

Service Engineering For Publishers: Systematic Development of New Services in the Publishing Field

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1 Situation analysis: Services as a factor of business competition in the publishing field

In most industry nations there is a shift of employment and added value from production industry to service industry¹. In Germany in 1998 64% of all employees worked in the service sector and achieved 68% of added value². This trend can be observed in the publishing field as well. It influences the future expectations of the management. In 1999 about only 6% of the publishers in Germany expected an increase of importance of book- and newspaper-market, but 30% expect an decreasing importance. Optimists and pessimist are balanced in the matter of the magazine market. 80% of the interviewed are expecting an increasing importance for services, multimedia and internet³, but publishers do have problems to attune to this challenge. High specialised in the publishing market they feel save and unassailable, but the new technology has become a opportunity and a threat for them. The huge technologic development is not pushed by the publishers, in many cases they even cannot keep pace. To get new competitor profiles without relying only on technology, an alternative could be to offer services around the traditional products. This presumption is supported by an analysis of traditional service markets. Expenses, product quality, or technology are not critical product features but rather the offer of really innovative services, characterized through recentness, continuous improvement, and proximity to customer.

¹ cp. OECD 1996

² cp. Statistisches Bundesamt 1998

³ cp. Klink 2000, S. 20f

Experience based reports tell about publishers who had to learn their lesson the hard way⁴. New services have a long time to market as well as there are higher costs and less profits than expected. The reasons for this disappointing experiences are the unsatisfying company structures and process organisation, which are not intended for the development and commercialisation of professional services. Furthermore there is a lack of suitable planning tools for innovation processes. A clear description of the output, the scope of the internal processes, the necessary resources and the needed processes are also often missed. For publishers the service sector is developing to a most important competitive factor for the maintenance and expansion of the own position based on existing content and market access.

If there is the possibility to engineer new services in the field of publishing in a methodical and systematic way to control the mentioned insecurities, is the consequential question.

2 Empirical evidence on service engineering in Germany

Between December 1998 and February 1999, 3500 companies have been addressed to fill in a survey about "service engineering"⁵. 282 companies answered, thereof 75% service companies, 18% producers of capital goods and 7% of consumer goods. Almost half of them had less than 50 employees. The characterization of service offerings, the development of services and the management of service engineering were main focus of this survey.

Since that time was no comparable survey in the field of service engineering existed the study was the first of its kind and has become an explorative character.

The following five topics were especially investigated.

- Classification of services
- Organisation of service engineering
- Factors of success for market focused service engineering
- Start up of service engineering
- Activities and methods of service engineering

The following illustrated results are part of the published survey of Fähnrich, Meiren et al. 1999, other sources are each labelled.

Classification of services

The service sector is characterised by great inconsistency, therefore a clear classification of offered services is necessary. The obvious partition in branches is not meaningful, because in the meantime some services, e. g. call center, are offered by a wide variety of different branches⁶, hence the term of "publisher services" is insufficient significant.

An applied classification has been developed for the different actual services, which decides between the following types⁷ (see Figure 1):

- Service Factory
Services with an extreme low intensity of contacts between bidder and customer. There are only few contacts between humans during the service generation.
Examples: insurance services, public transportation

⁴ cp. Klink 2000, S. 21

⁵ cp. Fähnrich, Meiren et al. 1999, S. 19f

⁶ E. g. the turn over in mechanical engineering reaches up to 40% of total turnover.

⁷ cp. Fähnrich, Meiren 1999, Schmenner 1995

- **Professional Services**
Services which are characterised by numerous and intensive human contacts as well as numerous versions. Examples: Consulting, market research, engineering.
- **Service Shop**
Services that hardly can be standardised and are jointed with goods. Examples: servicing, maintenance and repair of capital goods.
- **Mass Services**
Services with a small number of versions and a very good standardisation. Examples: trade, bank business.

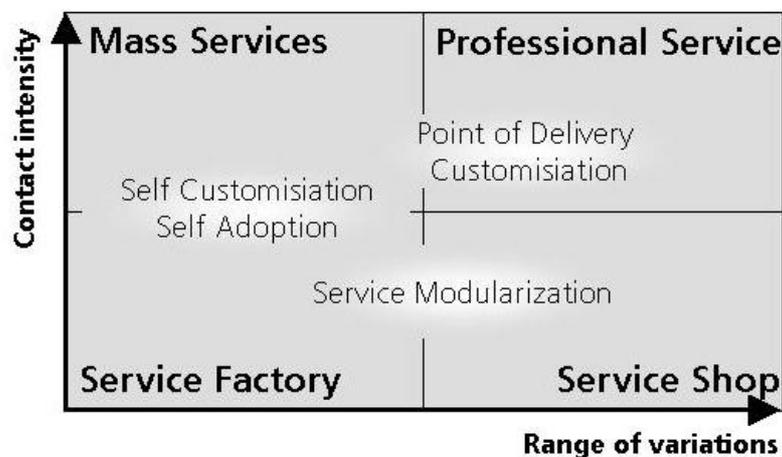


Figure 1: Overview of service classification
(cp. Fähnrich, Meiren et al. 1999, Page 34; cp. Niemeier et al. 2000)

The two main criteria of this classification are “contact intensity” and “range of variations”. Contact intensive services are performed by human beings on human beings, there are close relationships between bidder and customer. Services with a wide range of variations are sophisticated and adaptable. They include the customer and often are part of service contracts.

This defined clusters are very homogenous in themselves and outstandingly map the common services in the market. In this shape they are sector neutral and therefore fulfil the demands of the companies which result out of the grow together of the different branches telecommunication, computer science, media, and entertainment. Three additional service types can be described in that portfolio:

- **Self Customisation/ Self Adoption**
The customer customises and adopts an extensively standardised product, which is designed for the needs of many potential customers. By that way he becomes a co-producer of the service. This strategy is suitable for producer of „intelligent“, i. e. learning, knowledge storing, and proactive, products and services.
- **Point-of-Delivery Customisation**
Located between the mass sector and the customisation sector. Implementing this strategy, the creation process of services and products has to be fractionised in a mass segment and a customisation segment. Customer-far components becomes standardised and will be produced without client contact, customer-close components will be produced with direct client contact.

- **Service Modularisation**

Standardised components are combined to achieve a large number of variations.

Therefore the creation process has to be modularised, customer-far processes become standardised and will be recombined afterwards.

This strategy is suitable for companies with satisfactory human resources.

It is necessary for this three forms of service creation to analyse the proven output processes and to create by this procedure the fundament for a new process organisation. Such an analysis can be appointed individually. It would be reasonable to fall back on a framework of reference models to get a higher certainty in respect of completeness and applicability.

For media production processes a high quality model can be created easier⁸.

By publishing houses generated services can be expected in all clusters. After all, already today the branch is covering a great bandwidth of possible products and services. A publishing house with novels and coffee-table books stands side by side the directory publisher. The dual use of the publishing houses archive stands side by side the delivery of fresh rolls by using the newspaper delivery network.

The publishing houses mandate will change deeply – and this change can lead to a marketing company as well as an information service company or a knowledge service company. The future competitors can be another marketing company, an advertising agency, a training company, or a consultant⁹.

Organisation of service engineering

The organisation of service engineering has to be considered by the aspects of formalisation of service processes as well as designing organisation structures.

The service formalisation needs to describe the single steps in written form. The integration of the involved departments has to be ensured by organisational interface descriptions, to avoid repeated work as well as repeated mistakes and for reuse of knowledge. Instead of causing rigid processes, the formalisation should set up rules, which can be adopted if necessary.

This system is described in a reference model of procedure, in which activities, relations, and sequences are determined. Specially sequential formed phase models or iterative formed spiral models¹⁰ are conceivable.

To shorten the time to market a phase model seems to be clumsy when facing the high dynamic development in the publishing field. A spiral model allows fast action and reaction, as well as early tests with the customer and leads to precise improvements (cp. Figure 2). Only in 17% of the companies such a reference model is written down. So there can be supposed still a great potential for improvements by methodical proceeding.

An interesting point is which department conducts the service engineering. Only 7% of the companies out source this task. On the other hand 10% of the companies possess an own department for service engineering. Very usual is service engineering by an internal department (77%) or by a task force (49%).

In many cases (80%) the top management is involved in the creation process or controls it. Service engineering is a real executive function.

⁸ cp. Delp, Engelbach 2000, P. 193

⁹ cp. Klink 2000, S. 85

¹⁰ cp. Hofmann, Klein, Meiren 1998

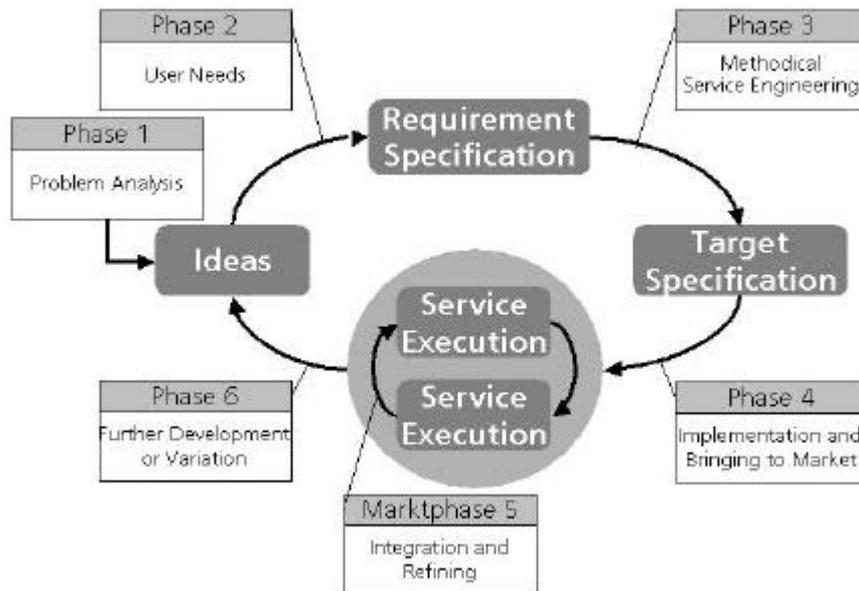


Figure 2: Reference model for the development of services in the publishing field

Factors of success for market focused service engineering

Only a few publications with the focus on „Factors of success for services“ are existing until now. However, this question has high impact for the company implementation. Therefore activities and behaviour of more successful and less successful companies were investigated. The decision between a successful and a unsuccessful company was based on the development of turnover and revenue.

In general five differences can be perceived:

- Successful companies having a dynamic development of services. The offered services are significant younger than the offered services of unsuccessful companies.
- Successful companies act by realising customer questions and technological developments as stimulation for new services. Less successful companies react on competitors and changing conditions.
- 74% of the successful companies are developing new services in regular intervals, but only 55% of the less successful companies do so.
- 73% of the successful companies are integrating the customer in the development of new services, but only 49% of the less successful companies do so.
- Successful companies are organising the development processes better than less successful companies.

Consequently there are four factors of success can be perceived:

- Selection of a service market, which has growth potential
- Development of services with integration of the customer
- Quality assurance of services
- Human resource management

Start-up phase for service engineering

It can be assumed, that many new and attractive ideas for services are existing in publishing houses. The main problem is focused in the following three questions.

- Will the service be accepted by the market?
- Is the publishing house able to realise the service?
- How is it possible to develop a market-ripe service out of the first idea?

Especially the first question is very difficult to answer, which is also the opinion of the investigated companies. The great number of influencing factors, the future oriented point of view, the low level of experience in the case of diversification, and the efforts for planning and developing of new services are complicating the active development. Just this ability differ successful and less successful companies.

The wish to minimise risk is also shown in the answers of the survey:

- The main trigger for the development of services are the “rounding of existing services” and “customer demands”. In both cases the rate of innovation is presumable low as the disposed risk.
- In cases of chancing the service offerings about 87% of the interviewed persons seeking the optimisation or the further development of existing services. Only 53% are seeking the development of quite new services. Companies prefer to make small steps and to offer services in well known areas.

The purpose is to describe the process of service engineering, starting with the development of ideas, evaluate the ideas, make a concept, and plan the implementation. An example is described in chapter 3.

Activities and methods of service engineering

Plenty of methods to support processes, which evolve products out of ideas, are existing in the classical product development. Two characteristics of high sophisticated industries like motor industry and increasingly the software industry are the use of methods and the control of most complex product development processes. Even in service fields like financial services and telecommunication performances will increasingly developed methodically an systematically. Precondition of this development to a professional development is the increasing importance of services by turn over and revenue to justify the additional expenses.

What are the indicators of “service engineering”? A systematic procedure has to meet two criteria:

- On the one hand the planned service has to be specified in advance. Such a specification consists of four parts, the product model, the process model, the marketing concept, and the resource concept.
- On the other hand methods of service engineering have to be used. The methods are supporting effective, precise, and fast development of high quality and customer oriented products by avoidance of unneeded wasting of resources¹¹. In specific the methods can be distinguished in methods of development, methods of innovation management and methods of mer integration.

The study of Fähnrich, Meiren et al. 1999 points out, that this criteria are met in a very different quality. The specification of product or process models is done by over 70% of the interviewed companies, a marketing concept or a resource concept is only done by 55% of the companies. Methods are less common. That especially applies for **methods of service development** (Ser-

¹¹ cp. Ehrlenspiel 1995

(Service blueprinting, service mapping, role concepts, GAP-analysis), which are only utilised in 10-15% of the companies, often they are even unknown. More common (about 50% of the interviewed companies) are engineering methods (process modelling, creativity techniques, Failure Mode and Effective Analysis, Quality Function Deployment). Most common are methods of economics (cost-effective analysis, analysis of profitability, analysis of competition), which are used by about 80% of the interviewed companies. This differences in the use of methods are probably caused through the employees, which are mostly educated in economic studies.

Methods of innovation management (expert interviews, trend analysis, cases szenarios, portfolio analysis, live-cycle technique, innovation scanning), which are used for identification and management of service innovation, are not usual as well.

As third kind of methods the use of **methods of customer integration** were investigated. The early customer integration especially in the service field can ensure customer satisfaction. This opinion seem to be popular in the companies as well, because 67% of the interviewed companies using methods of customer integration, in big companies even more. Most common methods are the customer specific demand analysis and the interviews of regular customers.

3 Model for the service engineering process for publishers

As mentioned above, to estimate the new services and products in respect to their market acceptance and their realisation is a main problem for publishing houses. The answer to such questions can be facilitated by using a reference proceeding model. Previous practical or theoretical approaches are rather oriented in optimisation of existing achievements than in new development. Therefore the proposal of proceedings and methods is respectively slight.

Fährnich, Meiren et al. 1999 recommended a proceeding model in six steps, which is introduced and adopted for publishing processes. This model has been developed in interdisciplinary workshops and has been tested in different service companies. It is intentioned as a generic model, which has to be optimised for company use. For that purpose sequence, methods and emphasis has to be adjusted.

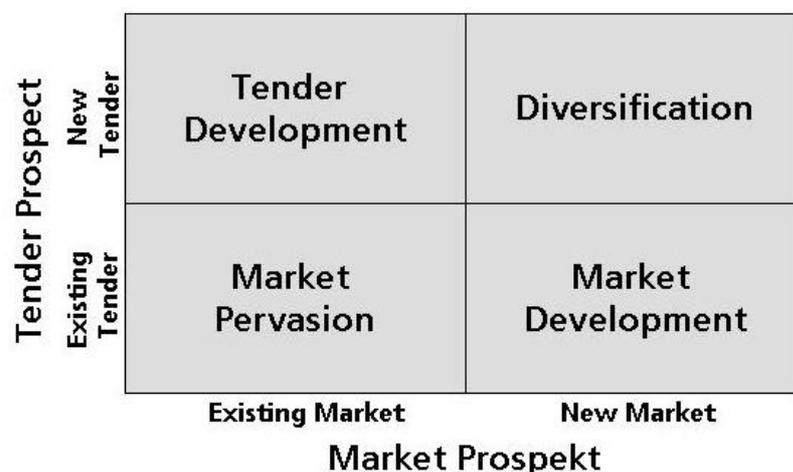


Figure 3: Tender-Market-Portfolio

- Step 1: Information collection about the new service

New ideas for possible new services are collected in an unstructured form. For this purpose customers, employees and partners are questioned as well as competitors and market leaders are observed. To receive real new approaches in this phase the quantity of the collected ideas is more important than the quality.

- Step 2: Condensation and specification

The collection of ideas will regularly be clustered and evaluated, e.g. in workshops. Promising ideas will be identified. In this phased visualisation of the ideas is helpful as seen with portfolio technique (Figure 3).

By this service-market-portfolio the classification of new service ideas into the existing company strategies is facilitated and a selection is enabled. Precondition of this step is the existence of a clear company strategy describing the actual target market and tenders. Due to the typical small and medium sized companies in the field of publishing such strategies cannot be anticipated.

The strategy of „market pervasion“ is afflicted with low risk for good market and tender knowledge and nearness to existing activities. But due to low market growth in the print publishing sector this strategy is not very attractive.

The prospects of the strategies “market development” and “tender development” are depending on the actual situation of the bidder, the market, and the accessible resources (cp. Step 3). In new markets new customers can be gained in the print- or electronic publishing business, e. g. by internationalisation of established products¹² or by building an online subject-driven community¹³.

Of course the strategy of diversification holds a high risk. A commitment seems to be rewarding anyhow by expected high market growth. An example is the creation of an online community tendering products, services, and contents.

Furthermore, another option to extend conventional publishing business is suggested by Ziegler and Becker¹⁴. Publishing houses have to develop not only new markets and new tenders, but they should also build a virtual network with different partners. Such a network is postulated as the basic approach for a worthwhile online business.

- Step 3. Model of the individual analysis

The matching of the service requirements with the company resources demands an individual tuned proceeding. Not all uncertainties of the development of new markets and services can be eliminated, but dealing with the important problems reduces the risk of failure. Therefore many employees should be involved in the adoption of the model of analysis.

- Step 4: Analysis of internal and external factors

The chosen services will be analysed now in regard to internal and external factors. In the company analysis of internal factors strength and weakness of the company will be opposed to the requirements of the planned service. The analysis of external factors like market, competi-

¹² cp. Invenz, Engelbach, Delp 1999

¹³ cp. Ziegler, Becker 1999, S. 103

¹⁴ cp. Ziegler, Becker 1999, S. 103

tors, resources, technology, etc. is focusing on possible impact on the company and the planned service.

- Step 5: Filter methods

The elaboration of all in Step 1 generated ideas is normally not possible for lack of resources. Therefore only the really promising ideas should be followed. For the selection a three-step filter is suggested.

The first filter generates key figures for the measurement of the company success and the contribution of each service idea to this success.

The second filter integrates new services in existing tenders. An example is the tried and tested portfolio method of The Boston Consulting Group, the “market growth-market share-matrix”.

The third filter analyses service ideas for the specific approach by formalised rating and forecast methods, e.g. Technology Push Analysis, Technology Relevance Analysis as well as different portfolio techniques¹⁵.

- Step 6: Ranking of possible new services

After elaboration of step 1-5 the generated ideas are evaluated and documented in regard to their market potential, their integration in the strategic orientation of the publishing house and their strength and weakness. The promising ideas are selected. Even so there are more ideas left than can be realised in the short run. In this last step it is proposed to rate each idea by a value benefit analysis and sequence them. The value benefit analysis results in the following steps:

- Determine the evaluation criteria
- Assess the evaluation criteria
- Specify the fulfilment of each criteria
- Calculate the value of benefit
- Documentation

4 Conclusion

Publishing houses have to adopt their traditional business model, especially non-fiction publishers are mostly effected.

An investigation identifies, beside others, the following important impacts¹⁶:

- Competition and pricing pressure increases
- Creation of value in the distribution of content disappears
- Violation of content copyright increases
- Transformation from print to electronic media
- Increased costs for service and product development

The structure in the publishing sector is changing. Companies have recognised this change late and left the “first mover advantage” for electronic publishing to other sectors and companies. This development is partly caused in the inhibition threshold of publishing companies to develop new business models and new services for the new technology.

¹⁵ cp. Winkelhofer 1999, cp. Bullinger 1994

¹⁶ cp. Palmer (Editor) 2000, S. 10

For this problem the concept of service engineering promises a structured and methodical procedure. Insecurities cannot be excluded, but they become more predictable. The strength of publishing houses, the control of brands, the control of content, and the control of customer relationship can be integrated in this concept. Consequential implementation of service engineering opens the door to the adoption of traditional publishing function in the new technology. Some business will change radical, but for some publishers there will be a future only with radical change.

The systematisation of planning processes and development processes for all tenders, products and services will be the task of research. The industry needs methods and tools to control the radical change to digitalisation of products and processes.

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