-mentioned sub-target groups.

4.3. Development for attaining target – a system with "customer pull effect"

To establish a systematic approach to market development and become the market leader in the region, it is necessary to closely examine the needs of customer target groups so that target group-oriented solutions can be offered. Along with the knowledge of customer needs, CITY BAU® uses the established basic needs of the target group (beautiful, creative living, individual and tasteful living, realising ones wishes) as the basis to provide range of solutions for possibly existing problems. Implementation of customer needs in the given budget, maximum safety as well as meeting of deadlines require here a special mention.

The owner describes the approach of CITY BAU® as follows: “We specialise in identifying and solving the problems of the sub-target group. In this way, as a specialist for individual high-quality single family houses and multiple dwelling units, we give our target group a permanent edge, which cannot be imitated by any competitor. It is the safe way out from interchangeability to distinctiveness and to an outstanding profile. CITY BAU® serves as a trustworthy mediator, who mediates all transactions between the target group (and its need for solutions to the problems) and the seller.“

To deliver this expertise, a special communication is required with the customer, from which safety, trust, respect, expert knowledge and the important function as an advisor, which particularly results in the intended pull-effect on the customer, can be derived. CITY BAU® achieves this by constant development and expansion of its marketing tools. The website created in the Internet in 2009 as construction consultant has in the meanwhile become the central means of communication. The accompanying measures are controlled by a media plan, in which most unusual forms of public relations are planned and scheduled. In addition to the numerous seminars and lectures by the business owner, the sub-target groups are attracted to the extraordinary corporate events, such as own poetry readings, recitals or cocktail parties.

The visitors to the website are encouraged to participate through “learning" checklists and questionnaires. The systematic evaluation poses specific questions or problems to the customer and sharpens equally the requirements and desires profile of the sub-target groups. The results are stored in a customer database, formatted and made available in a structured form for new statements. The online service persues a
consistent reduction in two clearly defined target groups: young couples, both working, and wealthy persons above 50, who are constructing a second or a third house. It takes into account the growing need for information and the resulting need for individual counselling, without “bombarding” the visitor to the website with information. The entrepreneur relies on the imagination of its customers: With the special architecture software, the prospective customers can make their virtual dream house on the website. The calculation of all special requests ensures transparency, but also brings new queries, which are answered by the entrepreneur.

The owner of the company describes the CRM concept behind it as "customer pull system". With the customer pull system, the contact with the target group is institutionalised and the permanent exchange of information with the customer is ensured. The customer thus perceives CITY BAU® as a reliable problem solver and expert. The present marketing tools and means of communication are just a small part of what is more or less automated on customer communication. On average, CITY BAU® receives with this system between 5 to 10 inquiries per week. These are automatically entered in the CRM and linked with the features. The next step is to make calls based on all addresses obtained in this manner with the objective to fix an appointment and a personal and individual consultation associated with the same. 20 - 30% of the inquiries are converted into orders.

4.3.1. Preparation of the corporate growth as specifications for the Service Navigator

As described in section 4.1, the latest development of the concerned enterprise is examined to see which control variables have intentionally or unintentionally contributed to the present result at the time of control; the Service Navigator is initially reconstructed retrospectively, and contrary to the prescribed sequence of flow of different perspectives (from the strategic targets to the identification of economic results). For this, the currently resulting financial ratios are used to retrospectively make their development plausible with the progression of the service design. In ideal case, this results in reconstructed cause-effect relationships.
a) Growth of financial ratios

![Sales and operating result development](image)

Fig. 3a: Sales (U), operating result (BE) and profitability (BE/U), (presentation based on author's personal research)

The development of CITY BAU® described earlier is based on compliance with the quality and deadlines selected by the company. The qualitative basis creates the prerequisite for being able to actually inspire the targeted clientele. To exercise “pull” on the customer, these specific values must be linked to the company, in short: a suitable image must be created. This image shows CITY BAU® as a problem solver, which accommodates the special needs of the targeted clientele and fulfils the given general conditions. For this it is necessary to gain the fullest possible knowledge about the clientele. This information can be used to create specific service offers exactly matched with the customers. The vehicle for this is the consultant's website www.bauen-in-oberbayern.de. To what extent, this approach impacts the relevant financial ratios is shown in the following figures 3a and 3b.

![Growth of sales/order and operating result/order](image)

Fig. 3b: Growth of sales/order and operating result/order (presentation based on author's research)

The (conscious) development of “customer pull system” began in 2006/2007. The company was already known for its reliable and high-quality work. The development
from 2005 to 2008 shows that despite some significant increase in the sales, the profit and profitability show significant losses. In the year 2006, the new target groups were defined and the website was designed based on them. The website was activated in 2009, following which the profit and profitability improved considerably. Figure 3b shows what the success is based on. The restriction on the clientele and the resultant improved approach to the customers result in a higher average value of the orders. Sales and profit per order have increased significantly since 2009.

The next step will be to investigate which individual screws have caused the results achieved and how can these be mapped in the Service Navigator.

b) Reconstruction of cause-effect relationships

The demonstrated growth of the financial ratios covers the “financial perspective” of the Service Navigator. In the following, individual events, which have determined corporate growth in the period under consideration, are assigned to other perspectives as “tips on the relevant indicators”. The key indicators can possibly be derived from these. The knowledge regarding the corporate growth could be obtained on the basis of several structured interviews. The basic interview guidelines are based on the structure of the Service Navigator, that is, the scorecard perspectives. In each interview, the focus is laid in a specific Navigator perspective and the link established between “process in the company” and perspective of the Navigator. While summarizing the results obtained in this way, first a diffuse image is produced (see Fig.4). Although each perspective could be equipped with events, targets or indicators, no direct dependencies are discerned from here. For reasons of clarity, no effective directions are shown in Fig. 4.
Better access is obtained if the described corporate growth is described as a function of selected individual sub-targets. The sub-targets result from the assumed strategic orientation of the company and are captured in the “positioning” perspective. These sub-targets include: “Meeting deadlines and quality assurance”, “Reaching target groups” and “Building customer pull system”. This is shown as an example in Fig. 5: here the aspects mentioned in the interviews are captured with regard to the target “building customer pull system, assigned to the perspectives of the Service Navigator and finally establish an effective context. Clearly, the process preparation is to be imposed on the “enabler perspective”, whose design again has a very strong influence on the delivery phase of the “service delivery perspective”. In a similar way, this can also be reconstructed for both sub-targets “reaching target group” and “meeting
deadlines and quality assurance”. This results in other dependencies and weightings for the individual Navigator perspectives.

Key performance figures are derived in the final step of the reconstruction. The dependencies shown earlier must be preserved so that the active chains starting from the company and the derived sub-targets extend right through to the perspective of the financial ratios. Figure 6 shows an example of an excerpt from the resulting key indicators.

It has been shown that this reconstruction step is a useful intermediate step towards building the productivity management of services for those micro-enterprises, which were previously not accustomed to plan the long-term corporate growth from a strategic point of view. On the basis of this reconstruction, one can finally look towards the future. For larger companies, this can more or less be addressed directly as shown in the second case study.
4.4. Case study Softwareentwicklung GmbH

4.4.1. Description of the company

Softwareentwicklung GmbH is a medium-sized software development and consulting company based in Duisburg. The company was founded in 1990 in Duisburg and presently employs about 70 employees in sales, service and software development or maintenance. Softwareentwicklung GmbH specialises in various industries in order to combine industry-specific expertise. The information, communication and management system Facilityware developed in-house can be used across industries and is primarily used for facility management in religious organisations, hospitals and public companies in Germany. The individually developed and flexible software can be used to standardise and control complex processes. Softwareentwicklung GmbH also offers consulting and support in finding software solutions as well as training for the software application and a hotline for complaint registration or quick troubleshooting (helpdesk). The core services of the company include development, specification and implementation of software as well as sales of licenses that authorise the use of the Facilityware. Over time it became clear that the said product-related tasks require a high degree of consulting and support services, which today form the additional extended service ring around the core services. Over the next three to five years, Softwareentwicklung GmbH aims to become the undisputed leader with regard to quality for software and consulting in the field of facility management for religious organisations, hospitals and public companies in Germany and Poland. The mission of Softwareentwicklung GmbH includes the responsibilities of supporting the real estate management as well as training and support for the application of the in-house developed software in the said industries and regions.
4.4.2. Strategic sub-path: Target group orientation

The specialisation of Softwareentwicklung GmbH in the said industries requires a higher degree of differentiation between company’s services with regard to the needs and demands of the target groups. That is why the strategic sub-path “target group orientation” is an important part of the overall corporate strategy. As a relevant target of the financial perspective, the revenue growth can be determined in the individual target groups. To achieve this revenue growth, several targets and measures for the strategic path of the target group orientation must be implemented.

Figure 7 illustrates the distribution of the core services and extended service ring compared with the situation 10 years back, the present actual situation as well as the development planned for the next few years. In the following, a strategic sub-path is shown using six perspectives of the Service Navigator, which forms the basis for the desired future corporate positioning (in N+5 years). The strategic sub-path is first established with respect to its cause-effect relationships and then merged with another very briefly traced sub-path for overall corporate strategy.
Fig. 8: Cause-effect relationships for the strategic sub-path of the target group orientations (presentation based on author's personal research)

Target group-oriented act requires an identification of the individual groups and an assignment of customers to the customer groups so that corresponding targets become necessary with regard to the enabler perspective. Based on the processes a CRM system must be built, which stores all available information about the customers and assigns the customers to the individual groups according to the relevant criteria and patterns. The information about the requirements and needs of groups identified by the CRM system forms the basis for a target group-oriented design of the standard modules in the application software. The target group-oriented standardisation of the software should enhance the level of the perceived quality. At the employee level, industry-specific training as well as performance-oriented reward system should improve the quality of work and target group orientation of the field staff.

Building networks in the relevant industry associations should also increase the level of awareness about the Softwareentwicklung GmbH within the target group networks and facilitate the acquisition of the individual target groups. In addition to the said internal measures and targets, additional services are rendered in order to promote the core services. By participating in the meetings of the association, e.g. in the form of lectures or workshops, Softwareentwicklung GmbH wants to attract attention on the subject of computer-aided real estate management and its own services. Offers for the technical analysis of the existing software of the potential customers and the
time-bound provision of a free trial version of the Facilityware within a target group should also boost sales. Figure 8 illustrates the cause-effect relationships of the said measures within the strategic sub-path of the target group orientation.

### 4.4.3. Second strategic sub-path: Internationalisation through co-operation

**Financial perspective**
- Revenue growth in the individual target groups
- Revenue growth with Polish partners

**Extended service ring perspective**
- Information phase:
  - Free training for the employees of the Polish partner
  - Providing a marketing package for the Polish market
  - Presence in the meetings of the branch association
- Offer phase:
  - Offer for time-bound free test version of the software
- Delivery phase:
  - Offer for free technical analysis of the existing software of the customer

**Customer perspective – Internal**
- Qualities perceived to be high from the point of view of the target group
- Increasing the group-specific level of awareness
- Enhance customer satisfaction

**Customer perspective – External**
- Classification of customers into the defined target groups
- Winning new customers in the defined target groups
- Acquisition of partners with large customer base

**Employee perspective**
- Branch-specific sales training for field staff
- Employment of a partner manager with Polish language skills
- Development of CRM system: target group-oriented design of standard modules in the software
- Implementation of systematic partner management
- Performance-oriented reward system for field staff
- Performance-oriented reward system for partner managers

**Cooperation**
- Development of networks in the industry associations
- Identification of potential partners

**Corporate Positioning**
- Strategic sub-path: Internationalisation and strategic sub-path: Target group orientation:
  - Undisputed leader with regard to quality in the field of software and consulting for religious organisations, hospitals, public companies in Germany and Poland

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Fig. 9: Corporate growth of Softwareentwicklung GmbH

Besides the increased target group orientation, over the next three to five years systematic work must also be done in the Polish markets. Softwareentwicklung GmbH does not want to start an independent office in Poland, but wants to have a presence in the Polish market through cooperation with the appropriate licensees and license sellers. The strategic sub-path “internationalisation through cooperation” is therefore the second important component of the overall corporate strategy. Due to lack of space, the respective inferences regarding this sub-path will not explained further; they are nevertheless incorporated in the overall presentation in Fig. 9.
4.4.4. Overall corporate strategy

The cause-effect relationships relevant for the implementation of this overall strategy are illustrated in Figure 9.

The illustrations show that Softwareentwicklung GmbH wants to grow by focussing on two strategic sub-paths with total 17 indicators, which probably have cause-effect relationships with each other. The above-mentioned strategic sub-paths can be combined into an overall corporate strategy, which can be formulated as follows: “With a dynamic and highly qualified team as well as partners operating in Poland, we are always almost there and would like to achieve complete customer and employee satisfaction. We want to inspire users in the religious organisations, hospitals and public companies and would like to support information management efficiently to ensure and enhance the success of our customers. Our expertise has an industry-specific focus, which means that we can tailor our services specifically to meet the customer requirements. Our strengths include high quality and best service.”

To implement this strategy with regard to the said key indicators in the individual perspectives, guidelines and measures need to be developed, which are subjected to a regular control process. With the help of the Service Navigator, Softwareentwicklung GmbH can focus itself on two strategic sub-paths for increasing productivity with the selected indicators and specifically focus on the additional services in the extended service ring. To support the practical work with the Service Navigator, the development of a software-based tool is envisaged, which will take into account the requirements of small and medium enterprises.

5. Conclusion and outlook

The newly developed Service Navigator aims at a productivity management, which specially attempts to capture the productivity of the “extended service ring” of the company. This is done by explicitly integrating the aspects of service development and design in the formulation of the corporate strategy. This means that the concerned company can clearly recognise, how important the systematic designing of services for the (future) success of the company is or might be.

With the help of the Service Navigator, cause-effect relationships between the relevant key indicators with regard to the productivity of the services rendered should initially be reconstructed ex post and then developed ex ante to implement desired image of the company. The evaluation should be carried out at an overall level in the company and must be done from external as well as internal perspective with monetary and non-monetary parameters. While doing so, core as well as value-added services along with traditional services and hybrid service package should be captured. Moreover, relevant productivity parameters must be identified in different types of companies and for different types of services. Particularly, vendor, customer and employee-related productivity parameters should be analysed. Overall, a compre-
A comprehensive tool to measure and control service productivity should be developed, which can be used in various types of SMEs and meets the special requirements of SMEs.

The development of the Service Navigator to a tool suitable for SMEs is currently still in a prototype stage. Initial trials of this prototype were promising and give reasons to believe that a correct course was adapted. At present, this prototype is being tested and developed further in a series of up to 15 SMEs. To be able to use the Service Navigator as a mature tool in the context of an integrated productivity management system in the small and medium enterprises and also ensure transferability to different types of SMEs, the Service Navigator will be tested, modified and precisioned in other applications in the next project phase in 2012.

### Literature


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