

Original cases

Appendix G: IT Consulting Services

**Packaging of IT Services –
Conceptual and Empirical Studies**

Petteri Kaitovaara

Contents

1	Introduction	377
1.1	The subject of IT services – case in essence.....	377
1.2	Research interest – objectives and questions.....	379
1.3	Research process	381
2	Research methodology	384
2.1	Selecting and anchoring methodology to research	384
2.2	Research design and approach.....	385
2.3	Research method	388
2.4	Quality of research design and approach.....	390
2.4.1	Empirical and validity challenges	390
2.4.2	Rigor in action research.....	391
3	The empirical part of the case	392
3.1	Initial situation of the case company and its IT services in the year 2001	392
4	Existing IT service	394
4.1	The internal description	394
4.2	The component view	398
4.3	The process of packaging IT services.....	398
5	The new IT service product.....	400
5.1	The internal description	400
5.2	An extension of the component view – bundling IT service products	405
5.3	The process of packaging IT services.....	406
6	Discussion and conclusions.....	412
6.1	Research summary.....	412
6.2	The comparison between the existing IT service and the IT service product	413
6.3	Research findings and contribution	415
6.4	Limitations of the research	419
	References.....	420
	Acronyms and abbreviations.....	424
	List of figures.....	425
	List of tables.....	426
	Personal communications – case discussions	427

1 Introduction

“Recursive adj. See RECURSIVE.”

KELLY-BOOTLE, S. (1981)
The Devil’s DP Dictionary. McGraw-Hill Book Company, USA.

1.1 The subject of IT services – case in essence

This research (Appendix G) provides a description of an empirical study called Information Technology (IT) Consulting Services. It is based on the studies by Kaitovaara and Hyötyläinen (2002; 2003 outlining the IT consultation services design and development process, referred to as the packaging of IT consulting services). Again, an effect of Sipilä’s (1996) writings on the subject of packaging professional services is shown here, yet the theory is adapted and developed further into the specific field of IT services as well as information systems (IS). Based on the successful experiences and contributions gained with the previous Cases of Magnus^{G1} and Juxto @Service^{G2} (discussed in depth in Appendix E, see also Nieminen 1997, Nieminen and Auer, 1998, and in Appendix F, see also Kaitovaara, 2001a; 2001b), the Case IT Consulting Services logically followed it – as I get more opportunities for adapting the things I have learned from my IS research and IS practice. Lastly, the appendix has been written intentionally in a form that can be read irrespective of the doctoral thesis. Of course, the readers will benefit most probably from familiarizing themselves with the main research as well.

The common factor, on the one hand, for all of three empirical cases is that they occur in IT service provider contexts, whether the provider is an internal organization or as in this case, an (external) IT service vendor organization with paying customers. On the other hand, there seems to be a primal difference between this last Case IT Consulting Services and the previous ones. As this case is about consulting, it is clearly about professional services. Gummesson (1978) defines management consultants, technical engineers, architects, accountants, and advertising professionals all as providers of professional services. Depending on the source, such a definitive list gets even longer. Bloom (1984, p. 102), for instance, includes dentists and doctors to the list. In sum, consulting has been

^{G1} The main idea of the research case Magnus was to improve the internal customer’s personal productivity by offering a networked personal computer environment with a range of applications and various services. The IT service provider organization was a local IT unit which operated in the in-house market.

^{G2} The main idea of Juxto @ Service research was to find the effects of packaging IT services on IS design. With Juxto @Service the customer gets real-time multichannel management for the purpose of its customer care operations. The IT service provider organization was an IT service vendor with paying customers.

recognized as a professional service. Halinen (1997, p. 29) takes a different view as she goes further in defining some of the characteristics of professional services. These include intangibility, people intensity, interactivity, customization, and ambiguity. The concept of consulting, however, is open to various interpretations (Reinilä, 1995). A very broad definition is made by Lipiäinen (2000). He suggests that consulting is characterized as “a total commitment to develop the customers business”. There are related research articles on effective consulting and managing the consultant-client relationship (see e.g., Turner, 1982; Bebko, 2000; Kesner and Fowler, 1997). Lastly, in the introduction to the nature of consulting, it is noted that consulting work requires an exceptional level of social skills (Cope, 2000; Agahi, 2002). Also, creativity is required for the consultants.

A likely question may be raised, “How it can be stated that the consulting service case discussed here is actually an IT service?” At first, the case may seem to have a lack of IT (artefact) if compared to the previous cases, and thereby making the study just a research on conventional business consulting, not for IT specific consulting. But for those who may argue this way, I have an opposed view to present. At first glance information technology seems to be hidden, yet it is still firmly present at the consulting case. The following argument simply makes the empirical study to be deployed in the broad field of IT services and particularly, in the field of IT consulting. The case is among those services that rely strongly on persons who support planning, design, creation, delivery, management, provision, or use of IT. It is not a situation where the IT artefact is distinctly in evidence but where persons (professionals, consultants) have the role of enablers for the thus far hidden utilization of the IT artefact. Without those necessary enabling IT services, the IT artefact cannot be utilized successfully by the customers. The services referred to here are provided by the Consulting team personnel of the IT vendor Sonera Juxto. Specifically, enabling services of the study include consultative IT services that are needed for making the IT artefact operable for use situations. The consultants should have a pre-understanding of the IT artefact’s usage in certain contexts, such as professionalism in situating the IT artefact in a way that helps making the most of it in practice. Therefore, the process of packaging IT services was also aimed to develop an IT service product that supports the consultants in these kinds of assignments better than before. The IT service product under examination is related to pre-study of the current situation, requirement determination, and problem analysis areas.

Even though human knowledge and experiences are obviously hard or impossible to imitate, the constructed IT service product seems to be quite easy to copy. This means that as the highly developed IT service product is based on a people-intensive IT service, it can be simply imitated by other actors in the market since it is founded on the extensively detailed documentation. I want to emphasize that it does not prove that the implementation of the IT service product is successful for the customer, because individual characteristics and traits are crucial in this kind of IT service delivery. In general, being successful in consulting requires a certain kind of attitude and cooperative skills of the person involved. Those things just cannot be regulated by or learned from various documents and presentation

materials. I hope that the readers of the empirical study understand the underlying reasons not to depict those documents, most of them related to so called substance description, and their contents nor the actual IT service processes. This prevailing requirement of classified company information made it a challenging effort to write the appendix of Case IT Consulting Services. I intentionally dismissed some pieces of detailed information in this appendix and also raised the level of abstraction in order to maintain the confidentiality prerequisites of the case organizations.

This is not a longitudinal study covering the life cycle of IT service products and their success in the market after packaging. As mentioned, professional packaging of IT services does not necessarily guarantee success, although it raises the probability of success. There can be many factors involved, such as an inappropriate choice of technology, the correct timing of the launch, a “badly chosen” price and the situation of the market and competition therein, which affect the eventual success of the IT product. This study does not focus on these factors. Instead, it focuses on the development and adaptation of the chosen approach to the packaging of IT products and of the organization that produces it. It is not essential to discuss here the success of this IT service product in the long run, but rather whether the approach was practical and suitable to the IT service involved in the case.

1.2 Research interest – objectives and questions

As with this empirical study, it is important to achieve an understanding both of how IT services are packaged and what an IT service product in a particular situation means. Whether it is worthwhile to use the packaging of IT services is also being studied along with this case. In fact, these are issues that are of concern in the main research. On the other hand, this empirical study has been carried out in premises of its own and in accordance with its terms. That explains why it has slightly differently formulated research objectives.

At first the Consulting team was operating only internally. As the organizational and environmental changes in the business context – a change from an internal IT service provider organization (providing internal services to other units of the company) to the external one dealing with real “paying” customers – took place, changes for the team operations were inevitable. These radical changes in business environment required for the packaging of IT services in order to make the best of tightened competition. In terms of a business plan, IT Consulting Services have been noticed as one way of revenue making, since they support other IT service products of the company. There were also other reasons for such a process as a need for training material for the new personnel. The outcome had to be easy-to-understand for both the customers and the employees of the case organization. Hence, the activities of the team had to be analyzed and systematized. The IT service was actually based on existing competences and experiences gained with previous assignments. A decision was made that one of the typical services of the Consulting team will be selected and packaged in the form of a small-scale IT

service product. The idea of the outcome (the packaged IT service, or to be more accurate, an IT service product) is to gather and analyze both quickly and effectively essential information about the current customer situation, the activities of the customer, and also its IS-related environment information. The general objective was that by the packaging of IT consulting services modularity and conceptuality could be brought to new IT consulting services. The empirical study can be judged successful if these issues turn out to bring an improvement to the present situation of the case organization.

One of the research motivations for the empirical study can be found from the average or sometimes weak competency of the IT service provider organizations' understanding of the service business. The IT service providers and their managers or those responsible for operations do not necessarily have enough of the necessary experience for the service business. The IT service providers' main interest area has traditionally been the technology development, not the marketing competence (Rao and Klein, 1994). Services are often launched without having been appropriately designed and tested. But more importantly, they do not clearly define their IT service offering to their customers. This inexperience usually causes severe difficulties with service delivery (Gummesson, 1994). The arguments above create a need for a similar approach as service blueprinting for general service development effort – a term coined by G. Lynn Shostack (see for example, Shostack, 1984) for IT services development. Service tangibilization is typically associated with bringing concrete elements to intangible services (see Shostack, 1977 for discussion of the concept of intangibility; Levitt, 1981 for discussion of tangibilizing the intangible, as making a promise into a credible expectation; see also Sempels, 2002 for a broader discussion on service tangibilization in terms of service management and marketing research).

As shown in the Case Juxto @Service (Appendix F), the Consulting team was a major player for the packaging of IT services. I reminded the other members of the Consulting team within the frames of this research about the principles of the internal description and the component view. Again, the principles were applied and developed in this case, especially in terms of the internal description. It was realized within the empirical study that other, just as important issues needed to be considered when IT consulting services are packaged. For instance, if compared to the Case Magnus (Appendix E), the program and the process were adjusted to a new situation. Of particular importance is the program and the process for people-intensive IT services. The team had seldom researched and described its own existing processes or developed them consciously.

This research is aimed at bringing some important issues to be taken into consideration for the IT service development process and for the end-product in the field of IT consulting services. The object of the study is defined chiefly to the operational level, not to the strategic level. Based on the ideas of Sipilä (1996) and previous empirical studies, the packaging of IT services improved design, development, and thus, delivery and use of IT services for the customer. The main purposes of this research are to develop an IT service product based on the existing

IT consulting service and to find out a similar kind of IT services packaging approach for the field of IT consulting services. Other, more specific purposes are as follows; first, to contrast the differences in the IT service packaging principles since the selected IT service and its content is different when compared to the previous cases. Second, to seek and to analyze the potential differences of the process between various types of IT service providers: the internal IT unit and the external IT service vendor. Methodologically these purposes will be achieved through action research (AR) with constructive research. AR offers an opportunity to understand a phenomenon in its context. At this point it is underlined that the research method for this case was AR, not case study. But for the sake of simplicity, the empirical study project is just called a case. The research objectives and questions are summarized next.

The empirical study appendix seeks to understand the following set of research objectives and questions:

1. How can the ideas of packaging IT services be extended in the IT vendor's consulting services?
 - 1.1 In particular, are there any effects on the principles of people-intensive IT services (i.e., IT professionalism-based services) when compared to the IT artefact-oriented services?
2. Is the process of packaging IT services for the IT unit's IT artefact-oriented services similar to the process for the IT vendor's people-intensive IT services?
 - 2.1 If it is not similar, what are the observable differences and the crucial phases of the process?

1.3 Research process

In general, the research can be divided into three major parts. This is the first part, "Introduction" (Chapter 1), which contains an introduction to the appendix as a whole. It also contains the basis for the research and the research problem as well as the purpose of the research. The part continues with the research methodology (Chapter 2) providing further insight into issues related to the basis for this research. The research method – AR combined with constructivism – and design of the case are introduced. In AR the aim is to support desired change in an organizational environment. In this case it is consisted of the organization of Consulting team but also the Professional Services unit organization. The research has been evolved from the subject of a single-case study of Case Magnus to the more participative approaches of both Case Juxto @Service and further to this case, as I acted as Head of a team supporting the IT packaging activities and was thereby actively involved, with benefit for both me as a researcher and the organization.

The second part is the empirical one, where the actual case is being introduced and studied. Chapters of the part are numbered from 3 to 5. It provides the initial situation of the case company dated back to the year of 2001 and a couple of years before that (Chapter 3). The existing IT Consulting Service is being analyzed

(Chapter 4). The new IT service product and in particular, an application of the internal description and its improvement, as well as the component view and its extension in terms of the packaging of IT services are introduced (Chapter 5).

In the third part, the appendix will be completed with a different chapter for discussion and conclusions (Chapter 6). It includes a research summary, comparisons in the form of tables, research findings and contributions, and also a discussion about the limitations of the research. Figure 1:A. depicts the completed research process as an empirical study of the Case IT Consulting Services.

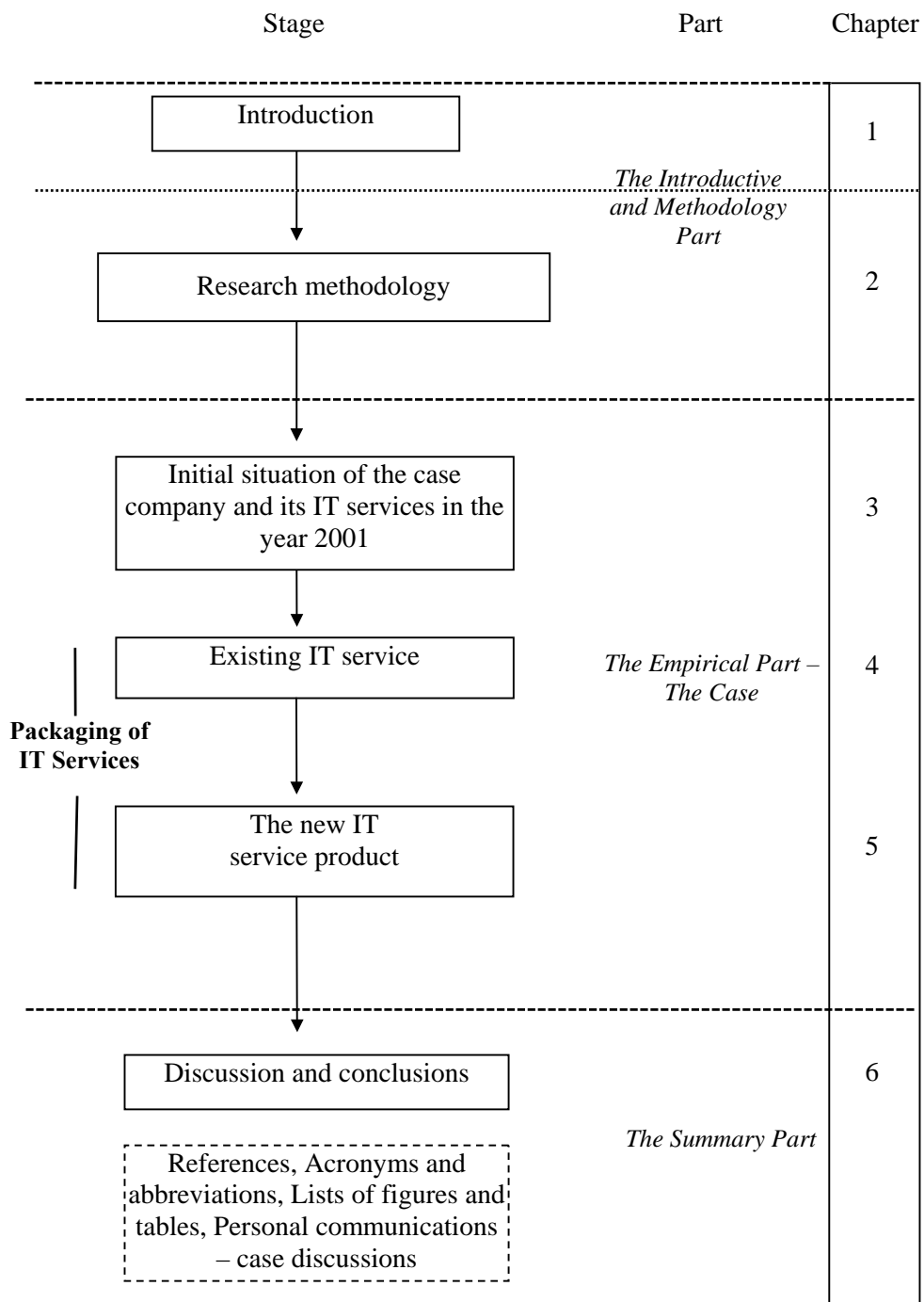


Figure 1:A. A completed research process of the Case IT Consulting Services.

2 Research methodology

2.1 Selecting and anchoring methodology to research

Issues and grounds which have affected both the selection of research approach and the application of methods to the research are discussed within research methodology. Quality of research as well as threats to validity and rigor of research are considered. It is essential to understand two different and important issues. First, the research method for this case was AR with a constructive approach, not a case study. For the sake of simplicity, however, the project is called a case within research methodology and the rest of the appendix. Second, this is a piece of research, not consulting. Specifically, IT-related consulting is the topic, in which the selected research methods are applied.

If the methodology section of the Case Juxto @Service (Appendix F) is compared to this one, there can be found similarities. Congruent research methodology with the cases is a natural starting point since my position as a Head of Consulting team opened the challenge to continue my research interests within the same case company. Due to the fact that the selected method AR with constructive approach proved to be useful earlier, it was also selected as a course of action for this Case IT Consulting Services. But of course, being a different empirical study focusing more on people-intensive IT service, there are also differences in the application of methodology.

My intervention was needed for the development of IT consulting services since I had gained previous experiences on required field of IT service development. Again, this case was not an objective research project focused on collecting research data from the target organization and analyzing it. Neither was this just IT service packaging-oriented consultancy project but a serious research project with more subjective participatory observation. There was a real intention of changing the circumstances of the case organization of the Consulting team. Thereby, a different research design and approach was required in order to make necessary changes to the initial situation. AR can address complex real-life problems or problematic situations and the immediate concerns of practitioners (Avison et al., 1999, p. 95). A primary reason for selecting AR as the method of this study is that it is a research method in which participative and action standpoints are combined. AR is typically used as a means of conducting IS research and also as a framework for information systems development (ISD) (Stowell et al., 1997). I was interested in both action and research simultaneously: I had a participative role as an employee of the company and the team as well as a simultaneous role of researcher (Ph.D. student). This can also be referred to as a dichotomy between business practitioner and research worker. I was ultimately in charge of the development and research project. Avison et al. (2001) call responsibility pattern identity domination, in which the researcher and the practising organization professional were the same person. A specific and immediate action needed to be

conducted in the case organization in order to fulfill an original practical interest. It is a matter of how the existing IT consulting service is developed into a consulting IT service product. Therefore, from a diagnosis standpoint, I realized that something had to be done to improve the existing situation of IT services because of large-scale changes in organizations and environment. The IT service offering of the Consulting team was diagnosed to be in need of efficient improvement efforts. For instance, a Sales unit of the case company found IT consulting services hard to sell. They did not know what kind of IT services the Consulting team provided and at what price. Being a new player on the market, the situation was similar to the potential customers. They needed to know what they would get and how much they had to pay for such IT services. Therefore, both internal and external marketing materials were needed for increasing awareness about IT consulting resources and knowledge. There was also a new member in the team so the idea was to get him to become acquainted as soon as possible with the IT consulting, its contents and approaches. In this existing situation this was not possible because the know-how was only in the brains of more experienced consultants but not in a written form. Mostly for these reasons my action included an intention for IT consulting service development. In terms stated by Avison et al. (2001), this makes my AR project a practitioner-initiated project. Based on the intention the set of research objectives for the study were developed. The original interest of a problematic situation was discussed and approved by my team and the Manager of Professional Services unit. My team also got support resources for such action from other organizations as the Methodology Expert of Sonera Juxto International joined in.

Generally in AR, it is emphasized that there is collaboration between research interests and practice in business, which was also true in the study. Since the process of packaging IT services was applied, approved decisions and commitments were kept. The common goal for IT service development was achieved. The suggestion for solving a problematic situation was introduced to practitioners in the business. Actually, the suggestion for this approach was no longer new but the idea to apply it to the Consulting team and its services was new. Simultaneously the suggestion to solve the situation contributed new knowledge of the theory. (Lau, 1997) The essential notion that AR is cyclical by nature is evident in this empirical study when compared to the previous study. Chronologically there were multiple iterative process cycles (a term also used by Susman and Evered, 1978) performed. This study is a continuation of the previous AR study when it comes to the understanding of the framework and approach, yet my understanding of the subject was developed even earlier when the case study of Magnus (Appendix E) was conducted.

2.2 Research design and approach

Retrospectively, in this empirical research as well as those already carried out, the research approach to IS is highly interpretive by nature. The story of my research, depicted in Figure 2:A., is based on an action-oriented approach combined with constructivism. Such an illustrative rich picture is divided into the views of IS

researcher and IS practitioner. This division is similar as I was in the role of researcher in academia but at the same time, I had my role of a practitioner. From the researcher’s viewpoint, my research aim described as how the theory from the previous Cases Magnus and Juxto @Service is further applied to the Case IT Consulting Services. The framework and specifically the approach were enriched for a case like this where people-intensive IT services are compelling, instead of just those cases where the IT artefact plays a major role. From the practitioner’s viewpoint, the real-world process occurs, of course, in a multivariate social setting. A research setting in the real-world view of Case IT Consulting Service is approached twofold. On the one hand, as the existing IT service was mostly in the form of the consultants’ existing competence it formed a starting point for the construction process. This describes “the situation before” meaning the moment when the IT service transformation process was launched. On the other hand, the construction itself is again a matter of interest. A constructive objective at a conceptual level is to produce the concept of IT services development – that is, an application of the IT service design referred to as the packaging of IT services. This is not all because there is another constructive objective to be found. It is the real-world construction of the suggested new IT service product developed on the basis of the existing IT service (competence). This moment can be referred to as “the situation after”. In sum, with my action intervention the framework and approach acted as a transformative experiment that changed, re-interpreted, and reshaped the constructions.

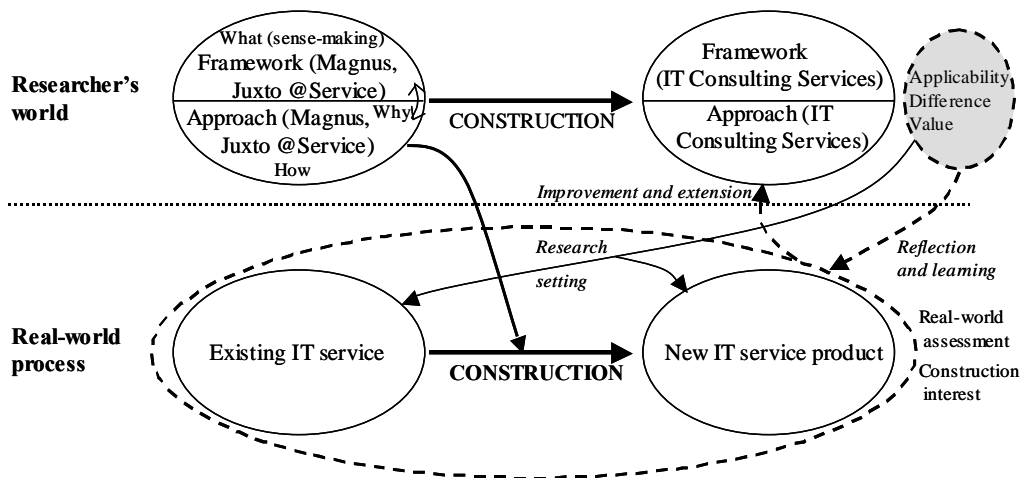


Figure 2:A. Action research combined with constructivism.

Theories originated from the Case Magnus formed a viable starting point for theories applied in the Case Juxto @Service, and thereby applied in this case of Consulting IT Services. Sense-making for the framework is related to the theories of the internal description and the component view. They both answer the question “what”. It was noticed that the technical description of the internal description was not suitable for the purpose of this kind of IT service. Therefore, the theory was improved as it replaced the IT artefact related entry with the entry of substance

description. An extension for the theory comes with the idea of bundling IT service products in terms of the component view. The approach and its sense-making are related to the program and the process of packaging IT services answering the question “how”. “Why” explains the relationship between the approach and the framework. It is a reason for applying the theory to the real-world case. The actions were guided by the research framework and the approach originated from the previous empirical studies and experiments. My actions as a part of the team led to the favorable outcome and change in consulting business practices. As a reflection, the changes through intervention in the research setting were observed and studied. This is called actual sense-making process. Hence, reflection, learning, and improvement process cycle affected the framework and its further development. For the research setting, at least three criteria can be found justifying the empirical study. These criteria are applicability, difference, and value. Applicability deals with the issue that the original theory based on the Case Magnus was an adequate baseline for the research. Since the theory part also was developed within the Case Juxto @Service, it was a reasoned opportunity to use it again in a different research setting. As discussed earlier, the theory was tested and found to be suitable for the new case but with some modifications. Possibly one of the most interesting observations is that the internal description and its technical description were found to be inadequate for this kind of IT service. This observation led to the construction of the substance description. It describes people-based IT professional services better than this theory before. Other interesting observation within the AR project is the extension of the component view. Again, this notion is related to bundling IT service products. Further, applicability demonstrates the feasibility of the constructions. The difference criterion is also related to applicability, as it was noted that theory needed to be extended and reinforced. In more detail, there were some differences between the theoretical framework of the existing IT service and the new IT service product. These particular differences emerged when I noticed that the baseline was neither totally satisfactory nor extensive enough to support the problematic situation characterized by the people-intensive IT service. The theory enables AR to advance both IS research and IS practice, which gives value to the study. Learning can be seen dualistically consisting of the results generated from my actions and the AR research process itself. The reflection, learning, and improvement process cycle describes what was achieved as a result of my activities (constructions) and how it was accomplished. Actually, it was accomplished by applying knowledge of the subject, understanding insights better and thereby, cumulating knowledge of the subject. In terms of an evaluation in the real-world, the immediate problematic situation was solved. This is referred to in Figure 2:A. as real-world assessment and construction interest. Afterwards the constructed IT service product has proved to be useful because it has been sold to and applied successfully by the small and medium-sized enterprises (SMEs) based customer segments. There was a remarkable change and improvement when compared to the original starting point. The realization of the construction of IT service had such a well-defined, easy-to-understand, and easy-to-sold form as originally aimed.

2.3 Research method

In this chapter the linkage from the research design and the chosen methods used are examined in more detail. The constructive approach of the research and the method of AR were applied in the empirical study of Case IT Consulting Services. The selected methods for the research have an important role because they affect the research targets in two ways: by reaching the research objectives as well as carrying out the research process.

According to Kasanen et al. (1993), constructive research can be divided into the following six phases:

- (1) finding a practically relevant problem which also has research potential;
- (2) obtaining a general and comprehensive understanding of the topic;
- (3) innovating, i.e., constructing a solution idea (the core element of a successful constructive study: the innovation is often heuristic by nature);
- (4) demonstrating that the solution works;
- (5) showing the theoretical connections and the research contribution of the solution concept; and
- (6) examining the scope of applicability of the solution.

Kasanen et al. (1993) consider that there is no point in going on with the study if the researcher is not able to produce any new solution to the problem. There were, actually, new solutions produced to the problems with the case. They are related to both the theoretical framework and the approach, which are constructions. In addition, the new IT service product is also a construction. The role of the researcher in AR is often blurred as the researcher is both an outsider and a collaborative partner (or participant) in the change process (Braa and Vidgen, 1995). Avison et al. (1999, p. 94) summarize the idea nicely by stating that AR combines theory and practice through change and reflection in an immediate problematic situation within a mutually acceptable ethical framework. By the framework they mean that no remarkable conflicts occur between researchers and practitioners or among practitioners themselves. The general aim of the approach is to contribute the research and the practical concerns. In this way the theory leads to practice and vice versa: the researcher learns from the practitioners and the practitioners learn from the researcher. In other words, AR is a matter of collaboration with participants. (Baskerville, 1999; Baskerville and Wood-Harper, 1998; Braa and Vidgen, 1995; Checkland, 1981; Checkland and Holwell, 1998; Järvinen, 1999; Stowell et al., 1997; Susman and Evered, 1978; Yin, 1984)

AR can be viewed as a cyclical process with five phases (Susman and Evered, 1978):

- (1) diagnosing, identifying or defining a problem;
- (2) action planning, considering alternative courses of action for solving a problem;
- (3) action taking, selecting a course of action;
- (4) evaluating, studying the consequences of an action; and
- (5) specifying learning, identifying general findings.

The infra-structure within the client system, the Consulting team – and me as the action researcher maintain and regulate all of these phases jointly. Susman and Evered (1978) in their classical research on AR consider all five phases to be necessary for a comprehensive definition of AR. With regard to IS, there are a variety of different research forms within the class of AR approaches (see, for example, Lau, 1997) but the five-phase process was adapted. This case is a continuum in an iteration of the five-phases, especially in terms of the framework and approach. The framework and approach were already researched in the previous AR study (Case Juxto @Service) and they were evaluated again in this very case. Multiple reflection, learning, and improvement process cycles were also engaged several times.

An iterative AR process was initiated by me when I noticed that actions were needed to solve the problematic situation. The problem sketch was defined by the Consulting team at the beginning of the research process. The team members had already some competence and experience in both the packaging of IT services and of course, the specific consulting task that was meant to be packaged. Hence, efforts were aimed toward a better understanding of existing IT consulting services. In the phase of action planning, it was outlined that the combination of development and tangibilizing efforts will solve and manage the problem. Therefore, the packaging of IT services was selected as the course of action. Based on this decision I tried to serve as a professional providing leadership to guide the organization and its participants. Although I had experience with IT service development in previous cases, I have not concentrated on IT consulting service development before. The principles of the packaging of IT services still seemed to be a suitable solution for the current situation because their potentiality was shown already during the cases of Magnus and Juxto @Service. In the action phase, the decision was made based on my suggestion to proceed with the principles. A meeting was held where the idea of applying the packaging of IT services to consulting was accepted by everyone. By taking these actions changes were made in the situation. I reflected and learned from the experiences gained, and my experiences modified the theory basis (the framework and the approach) of the research. Several discussions and workshops with the other members of the team gave a view of the object. Internet and Intranet material, various books, and most of all, the documents and presentations written in previous similar assignments were collected and analyzed in order to increase information. My involvement has allowed me access to confidential data, such as cost, pricing, and customer data as well as business and future development plans. The team discussed the information gathered and divided tasks in a way that each member concentrated on a specific part of the substance description. Others re-checked and verified the draft papers and presentations. In the evaluation phase, the research case was supported by my knowledge of the principles of packaging IT services. An evaluation meeting was held, where my team presented the results of the study, and got positive feedback. Afterwards, there were also some unofficial discussions regarding the results of the study and again, the given feedback was positive. Finally, the problem was solved and the two-way learning cycle was adopted by the responsible organization. The illustration of personal learning and the learning of the case organization have a

marked role in studying the high relevance of the subject. It gives a set of usable knowledge and principles to approach, and most likely to solve, the problematic situation of this kind in the near future. This ended the AR project, although it continued with piloting and some other phases, which I was not so actively involved in.

2.4 Quality of research design and approach

2.4.1 Empirical and validity challenges

Technically there are no strict definitions or agreed principles of AR because there are many variants. The lack of strictness for the empirical study creates some empirical and validity challenges. Generally, undertaking AR is difficult and establishing the validity is both time-consuming and challenging (Champion and Stowell, 2003). Validity refers to the extent to which an observation measures what it purports to measure. Baskerville and Wood-Harper (1998, pp. 103-104) discuss possible validity criteria in IS AR. Their five plus two characteristics argumentation is applied together with Yin's (1984) four criteria for judging the quality of research designs.

The research should be set in a multivariate social situation as in this case. There was researcher action (my action with the framework and the approach) that intervened in the setting. Further, changes in the social setting were studied. As noted, all criteria were met in the research. Yin (1984) lists four criteria for judging the quality of research designs: construct validity, internal validity (not for descriptive or exploratory studies like this one: however, Baskerville and Wood-Harper, 1998, argues heavily for internal validity in AR), external validity, and reliability. Construct validity is about establishing correct operational measures for the concepts being studied. To meet the construct validity criterion, a researcher has to select the specific types of changes that are to be studied, and demonstrate that the selected measures of the changes reflect the specific type of change that have been selected. The following criterion by Baskerville and Wood-Harper (1998, p. 104) corresponds to internal validity in AR: "The immediate problem in the social setting must have been resolved during the research". According to the internal validity criterion, it can be seen to be fulfilled. The degree of external validity is the extent to which the causal analysis and explanations offered by the theory may be applied to similar phenomena: study findings can be generalized. In the sense of AR and its external validity this is a shared criterion with case study. Such argument is based on the view that the research illuminates theoretical framework and approach explaining how the actions led to the favorable outcome. On the other hand, it is typically argued that high external validity in AR is quite hard to achieve. Reliability refers to the extent to which observations by several researchers studying the same phenomenon with similar purposes yield nearly the same results. The goal of reliability is to minimize the errors in a study. (Baskerville and Wood-Harper, 1998; Braa and Vidgen, 1995; Järvinen, 1999; Yin, 1984)

2.4.2 Rigor in action research

The methodological details of AR are not well-established in the IS field (see e.g., Lau, 1997). This standpoint still makes it an evolving research paradigm. Rigor refers how the research process is conducted. For the selected research method AR is typically associated with a symptom of a "more relevance, less rigor" method. In order to have more rigor in the action-oriented research approach, there are guidelines for controlling AR projects suggested by Avison et al. (2001). Similar control aspects can be found in terms of my AR project: it can be referred to as classic action research genesis, the practitioner and researcher were the same person, and the agreement was defined broadly and verbally. Coghlan and Brannick (2001) also give some useful guidelines for improving rigor in AR projects.

3 The empirical part of the case

3.1 Initial situation of the case company and its IT services in the year 2001

The case company for IT consulting services is again the same as in the previous case (Case Juxto @Service), namely Sonera Juxto. Hence, as an introduction for the empirical part of the case, the initial situation of the case company and its service offering specifically in the year 2001 are presented. The Sonera Corporation had a history long and rich in nuances as a government owned telecommunications company in Finland. It went public in 1998 and since then it has undergone major structural and colorful changes.¹ As a result of changes in 2000, a subsidiary with a new brand named Sonera Juxto Oy was formed, and it had around 450 employees with a turnover of 50 MEUR. At the time when the research was done (March, 2001 – May, 2001), some reorganization activities were still on-going at the incorporation. Similarly as in the previous case, I speak in the context of the study about Sonera Juxto Oy when referring to the case company. This is necessary because the Sonera Corporation, as a whole, operates in the entire telecommunications market area whereas Sonera Juxto Oy is said to be focused more on application service provisioning (ASP) and related IT services. The case company was a wholly owned subsidiary of Sonera Corporation, and it operated in the context of converging IT, telecommunications, and the mobile industry. It offered small and large companies various applications, such as ASP service and IT implementation, administration, care, and development services, to support their business. The main part of the case company's business, namely the application renting part or ASP, has in the recent past been hyped up to an almost ridiculous extent. Hence I prefer to state here that Sonera Juxto's business was IT business as it describes the whole concept better. Furthermore, it was marketed as a company focused on delivering IT applications as comprehensive services over a fixed or wireless telecommunications network in Finland. The market where the case company operated was said to be service-oriented or solution-oriented. It was based on the business assumption that companies want to buy comprehensive services to solve their problems, not separate incompatible products or applications. These IT services were targeted at the Finnish business-to-business segment from small and medium-sized enterprises to large enterprises. The market was characterized with a high speed of technological change and information density. The relationships with customers (or customerships) in this area were generally long term in nature. The length of the contracts is usually a minimum of two years and they often comprehend several individual services. The management level hoped that as the customership develops positively in time, more complex and sophisticated services will be adopted by the customers.

¹ The merger between Telia and Sonera took place in December 2002. TeliaSonera offers a product portfolio in Finland under the Sonera brand. Number of employees in 2003: 6 661 (Finland), 26 694 (the TeliaSonera Group total)

I acted as Head of Consulting team in an organization called Professional Services at Sonera Juxto. No remarkable changes occurred between the previous case (Case Juxto @Service) and this particular case in the context of case organization. However, the most important difference was that having previously operated internally (inside) the company, I had to direct even my own activities more clearly outside the company – that is, real-paying external customers. Initially, the team could operate freely without previous customer segmentation or IT service preferences. The main idea was just to offer various IT-related consulting services internally without price allocation directly to the Consulting team. Actually, the prices were based mainly on the day fees but more accurate pricing decisions had to be made. So the IT service portfolio was not defined and only some of the services were known internally – but poorly though, not to mention the external customers and their awareness about the Consulting team. There were also variations in quality among the IT services offered. The current operations of the Consulting team did not answer to the needs of both new businesses and customers.

On these premises it was decided by the management level that the current IT services and tasks needed to be simplified, developed further, and concretized. Hence, I suggested the packaging of IT services to be adopted as a course of action for the Consulting team. The main idea of the outcome (i.e., the IT service product) is to gather and analyze both quickly and effectively essential information about the current customer situation, the activities of the customer, and also its IS-related environment information.

Lastly, this short paragraph gives the reader some insight into what has happened after the empirical study – although such information is not essential for the contributions of the study. Due to the fact that the kind of economic activity has been and still is in the midst of radical change, some huge mergers took place. Sonera Juxto Oy operated as a separate subsidiary to the end of June 2002, and in July 2002, Sonera Juxto Oy was incorporated back to Sonera Corporation. This parent company had around 7 000 employees and had a turnover of 2 187 MEUR in 2001. The merger between Telia and Sonera became a reality on December 9, 2002, and the company and share changed their name to TeliaSonera. The number of employees was 30 000 on June 30, 2002 and its Pro forma net sales in 2001 amounted to 8.9 MEUR.

4 Existing IT service

4.1 The internal description

It is argued e.g., by Morral (1996, p. 44) that any new product development must be based on an analysis of previous products. This is also the case with the IT service product development in terms of the packaging of IT services. The new IT service product is based on the analysis of the existing IT service. There were, however, no analyses performed previously of the present IT consulting services. The aim of this chapter is to describe and thereby, familiarize the reader with the existing IT service situation that acts as a starting point for the packaging of IT services. It is essential to have a written analysis of the existing IT service. Hence, the importance of the entries of the internal description by Sipilä (1996, pp. 74-78) cannot be underestimated. Interestingly, there are two equally important sides to the coin, I refer now to the internal description and particularly to one of its key entries. If compared to the previous writings of Sipilä and again to the cases of Magnus and Juxto @Service, it was found in this research that there still was some kind of gap in the internal description. But this gap is not similar to the previous cases since the IT artefact is not so evidently present here e.g., in the form of hardware and software. More likely, in this case the service in question has a strong presence of IT as a person service (content). It is about employees' (i.e., consultants') understanding and know-how of the IT artefact: its potential usage that is beneficial to the customer but also the restrictions it may have. It is, then, the consultant's responsibility to find another solution for the customer if there are restrictions for applying certain IT artefacts in their work contexts. As argued in both previous empirical studies in terms of the importance of the technical description, IT services are often highly dependent on the IT artefacts. But because there are various kinds of IT services, not only those where the IT artefact directly plays a major role, a special knowledge of the IT artefact is needed as we operate among professional services. When categorizing professional services, Gummesson (1978) and Bloom (1984) defined consulting services as a subset of them. For the substance description, the knowledge of the IT artefact and its features are an important part of the core competence and professionalism of the IT service provider. This means that certain issues of substance have to be highlighted for the purpose of packaging IT services, so it cannot be excluded from the internal description in this study. This is not contradictory to Sipilä's ideas but it goes a bit deeper if compared to his argumentation and also my previous empirical studies. In sum, it is not a new finding that the substance factor is somewhat mandatory since we are dealing with professional services and their specific domain of IT. What is interesting, however, is that this case underlines some new detailed fundamentals and relevant issues for achieving the required level of IT professionalism. The reason for arguing such fundamentals and issues is that people-intensive IT services are meant to be packaged and distributed as coherently as possible within a fixed time frame. The substance description tries to offer means for solving those purposes.

An existing IT service is here introduced in the spirit of the internal description. As learned from the previous empirical studies, it is useful to try to first describe the existing IT services and tasks along the road to packaging IT services. This kind of internal description is primarily for internal use of the IT service provider organization, although some parts of it are also visible to the customer. The substance description in this Chapter is discussed relatively briefly in comparison to the same section of the new IT service product, whereas the relevant issues are introduced in more detail.

Name of the IT service

There was no specific and agreed name for this IT service in the first place. It was typically referred to as a survey or mapping at the team discussions and meetings.

General description

As the Consulting team operated internally, assignments were often given by the Manager of the unit quite informally and quite briefly. Consultants were sent to the internal customer organization, and the current situation was mapped and the customer requirements were clarified as a suggestion for the next phase. So the survey was documented, analyzed, and handed to the customer. Some of these mappings were related to the IS environment, various applications and their usage, and of course, the context where the employees used IS in their daily work. The reason for such assignments was often related to a changing situation at the target organization e.g., there were problems in the IS environment, applications usage was not as efficient as thought before or there were also assignments that were directly intended for ISD – in particular, the first phases of ISD. The common thing for all of these assignments was obscurity, whether total or slight but obscurity it still was. The Consulting team members did not know what the situation was in the customer organization before entering there, or what the real problem or challenge with the assignments was. We even joked that the team members, myself as one of them, were sent to various assignments with the famous principle as the only resource they had: “To boldly go where no one has gone before”. In reality, the situation was often not so bad. As the team members gained experience, step by step, in such a working method, gradually but not so intentionally several tools and approaches evolved. Unfortunately, they were not documented before this project.

The use of IT service and added value for the customer

Retrospectively the consultants have gained their experiences and most of their know-how in various customer cases. Yet these assignments were internal and their service focus was not as clearly defined as the aim was in this AR project. These kinds of assignments brought value for the customer by familiarizing the Consulting team with their customer. Thereby, the team members familiarized themselves with the current customer situation. It created a basis for future IT consulting assignments with the rest of the Professional Services unit. Last but not least, there was almost nothing to lose by the internal customer organization using the Consulting team because the consultants did their job well and without direct cost effect to the customer.

Market potential and customers

Initially, there was no previous customer segmentation. Basically, almost all the assignments were taken as given and the necessary surveys were conducted within a given time frame. The only rough segmentation was that the customers were always internal organizations such as support organizations or the company's various business units.

IT services which compete with it and IT services it makes obsolete

The present role of the Professional Services was quite unique in the context of the whole company. Yet the company used a lot of consultants but they were external consultants. The idea of having the company's own internal consultants was quite innovative in such an environment at that time.

Fits for the strategies

This type of consultative IT service is a part of the strategy of Professional Services.

Substance description

In this particular IT service, the IT artefact is not totally missing. As discussed in the introduction of the appendix, the IT artefact is still there – although not so evidently. Hence, an IT service is heavily dependent on professional people and their understanding of IT artefacts (e.g., their usage and restrictions). On that account, substance description is added as one of the important entries to the internal description, whereas the technical description so important in the previous cases (Magnus, Juxto @Service) is excluded from this empirical study. The consultants are not the people who really code the IT artefact from scratch or construct and configure it from elements such as hardware or software available from the shelf. More likely, they are the people who are meant to impress potential customers by what can be gained and solved with the use of IT in various contexts. In terms of the substance description for the existing IT service, the inputs and outputs were not so clearly defined since the Consulting team provided the customers with various kinds of IT services. Based on the history of the case organization, most of the assignments dedicated to the team were internal within the company so it was quite unique for somebody to ask for the team members' competencies in a written form. In the selection of consultants, strong interpersonal and cooperative skills were required when the team was put together. The visual layout for the documentations and presentation slides was not very accurately defined. Mainly it was suggested that company templates should be applied but no other layout requirements were required at this point. The materials were typically tailored for each assignment only and their specific purposes. Of course, some kind of reuse was also in place but it was not an organized method of action for the team.

IT service description: effects on the processes

Initially, there were no as-is process descriptions, not to mention to-be processes for the Consulting team. This was quite a peculiar situation because the competences of the team members were related to process modeling and its various

techniques. Of course, there were competences as well. Yet, a need for process-related competence was the actual reason for forming such a team in the first place. From the packaging of IT services' standpoint, the processes were not systematic as they should be in IT service delivery, although certain process patterns did already recur. For instance, phases such as the team members' approach to asking information on the prevailing subject, how they commented on the situation to various parties at the beginning of the assignment, how the information was collected for analytical purposes, and also how the results were presented to the customer and other parties.

Versions

There is no kind of versioning of mapping or survey services. At that time, it seemed that the offered IT consulting services were so different. But later on when discussed and evaluated, common features for such assignments were found. One of these versions was selected as the IT service to be packaged.

The most important references

There was no actual reference listing put on record or updated. Rarely the consultants were asked what the team has done and who the internal customers of the team have been (i.e., other organizations of the company), so it was not considered important at this point. Depicted from an internal IT service provider's perspective, the most important references can be still listed in the following way:

- the Consulting team has personnel who have competence in IT and the business area; and
- although the Professional Services unit is not very well-known internally, it can also offer other kinds of professional IT services as a logical continuation of IT consulting services to various customers.

The price of the IT service

For the existing consulting service, the pricing model was not easy to categorize because the given services were not charged directly to the customer units. At this point, this team's charges in particular were not so carefully monitored since the total budget was given to the Professional Services unit, which then allocated the revenues to the on-going IS projects and their responsible teams. The case environment, however, was not as monopolistic as it was in the Case Magnus. The idea was that the internal unit has a zero budget draft and it has to keep IT and personnel costs for the company at a reasonable level. The information of detailed charges and pricing are excluded from here similarly as detailed information of the substance description.

The IT service delivery time

The IT service delivery time for consulting assignments varied a lot, from two or three days to months. It was sometimes given by the customer managers and sometimes suggested by the team members based on their estimations. The estimation was hard because of such a massive tailoring component in the IT service offering.

People in charge

According to the theory of the packaging of professional services (Sipilä, 1996) the people in charge should be well-defined. Again, this is not true within existing IT consulting survey service. So far, nobody has been clearly defined as the responsible person for this particular service. On the other hand, I, as Head of Consulting team, had the final responsibility for this service as well but no named service personnel were assigned. The present existing IT service is a result of relatively long term development efforts. Therefore, almost none of those who developed it can be responsible any longer because the time of development and some replacement of the consultant staff.

Further actions plan and development suggestions

This kind of survey approach of the Consulting team has been slightly developed to its existing form. Again, it can even be seen as a kind of self-organized system. The consultants have gained more and more experience with time and hence, they have cumulated know-how and an understanding of the substance. Similarly to the Case Magnus, it means that there have been countless short-range plans at the operational level but the strategy for developing the IT service product as a whole package has been missing. But then, what happens for instance when new and less experienced consultants join the team. They may not have developed such competence and substance understanding yet – and know-how is really needed as soon as possible in order to be effective in the customer cases. On the other hand, there are variations in the service quality delivered and implemented by different consultants. These variations should be reduced in order to be more effective than so far. In sum, there is plenty of room for improvement with IT consulting services.

4.2 The component view

According to Sipilä (1996, p. 70), the component view consists of a standard part, a number of modules, and customized (tailored) parts. The component view has shown its potentiality in the packaging of IT services. This was noticed within the previous empirical study in which the idea was extended into the form of an evolution roadmap (see Appendix F: Case Juxto @Service). Hence, it became evident that the component view will also be used innovatively in this specific case.

4.3 The process of packaging IT services

The program and the process of packaging IT services from Case Magnus formed a basis for the IT consulting development. Since I had already experiences with the packaging of IT services, various phases of the process were tentatively defined. In other words, most of the necessary phases were already known beforehand, or at least I thought so. Yet, the process of packaging IT services was quite dramatically changed in certain phases. Every phase and high-level step was not implemented as anticipated at the beginning of the process. Presumably the reason can be found in

the differences people-based IT services compared with technically-oriented IT services as well as in the differences in the market and the case organizations. In Figure 4:A., the preliminary and tentative process for this case is depicted. It is based on the experiences gained with Case Magnus.

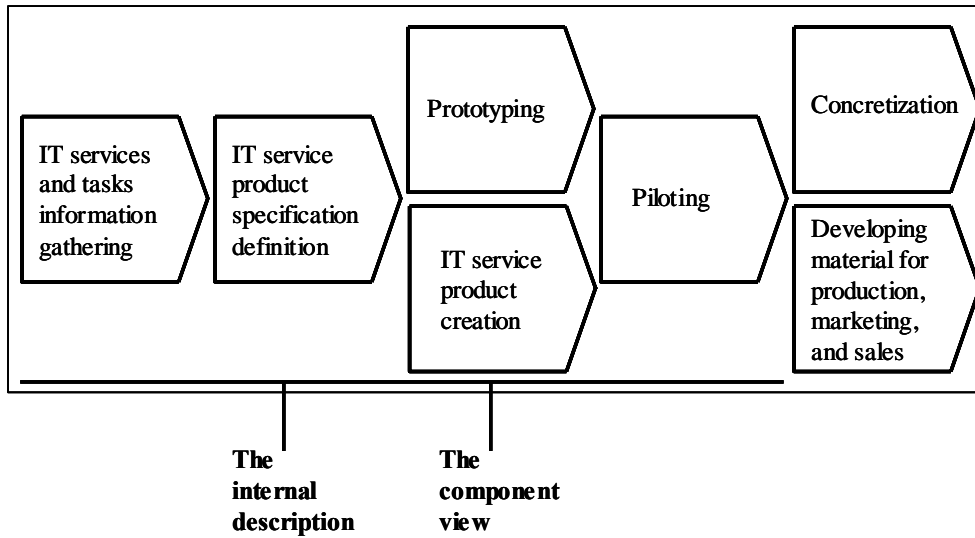


Figure 4:A. A tentative process of the Case IT Consulting Services.

5 The new IT service product

5.1 The internal description

This part of the research deals with a tangibilized new IT service product, the development of which is based on the existing IT service. From the standpoint of the internal description, the new IT Consulting Service can be seen as having a new form of more accurately defined substance, yet it is based on the previous consulting survey service. It was evident that the case organization and its operations were in a continuous transition stage during this research. The managers focused almost all the time on revenue and spending as well as project and human resourcing. Under this financial pressure the Consulting team targeted at defining its IT service portfolio and as a practical example, it was decided that one IT service would be packaged. Simultaneously, it proved to be a useful opportunity to study the packaging of IT services in a people-intensive IT service domain. This historical change from a part of an internal IT unit to a whole new IT service provider company with real paying customers required a step toward customer segmentation. The segmentation was defined by the upper management level focusing on SMEs. Similarly, the developed IT service product was targeted at the same specific customer segment. The main reason for the new IT Consulting Service was an emerging need to have a well-defined, easy-to-understand, and easy-to-sell IT service product. During the process of packaging IT services, it was underlined that the desired outcome should be repeatable and predictable. It was intended to be sold more as a bulk IT consulting service, so it had to be cheap to the customers with a fixed cost structure and also a fixed time frame for a quick delivery. Again, the IT service product was meant to be a sort of predefined small-scale flagship IT service product for the team and it was hoped that it would gain more visibility among the customers and the internal organization. And of course, to bring relatively small but still important revenues to the team. In addition, the IT service portfolio started to shape into a more distinct form than the previous hazy one. The project did not have so many difficulties concerning employee resources because the project had the backing of the managers. As a result, the management level of the IT service provider organization could predict the usage of consultation resources better than before.

The substance description is here depicted at a more detailed level as it was developed with the intention to illustrate the new IT service product. The process and program of packaging IT services is also discussed in more detail as it was developed on the basis of Case Magnus. Quite soon, however, I realized that the previous model was not good enough in this specific domain.

Name of the IT service

The name *Pre-study* was actually selected for the IT service. It is not fancy as such but a useful name describing something about its content. In this appendix, however, it is referred to as the IT Consulting Service in order to emphasize its strong interdependence of people-intensive IT service.

General description

An object definition has been written based on the existing original IT service and it was developed further according to the packaging of IT services. The reason for selling and launching the IT service product is related to a changed situation in the target organization. There might be problems in the IS environment, applications usage might not be as efficient as anticipated in the early phases of ISD, or there might be a need for new ISD in order to have usage situations improved. With this IT service product essential information about current customer situation, the activities of the customer, and also its IS-related environment information can be gathered and analyzed both quickly and effectively.

The use of IT service and added value for the customer

The entry is improved in many ways when compared with the existing IT service. The Consulting team's focus was turned more on the business from the internal assignments. It was even argued that everything else but a paying customer was just messing around, so "Cash is King". It forced the team members – me as one of them – to delimit the offered IT services into pieces and start to think each thorough their individual use and value adding elements. So there are several reasons for the customer buying and using this particular IT service product. It is all about starting a slick business relationship with the customer and getting the customer's problems finally solved in a win-win situation. From the standpoint of the customers and specifically in terms of added value, the customers will have a fresh scenario plan offered in an effective manner by this IT service product. And as a result of the IT consulting service products and implementations, the customers can acquire and start using a bundle of solutions and IT services which really underpin their business targets. This is closely related to the idea of modularity in IT consulting services.

In sum, these reasons will give added value to the customer:

- First of all, the well-defined IT service product is an easy-to-understand IT consulting service with a fixed price, which makes it easy-to-buy for the customer;
- It is a small-scale but still an effective start for a business relationship between the customer and the IT service provider;
- It gives a realistic understanding of the complexity of the customer's situation from the IT service provider perspective;
- The plan as an outcome is offered to the customer in a fixed time frame, which facilitates better planning for the customer;
- The to-be plan includes an estimate of the necessary consulting efforts for improving the as-is situation; and lastly,
- The to-be plan also includes a preliminary time schedule for the forthcoming projects that ultimately underpin the business targets of the customer.

Market potential and customers

There is one potential customer segment identified for this IT service product – that is, SMEs.

IT services which compete with it and IT services it makes obsolete

At this point, this is the only IT service product available in the team's portfolio, since it is the first time the packaging of IT services is applied to the Consulting team. The IT service product's market launch implies that other IT service products will be launched in the future.

Fits for the strategies

This IT service product suits the strategy of the case company and its Consulting team well. It offers the customers the kind of introductive services they need from the new IT service provider such as the case company. Thereby, both the customer and IT service provider will benefit from the IT service product because of its capability to examine the current situation of the customers and suggest scenarios for their co-operation.

Substance description

The substance description is an essential part of the new IT consulting service product. In terms of a tangibilization referred to in the services marketing literature, there will be several new concretized issues that both the customer and the IT service provider organization can utilize. The following is a sample of the substance material generated within the AR project:

- Internal Marketing Slide: a succinct but as short as possible internal sales slide for the moments of truth between the consultants and other personnel e.g., salespersons;
- Methodological Document: an internal instruction for the methodology of the IT service product implementation for the consultants;
- Selling/Marketing Slide: again, a snappy but short sales slide for the moments of truth between the customers and salespersons;
- Marketing Document: a detailed document for customer sales and marketing purposes;
- Offering Documents: assist in the offering process between the customer and the IT service provider;
- Contractual Documents: the documents like standard contract templates assist with and thereby accelerate the contractual process between the customer and the IT service provider;
- Methodological Document (short): it introduces the methodology of the IT service product implementation in a nutshell to the customer;
- Content Description: a presentation that describes to the customer how the particular IT service proceeds in its various phases;
- Questionnaire Document: a set of questions including instructions for the customer (as inputs for the analyzing process of the IT service product);
- Documents for Answers: the customer's answers are to be collected on this document template; and
- Outcomes Presentation: slide sets for both the customer and the internal use of the IT service provider (as the final outcomes of the IT service product).

The materials were conformed on similar consultation templates. In addition, it comes in useful to have competence information available on the backgrounds of

the professionals attending the customer projects, their previous work experiences and possible certificates (i.e., curriculum vitae). The overall number of documents and presentations in this IT service package was about a dozen.

Being responsible for the development, I had access to all information that was needed for constructing the new IT service product. Due to certain reasons such as company confidentiality, a presentation of the detailed substance description of the new IT service product is excluded from this Case IT Consulting Services appendix. However, in terms of this empirical study it has no substantial effect on the research contributions whatsoever.

IT service description: effects on the processes

Both the as-is and to-be processes of IT Consulting Services are described in this section at a mixed and generic level, because they are an integral part of the IT service. Usually, the current processes are not merely defined but one also has to innovate the to-be processes for the IT service in question. The reason for this can be found in the development perspective, which is strongly evident in the packaging of IT services. So there are phases planned and designed at a more detailed level in the framework of this research, yet these phases and their associated tasks with task descriptions are not illustrated here for confidentiality reasons. One example of the reasons is that the processes can be imitated by other players in the market. The lack of detailed presentation and as-is and to-be process information have no effect on the contributions of this research. The main idea here is to underline that at least the most important processes have to be defined for the implementation purposes when an existing IT service is packaged into the form of an IT service product.

Yet, something can be revealed from the IT service provider's standpoint – a simplified process of IT service is described as follows. This all happens in fixed time frames, of which the customer is already informed during the sales phase. Before the IT service product implementation can be launched certain requirements are discussed and agreed with the customer. The basic idea is that consultants will be sent to the customer organization to do mappings of the current situation on the customer's premises. Before this phase some information has already been collected about the customer environment. The customer receives a reasonable amount of preliminary tasks that are related to the content of the workshop. Within a short period, the consultants arrange a workshop for the customer on their premises, and they create various notes based on the customer's responses to their questions. The current prevailing situation is documented for the next phase. Subsequently in the analysis phase, consultants create a customer-related information package with specific approaches and tools using their PCs. Afterwards as a visible result of the IT service product, the analyzed outcomes and suggestions are handed to the customer and other organizations, especially to those provider organizations or employees whom it may concern. In this last meeting with the customers, the consultants organize a meeting where they give the results of the consulting study and a proposal for future development efforts and projects. The preliminary tasks to the customers, the workshop with the related questions, the agendas for the workshop and the presentation gathering, as well as the

structure for the contributions are all defined a priori– as ready as it is possible for these kinds of customer projects.

Actually, the customer requirements are clarified so that there is a common language between the customer and the IT service provider. This assists in having a better understanding of each other, which will create presumably a good starting point for the evolving relationship of the parties. The material generated by the members of the Consulting team is also intended to support the further phases of the IT consulting assignments. Due to the fact that the case organization Sonera Juxto has explicit business objectives, the idea of the IT service provider is to sell its applications and services to the customers. Of course, this is the operative purpose of the team as well but it was not a mandatory guideline for the consultants to always suggest only the case company's IT services. For instance, if there is no certain kind of application or other IT service available in the company's portfolio, the consultants can always suggest something else as a solution to solve the customer's problems or to improve their current situation.

Versions

There are no different versions of this IT service product in the market.

The most important references

Considering the newness of the IT service product and its focus on real paying customers, there is no impressive reference listing available. However, it was discussed with the members of the IT service development project that as the next real customer cases come along, consultants should ask the customer organizations whether their names could be added to the list of references. The consultants also have the responsibility to keep the list up-to-date. The most important reference list can be exploited in sales activities and the internal and external marketing activities in future.

The price of the IT service

For the new IT service product, the pricing model can be referred to as a fixed price. Detailed information on the charges and pricing for the new IT service product (price list) are again excluded from here for confidentiality reasons.

The IT service delivery time

The IT service product is divided into various phases with fixed time frames. Hence, the customer (as well as the IT service provider) is aware of the total time of the IT service delivery. Although the exact delivery time and price information are excluded from this appendix, it can be unveiled that it is a matter of weeks.

People in charge

The Head of the Consulting team is responsible for the new IT service product and its implementation. In addition, the rest of the consultants are known to have implemented this kind of IT service. There was also some discussion about deputy consultants.

Further actions plan and development suggestions

Those suggestions already collected and discussed in terms of the existing IT service were taken into consideration for the development of the new IT service product. Most of them were actual reasons for packaging IT services. For this new IT service product, no development suggestions are available yet. They are supposed to be collected by consultants in the long run.

5.2 An extension of the component view – bundling IT service products

The objective of the empirical study was that by the packaging of IT consulting services modularity and conceptuality could be brought to new IT consulting services. The objective was achieved by suggesting that several IT service products together create an entity based on the component view. This can be seen as an incremental extension to the idea of the component view, as it was previously associated with the idea of a single IT service product solely. Hence, there are two or more IT consulting service products within one package for the customer. Modularity will give the options for the customer and the IT service provider. For instance, from these options the IT service provider can bundle a suitable package for the customer. There are researches and literature on bundling (see e.g., Eppen et al., 1991 and their recognition that customers buy “bundles of satisfaction”, not just products) which proves that it is a profitable approach. In the following Figure 5:A. I have illustrated bundling combined with the component view of the Case IT Consulting Services. The IT service product in this particular case, referred to as the Pre-study, can be seen as a standard part which will be offered to all customers, except those few potential customers who have the necessary up-to-date information already available. The Pre-study gives a general view of the customer’s current situation but also suggestions as to how to continue co-operation between the customer and the IT service provider (cf. the use of IT service and added value for the customer). In terms of this empirical study, it is presumed that the packaging of IT services as an approach will also continue in the case organization in the future as it will be developing more IT service products. The forthcoming IT service packaging projects are focused on developing these modules: the IT service products are geared towards the needs of SMEs. Together the standard part, modules, and the (minimized) tailoring part are bundled for the SME customer.

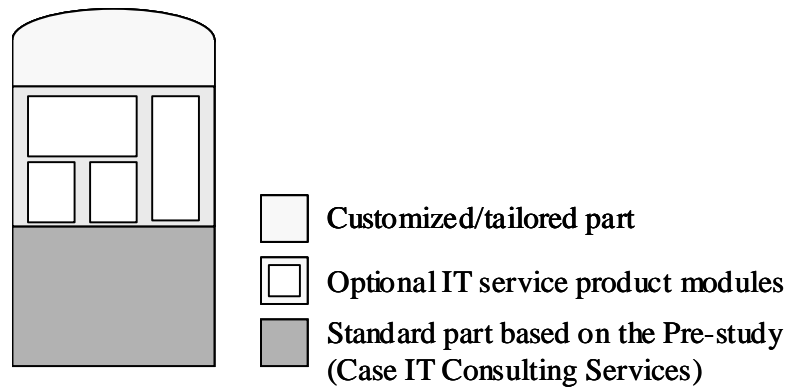


Figure 5:A. Bundling IT service products.

In sum, one of the aims of packaging IT services is to make IT services modular. All of these separate components, each of them being an IT service product of its own, construct the customer’s complete IT service package. This has an impact on the pricing of IT service products. The IT service provider can mark the price for the whole bundle or pricing can be based on individual prices of the IT service products selected by the customer. The IT service provider should not offer price cuts to the customer but sell a different IT solution package by changing the combination of modules and thereby, keeping the planned pricing levels.

5.3 The process of packaging IT services

The packaging of IT services requires both internal employee and customer participation in IT service development. On the other hand, the process of packaging IT services in Case IT Consulting Services was clearly different from Case Magnus. The experiences and contributions gained from Case Magnus did not provide a sufficient process model describing the approach for developing these kinds of IT consulting services.

At the top level, there are four main steps identified by this empirical study illustrated in Figure 5:B.



Figure 5:B. Realized steps towards packaged IT consulting services.

The approach assumes that the IT unit already has some kind of IT services and tasks to start with. Before the idea has been formulated into a project, the *prepare* step is needed for the development of the IT consulting services offering. The project is started by setting up an ad hoc development team. The term ad hoc means that the team consists of different kinds of employees such as personnel of

the IT unit, marketing, and other professionals. In the *design & develop* step, the team defines the content and gathers information, which can also be used for marketing purposes. Hence, the IT service product is created and documented, and the implementation processes are defined. Based on the experiences and feedback in the evolutionary *pilot* step, the IT service product is modified accordingly. The pilot group mainly consisted of customer personnel, who gave feedback to the project team. In the *implement* step, internal activities should ensure the fluent roll-out of the finalized IT consulting service product.

Retrospectively, since the process had gone through the two first steps (prepare and design & develop), it seemed that the major work had already been done and there was only minor work left for the pilot and implement steps. But this was not the case. It was noticed that some additional phases were already taken, even if they were not present in the preliminary suggestion of the process. This observation indicated that there might be more phases to come in the forthcoming steps than were originally anticipated. As the process of packaging IT services was continued, it became evident that some of the steps will include more phases and effort. The program and process of packaging IT services are depicted in more detail for the case of IT Consulting Services in Figure 5:C (process owner: the Consulting team). The phases concentrate on the activities that are performed after it has been decided that the project will be launched. The model will not explore questions prior to the project start such as how the Project Manager is selected. Furthermore, the internal description and the component view are generated through the process. They are iterative by nature. Therefore, it is not possible to give the exact locations, where the description and the view are constructed.

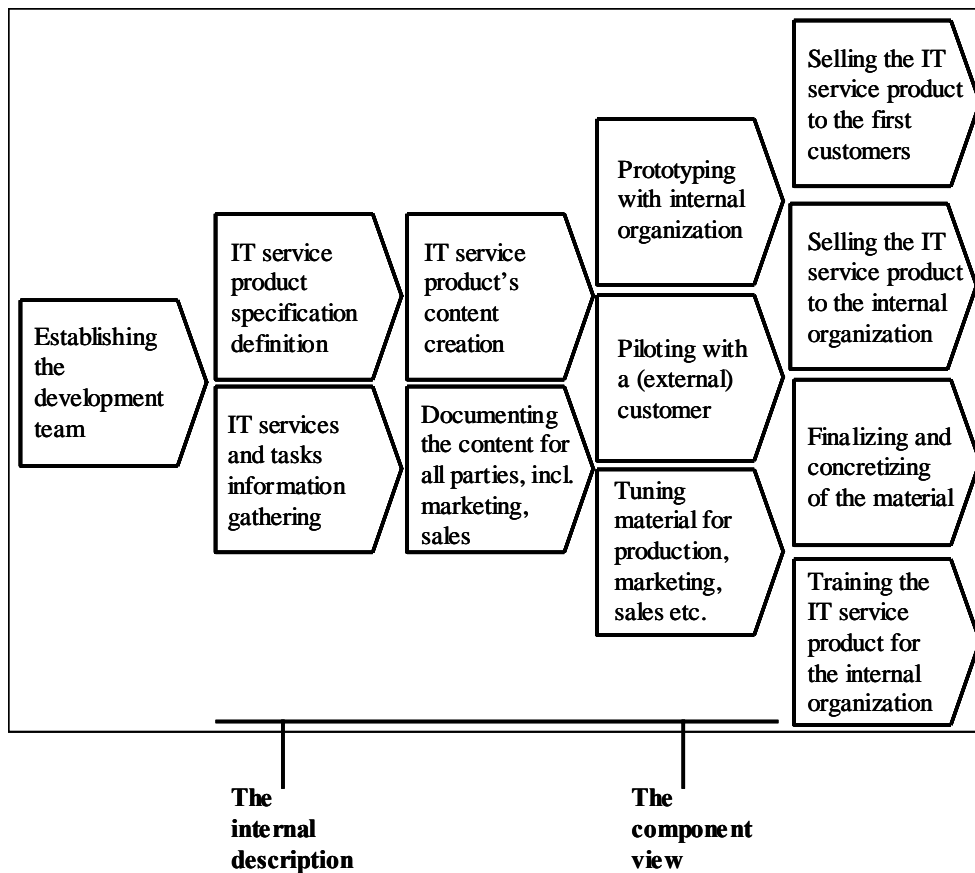


Figure 5:C. From the existing IT service to the new IT service product: Case IT Consulting Services.

The process is divided into three different levels of actors: the customer, the management, and the IT service product development (ad hoc) project team (i.e., the team responsible for the packaging of IT services). These actors have their different activities yet they should work in cooperation. There are also several phases that are meant to be conducted simultaneously. The IT services packaging process starts with the establishment of the development team and it is considered to end when the IT service product is rolled-out. There was also some feedback collected afterwards, although I did not participate actively in such efforts. However, at the end of the project it was noticed that the feedback received for the current IT service product was repeating itself. This saturation effect suggested that the process had reached its end. As it became clear that the packaging of IT services should be extended to cover even a wider range of consulting services, a feedback meeting was arranged to recap the most important lessons learned. Project Steering Group together with a couple of selected members of the team gathered to view the whole project in retrospect. The experiences of the participants were discussed and based on the discussion a revised process model

was defined. Hence, the phases of the process were identified. Table 5.A. describes these phases in detail.

Table 5.A. Description of the phases of the packaging of IT services in Case IT Consulting Services.

Step / Phase	Description
<u>Prepare</u> Establishing the development team	Before the actual IT services packaging project can start, the (ad hoc) development team has to be established. This is most likely an activity for the project manager to do. The members of the development team should represent all the necessary parties that are needed when offering the IT service product after its roll-out. In this way, all necessary standpoints are taken into account.
<u>Design & Develop</u> IT service product specification	The team sets target specifications, by reviewing issues such as market potential, customers and the business logic, for the upcoming IT service product on consultation. This phase sets boundaries and aims at a common understanding of the goals among the project members.
<u>Design & Develop</u> IT services and tasks information gathering	It is often possible that there are some preliminary IT services and tasks to start with. Hence, related information and knowledge of the particular consultation is gathered around the organization by the development team. Based on this, an overview is generated on what already exists and what has to be created. Also information concerning the particular business area should be gathered. This information will form the basis for the high level concept and specification.
<u>Design & Develop</u> IT service product's content creation	The content, including such issues as theories on the current consultation subject, methodological issues, pre-defined delivery and implementation processes, and a set of questions for the customer are collected, and - as needed - developed. The purpose of this phase is to define the overall methodological framework as well as the actual content.
<u>Design & Develop</u> Documenting the content for all parties, incl. marketing, sales etc.	After the content and framework of the consultation product are specified and developed, those ideas are put on paper. Also material for internal and external marketing and sales efforts are created e.g., easy-to-understand slides, brochures, and reports. This phase helps the knowledge transfer that has to be conducted in situations such as training in the usage of the IT service product or internal communication purposes.
<u>Pilot</u> Prototyping with internal organization	The IT service product can be prototyped with the internal organization, in order to test and evaluate its usability. This phase has its effect on the content of the IT service product and it acts as a general rehearsal for the external piloting phase. Its purpose is to make sure that no essential issues have been forgotten.
<u>Pilot</u> Piloting with a (external) customer	Piloting with an external customer or customers gives valuable feedback on the IT consulting service – such as the IT service delivery time and the content suitability for the customers – to the development team based on the market perspective. This is a very essential phase, since thus far the team has been dealing with the development – without any specific external view on the subject. This phase also has great motivational aspects in the form of confidence and trust.
<u>Pilot</u> Tuning the material for marketing, sales etc.	The documentation is revised according to the feedback gathered from the internal organization and the customer. The material is also fine-tuned to pass the possible IT service provider organization's brand demands so that it can be externally marketed.

Table 5.A. Description of the phases of the packaging of IT services in Case IT Consulting Services (cont.).

Step / Phase	Description
<u>Implement</u> Selling the IT service product to the first customers	Before selling to the internal organization, the product has to be sold to the first real customers. This will increase the credibility of the IT service product, as it can be proved that it really responds to the market demand.
<u>Implement</u> Selling the IT service product to the internal organization	Changes on the organization's existing IT services and tasks, especially those that are described as people-processing professional services with a high expertise IT component, need to be sold to the rest of the IT service provider organization. This phase will increase awareness of the developed IT service product and its delivery process.
<u>Implement</u> Finalizing and concretizing of the material	When the product is sold to the internal organization, there will emerge discussion and feedback that has to be incorporated into the final version, so that it will get the internal organization's approval. In this finalization and concretization phase the difficult service is transformed into as a concrete service as possible for the customer.
<u>Implement</u> Training the IT service product for the internal organization	After the IT service product is concretized, the people that will be dealing with it have to be trained to use it. The purpose is to ensure that those people will have wide enough competence and expertise to carry out their part in its delivery process. In this training phase all the documentation will also be handed out.

In a professional service organization, such as an IT service provider organization, the know-how and information of an existing IT service seems to be possible to be gathered and transferred into concepts, models, and methodologies – at least to some extent. The laborious documentation phase can be organized as a project, because these issues are mostly a matter of time, available personnel, and commitment. Despite the fact that the packaging of IT services is more a design and development approach than has typically been associated with service tangibilization, it is such an interesting finding that the crucial phases in the process were found in phases other than the essential substance and content development work in terms of the internal description. Hence, some challenges arose in the separate five phases of the process. These phases are crucial for the overall success of the packaging of IT consulting services. The underlying reasons and findings based on the empirical study are introduced as follows.

Establishing the development team

The first challenges relate to the establishment of the (ad hoc) development team. The composition of the team is established partly on the basis of relevant expertise and partly on the basis of internal and external relationships. The expertise is needed for the particular IT service product. The members need to communicate it to various parties as well as sell it. The development team is responsible for the project. On the other hand, the final responsibility of the project result in its customer delivery phase will fall evidently to the Head of Consulting team.

Piloting with a (external) customer

In the pilot phase the team is expanded for the first time. The expansion is such a complicated phase because it involves external parties. The role of customer feedback, which is based on the real market environment, cannot be ignored since it is the first actual shift demonstrating that the IT service product really meets the market demands. Before this particular phase, a nascent IT service product cannot be sold or delivered as easily as a real IT service product. In this phase, the quality of the team's external relationships is under test, whether the outcome is acceptable or not.

Selling the IT service product to the first customers

Since the characteristics that the customer looks for in the actual selling phase differ from those in the pilot phase, a different approach is needed to build these relationships. The project team continues expanding. The phase is a very crucial one, because the phase of selling the IT service product to the internal organization becomes just too difficult a task without any credible external references. With such references, the credibility of the IT service product will be increased. The challenge comes from the fact that until now only the development team knows the IT service product well enough. It is about time to try to sell it to the first customers.

Selling the IT service product to the internal organization

Within this empirical study, in the internal selling phase, a few executive managers become members of the project team. The IT service product has to get approval from the executive managers before it can be communicated and marketed in their responsible organizations. This is not as self-evident as one might think. It becomes even more difficult the more innovative ideas and concepts of IT consulting come into the question. The approval ensures that the IT service product also has the support from the managers at higher levels. The members of the team have to act as messengers towards the executive managers within the IT service provider organization and thereby, get their valuable attention. The value of internal relationships of the development team is again emphasized in this phase.

Training the IT service product for the internal organization

Again, this phase in the packaging of IT services is challenging. The underlying logic of the IT service product has to be communicated to a heterogeneous group of people in a simple but straightforward way. The importance of the previous phase is still underlined, since the attitudes of executive managers towards the IT service product will have an impact on the successful completion of the training of the personnel. The main idea of training is to ensure the quality in the delivery of the IT service product.

6 Discussion and conclusions

6.1 Research summary

In this empirical study the targets were defined as developing an IT service product based on the existing IT consulting service and having an outline for a transition process for the IT service vendor derived from a kindred IT unit's process. The sub-purposes of the study were defined as exploring the effects of the principles of people-intensive IT professionalism-based services compared with the IT artefact-oriented services. And if there were differences discovered in the process, to introduce those as well as the crucial phases of the process. In this case of IT Consulting Services, the customers were external "real" customers to whom the IT service provider sell their IT services. The research method AR combined with constructivism acted in various activities, including research problem diagnosis, action intervention, and reflective learning. I applied the ideas of packaging IT services to a certain IT consulting service of the team. As a result of the empirical study, there were practical outcomes for practitioners and theoretical implications for IS researchers. The objective was that by the packaging of IT consulting services conceptuality and modularity could be brought to new IT consulting services. The original problematic real-world situation was solved as shown in Chapters 3 to 6 (including this Chapter). The case provided me with the opportunity to theorize research from reflection. It also reinforced the existing theory on the basis of the evaluation. In this research the principles of the internal description and component view are again extended. In the internal description it is noted that on people-based professional IT services the substance description has an important effect on the packaging of IT services. In terms of the component view, the idea of bundling IT service products is a useful incremental extension to the concept.

The first Case Magnus (Appendix E) was an internal case unlike the second Case Juxto @Service (Appendix F) and this third Case IT Consulting Services, both of which were external ones. So, Case IT Consulting Services acts as an example of a packaged IT service for real customers, not in the monopolistic market but in the competitive market. The IT service product for IT Consulting Services was developed for the selected SME customers of the company. It became a well-defined and easy-to-understand package to be communicated to the targeted customers and the consultants and other employees of the case organization. There were several improvements achieved by the empirical study. For instance, with the general description and the pricing model the customer knows what is included in the particular IT service product and what it costs.

6.2 The comparison between the existing IT service and the IT service product

The empirical study of IT Consulting Services focused on a people-intensive IT service packaging. For the IT service provider the IT service product reduces indefiniteness among customer assignments with tools and approaches already designed for the specific purpose. A success element for the customer was reached by removing or at least, lessening confusion typically associated with the IT consulting assignments.

One of the main differences between the initial non-packaged IT consulting service and the IT consulting service product was related to the tacit substance knowledge. Mostly, it was transferred “from people’s heads” into the written form, discussed, revised, and further developed. As such, the substance description improves the quality of the actual content and the way to approach the customer assignments in delivery. It facilitates communication about the IT service product both internally and externally. For instance, all the necessary internal training material for the use of the Consulting team was developed during the packaging of IT services. The detailed comparison between the existing IT service and the new IT service product indicates no remarkable differences within the following entries: IT services which compete with it and IT services it makes obsolete, suitability to strategies, and people in charge. In the first entry, there exist no competing and substitutive IT services. The IT service product’s market launch is an implication that other IT service products will be launched in the future. From the strategy perspective no changes in the case organizations’ strategy were identified. Lastly in terms of people in charge, there were already responsible people elected in the Consulting team. However, the packaging of IT services defined the roles and responsibilities of the IT Consulting service more accurately.

There were several improved attributes with the case. The advantages and improvements of the new IT service product are presented in Table 6.A.

Table 6.A. Advantages of the new IT service product compared with the existing IT service.

Entry of the internal description	Advantage – specific improvements based on customer requirements and needs
Name of the IT Service	Established name for the selected IT service - The IT service provider and the customer are discussing the same subject with a common name
General Description	An object definition documented - Again, the IT service provider and the customer are discussing the same topic
The Use of IT Service and Added Value for the Customer	With the packaging of IT services the use of the IT service became evident to all parties. The entry is improved in many ways when compared with the existing IT service. For instance: - It is an easy-to-understand IT service package - It exemplifies the customer approach of the Consulting team in a professional way that Supports business relationship formation
Market Potential and Customers	As being only one customer segment selected for this IT service product, it focuses the efforts on marketing and selling
Substance Description	A detailed documentation: the new IT service product is based on an extensive and high-detailed content description
IT Service Description: Effects on the Processes	As-is and to-be processes are defined and innovated internally for the first time. This kind of process management is important for the packaged IT service in order to secure homogenous service quality in IT service delivery
Versions	At this point, it was decided to have just one version of Pre-study - A clear direction to use only one available version for customer assignments simplifies the usage of this kind of IT consulting services
The Most Important References	Documented for marketing purposes - The reference list can be used as a support for internal and external marketing activities and various selling occasions
The Price of the IT Service	The charge is more realistic and market-driven - A step toward a more economic consulting approach of the case organization: pricing becomes easier - Here, fixed pricing is advantageous to marketing and selling, especially when the IT service product is priced aggressively
The IT Service Delivery Time	- A fixed time frame, which facilitates better planning possibilities for the customer and the IT service provider - IT service delivery time for implementation is known in advance
Further Actions Plan and Development Suggestions	The new IT service product was partly developed on the basis of the existing IT service ideas and suggestions. In the long run, potential development suggestions are meant to be collected purposefully

There is also a disadvantage that became evident with the new IT service product. It is discussed briefly in Table 6.B.

Table 6.B. Disadvantage of the new IT service product compared with the existing IT service.

Disadvantage	Definition of disadvantage
A Need to Update the Substance Description and Other Related Entries	Things do change (e.g., based on the feedback received and collected from the customer assignments in the long run): the IT service product documentation needs to be updated - A demand for resources and operative personnel to update and at the same time, participate in various on-going customer assignments

6.3 Research findings and contribution

As the theories are applied to the case, the findings are documented and interpreted for the specific field of IT services. The illustrative case in this paper refers to people-processing professional services with a high expertise IT component. Needs for the new IT service product have been widely met and several advantages and improvements can be found compared with the existing IT service. In short, the IT service product became conceptualized, packaged, and modularized.

The summarized contributions of this empirical study can be listed as follows:

- Applying the ideas originally introduced to the packaging of professional services (Sipilä, 1996) as well as developed and tested with both cases Magnus and Juxto @Service to the topic of IT consulting services (an application and testing of the specific theory and its potentiality);
- Expanding those ideas successfully by developing a specific adaptation for the IS field e.g., replacing the IT artefact related entry with the entry of substance description as a part of the internal description of IT professionalism-based services (a confirmation of applicability of the specified theory and its constructions);
- Describing the effects and benefits from the case by applying the principles of packaging IT of services (associated with the component view and its usage in bundling IT service products: it is discerned that these constructions of packaging of IT services are again extended with this case);
- Developing the process and the program of packaging of IT services for the external IT service vendor organization operating with IT consulting services; and
- Identifying the crucial phases of the process.

For the internal description and component view, two useful improvements and extensions of the field of IT services are found when compared to the original theory of Sipilä (1996) and my previous empirical studies. First in terms of the internal description, the substance description adds the actual IT-related service content (i.e., people-intensive IT professionalism) to the service product. The substance description argues for a systematic IT service process, competences and their demonstration, human relations skills, and design management. The fundamentals of a systematic IT service process with beforehand designed roles of the personnel and their responsibilities and the competence argumentation are all aimed at convincing the customer of the IT service provider's capability to deliver successfully the promise of an IT service product. In this way, the IT service product's value becomes utilized. These labor-intensive IT services are not only about the technical skills of the employees but also other skills. Since there are people strongly involved, cooperative skills are required. But the IT consultants should know, or at least they should acquire enough knowledge of the IT artefact in a deeper level than their typical customers. Furthermore, design management ensures that layouts for produced materials are visually coherent. It gives a professional impression of the IT service provider. The relevant issues such as templates, documents, and presentations as tools and instruments have to be written at a detailed practical level. This kind of documentation guides the implementation of the IT service product but acts also as training material for new personnel. Usually there is less time for more experienced consultants to teach the new juniors how to provide certain consultancy services. Therefore, the IT service product documentation also has to be self-explanatory as much as possible. In retrospect, though, these kinds of phenomena were partly emerging in my previous studies but not as evidently as they emerge in the last empirical study of Case IT Consulting Services.

Second, in terms of the component view, there are several potential benefits from bundling IT service products. It is suggested that several IT service products together create an entity based on the component view. Hence, there are two or more IT service products within one package for the customer. In this view the objective of packaging IT services is to make IT services modular. Modularity will give options to the customer and the IT service provider. For instance, from these options the IT service provider can bundle a suitable package for the customer.

The Case IT Consulting Services took place in a real market environment, in which the business thinking rules. There is no use packaging existing IT services and tasks for just one occasion but for several occasions. The reason is based on the fact that it will take time, resources, and money to start the process of packaging IT services. The outcome of the process has to be a repeatable IT service product with high standardized routines for the purposes of several customers within the selected market segment – not an IT service product that is totally tailored/customized for only one customer. The research is not about tailoring IT services, which requires an approach of its own excluded from the scope of this empirical study. The packaging of IT services is about reproducing for many, not customizing for one. It

is a designed approach for getting higher volumes in IT service business where resources are often limited.

The pure service marketing concepts such as 'service tangibilization' or 'managing the evidence' do not bring anything exceptionally new to the research field of IT services, which typically require an understanding of the information technology context. So it is highly likely that these service tangibilization techniques are not extensive enough in the topic of IT services. The IT service provider can concretize its services conventionally for the customer, for example, by creating brochures, printed material, or even mouse pads – with the name of the current IT service (if it has a name at all). But the service marketing perspective is not all. Often the IT service provider cannot just add some tangible evidence to their IT service, and then consider everything to be ready for the customer consumption process. Thus, in order to succeed in service tangibilization, a more comprehensive view has to be taken. This need for a holistic process approach to the packaging of IT services became evident also with the Case Juxto @Service with regard to IS design and development in the business-context. As noted, the IT service provider has to design, delimit and further develop existing IT services and tasks into clearly defined IT service products. Based on the experiences gained the challenge is to handle the total chain of the packaging IT services, starting from the preparing, design, and development phases to the testing and piloting phases. The process has to be managed and controlled in a professional way. Thereby, IT consulting services can be marketed to the selected segments, and then sold and delivered effectively.

The recognition of the crucial phases in the process is also a finding of this empirical study. In sum, the phases are establishing the development team, piloting, selling, and training phases. In a case like this, where a controlled change in service management is strongly present, the roles of internal selling and IT service product training are noteworthy. If the IT service product can be communicated easily to the internal organizations within the company, it supports marketing and selling efforts towards the external, real customer. Also, effective training of new consultants improves their understanding and knowledge of the IT service product. A better quality of IT services will be achieved. All of the phases included add new actors to the previous composition and thus build new relationships. This supports e.g., the suggestions of Kandampully and Duddy (1999) that the relationships inside and outside the organization eventually assist the firm in adding value to both customers and the firm simultaneously. By concentrating on these particular phases the advanced IT service products with their tangible evidences will be easier to market, sell, and deliver. Also the values of the IT service products are easier to communicate and extract in the business environment.

The social skills of the personnel are essential in professional services. Despite the packaging of IT services in the IT consulting, the need for social skills cannot be ignored. Good social skills to succeed in a customer-IT service provider dialogue are mandatory because of dealing with people-intensive professional services.

Lapierre (1997, p. 393) argues that it is mandatory to develop relationships where all involved actors are part of the value creation process. This will result in satisfied and profitable customers and providers. The need for the social skills of the consultants can be reduced with the packaged IT consulting services, but the situation can be almost the opposite as well. These kinds of cases will most likely come up in situations where the applicability of the packaged IT consulting service is extended to its limits.

The packaging of IT services provides practitioners with some useful insights. From the managerial standpoint it can be seen as an approach that makes it possible for the IT service provider to efficiently produce IT consulting services. The IT service products and their related processes are designed as ready as possible for forthcoming interactions with the customers. As the four-step model suggested, the process is not merely about design and development work, even though this perspective is elemental. If the process is initiated, managers should see that the crucial phases are essential and they cannot be ignored – at least, in terms of the findings of this empirical study. The packaging of IT services is an investment that requires time, resources, personnel, and money. It is the business of IT service packaging. The managers should pay attention to the phases and ensure that they are sufficiently committed to these phases. Thereby, the managers ensure that the design and development of the IT service will ultimately reach a real business value. If these phases are not implemented carefully, the offered IT services will ultimately be nothing more than a pile of MS PowerPoint slides. As a result of the process, the existing IT consulting service will have a clearer focus. What the IT consulting service product includes and what is left outside, what is needed for delivering it, what its delivery time is, and what it costs will be transparently defined. For the IT service provider it is easy to sell. But more importantly, the IT service product reduces the uncertainty of customers, which makes it easy for them to buy it. So, a good reasoning for the adoption of packaging IT services is to keep up with the first selection phase of the customers as they are browsing various IT services in the market. Luckily, the well-defined IT service offering may convince the customer to take the first important step toward the IT service provider.

The IT service products decrease risks in assignments but even the most successful ones have their limitations. It is important for the managers to understand that the IT service products are clearly delimited – they cannot be total “amoebas”, which can be applied in every business case. Advantageous IT service products and their name can be vitiated because of applying them to unsuitable business cases. Moreover, the packaging of IT services is not always a guarantee of a successful perceived customer experience of IT consulting services. This is due to the fact that the nature of professional IT consulting involves person-to-person interactions, which can be neither totally designed beforehand nor predicted. The real manifestation is related to the IT service provider’s consulting offering through individualized human interaction. Naturally, it is not possible to package everything in the wide range of IT consulting services. In general, every IT service product has customizing/tailoring components present, although they are

minimized. On the other hand, there will always remain a need for completely tailored IT consulting solutions for the customer.

The principles of the internal description and the component view answer the question what (a definition interest) and the process and program answer the question how (a realization interest). Altogether, the packaging of IT services forces the IT service provider to consider value-generating issues and processes from the customer's viewpoint in the early phases of the approach. The approach focuses on giving the customer what the customer wants in a co-operation relationship with the IT service provider. Therefore, this approach to IT services design and development is a shift from a transactional approach to a relationship approach – despite the fact that the ideas of the packaging of IT services do not take the total IT service provider organization towards a total relationship management. Having said that, it will require more, a strategic decision, which is founded on – to cite Grönroos (2000), “a marketing attitude of mind” – in every member of the IT service provider organization. Being a part of it, the shift develops an understanding of how to develop, manage, and market IT consulting services both internally and externally.

6.4 Limitations of the research

The major empirical limitation is its sample of one case company. Again, it is not reliable to argue that the process of packaging IT services for IT consulting services can be generalized and thus, applied blindly to other kinds of business environments.

From the research methodology standpoint, the lack of strictness in the empirical study creates some empirical and validity challenges. For instance, reaching the necessary rigor in AR study is a matter of interest for the researchers. If the study is not rigorous enough, it might limit the reliability of the research.

In the long run, the idea was to systematically develop other IT consulting services as well into more profitable and homogenous products. Volatile market situations, various environmental reasons, the contexts where the IT service product is used, and the strategy decisions of the company, or even company mergers – just to name a few, have their effect on the IT service product portfolio. Although the idea of bundling IT consulting services is good it may not guarantee its full implementation as planned in the future.

References

- Agahi, F. (2002) Support consultation by growing agreements. In *Proceedings of DSilage2002 – An IFIP TC8/WG 8.3. Open Conference*. eds. Adam, F., Brézillon, P., Humphreys, and Pomerol, J.-C., pp. 377-386. Oak Tree Press, July, Cork, Ireland.
- Avison, D., Baskerville, R., and Myers, M. (2001) Controlling action research projects. *Information Technology and People*, Vol. 14, No. 1, pp. 28-45.
- Avison, D., Lau, F., Myers, M., and Nielsen, P.A. (1999) Action research. *Communications of the ACM*, Vol. 42, No. 1, January, pp. 94-97.
- Baskerville, R.L. (1999) Investigating information systems with action research. *Communications of the Association for Information Systems*, Vol. 2, Article 19, October, http://www.cis.gsu.edu/~rbaskerv\CAIS_2_19/CAIS_2_19.html, accessed August 31st, 2000.
- Baskerville, R. and Wood-Harper A.T. (1998) Diversity in information systems action research methods. *European Journal of Information Systems*, Vol. 7, No. 2, June, pp. 90-107.
- Bebko, C.P. (2000) Service intangibility and its impact on consumer expectations of service quality. *Journal of Services Marketing*, Vol. 14, No. 1, pp. 9-26.
- Bloom, P.N. (1984) Effective marketing for professional services. *Harvard Business Review*, Vol. 65, No. 5, September-October, pp. 102-110.
- Braa, K. and Vidgen, R. (1995) Action case: exploring the middle kingdom in IS research methods. In *Proceedings of Third Decennial Conference Computers in Context: Joining Forces in Design*. eds. Bødker et al., pp. 50-60. Aarhus, Denmark.
- Brännback, M. and Nieminen, P. (1998) Exploring the relevance of relationship marketing theory in product packaging of IT services. In *Proceedings of the IFIP WG 8.7 Working Conference*. eds. Roche, E.M, Kangas, K., and Suomi, R., pp. 291-309. TUCS General Publication, No. 12, December, Turku, Finland.
- Champion, D. and Stowell, F.A. (2003) Validating action research field studies: PEArL. *Systemic Practice and Action Research*, Vol. 16, No. 1, February, pp. 21-36.
- Checkland, P. (1981) *Systems Thinking, Systems Practice*. John Wiley & Sons, The Pitman Press, Bath, Avon, UK.
- Checkland, P. and Holwell, S. (1998) *Information, Systems and Information Systems making sense of the field*. John Wiley & Sons, Lancaster University, UK.
- Coghlan, D. and Brannick, T. (2001) *Doing Action Research in Your Own Organization*. Sage Publications, London.
- Cope, M. (2000) *The Seven Cs of Consulting*. Financial Times, Prentice Hall, Pearson Education Ltd, London.

- Eppen, G.D., Hanson, W.A., and Martin, R.K. (1991) Bundling - new products, new markets, low risk. *Sloan Management Review*, Vol. 32, No. 4, Summer, pp. 7-14.
- Grönroos, C. (2000) *Service Management and Marketing – A Customer Relationship Management Approach*. Second Edition. John Wiley & Sons, Chichester, UK, New York.
- Gummesson, E. (1978) Towards a theory of professional service marketing. *Industrial Marketing Management*, Vol. 7, No. 2, April, pp. 89-95.
- Gummesson, E. (1994) Service management: an evaluation and the future. *International Journal of Service Industry Management*, Vol. 5, No. 1, pp. 77-96.
- Halinen, A. (1997) *Relationship Marketing in Professional Services – A Study of Agency-Client Dynamics in the Advertising Sector*. Routledge, London.
- Järvinen, P. (1999) *On Research Methods*. Opinpaja Oy, Tampereen Yliopistopaino Oy, Juvenes-Print, Tampere.
- Kaitovaara, P. (2001a) Increasing business-relevancy to the IT service product by the support of packaging of IT services. *TUCS Technical Report*, Turku Centre for Computer Science, No. 391, January, Turku, Finland.
- Kaitovaara, P. (2001b) Packaging of IT services: a business-relevant process for IS development. In *Proceedings of the Second Annual Global Information Technology Management World Conference (GITM 2001)*. eds. Palvia, P. and Chen, L., pp. 215-218. GITMA, June, Dallas, USA.
- Kaitovaara, P. and Hyötyläinen, M. (2002) Towards packaged IT consulting services: an illustrative case from IT business. *TUCS Technical Report*, Turku Centre for Computer Science, No. 470, August, Turku, Finland.
- Kaitovaara, P. and Hyötyläinen, M. (2003) A model for packaging IT consulting services: a case of an IT service provider. In *Proceedings of Second Annual International Outsourcing Conference (Center for Global Outsourcing)*. eds. Palvia, S. and Yee, E., Section 4. Ivy League Publishing, August, New York, USA.
- Kandampully, J. and Duddy, R. (1999) Relationship marketing: a concept beyond the primary relationship. *Marketing Intelligence & Planning*, Vol. 17, No. 7, pp. 315-323.
- Kasanen, E., Lukka, K., and Siitonen, A. (1993) The constructive approach in management accounting research. *Journal of Management Accounting Research*, Vol. 5, Fall, pp. 241-264.
- Kesner, I.F. and Fowler, S. (1997) When consultants and clients clash. *Harvard Business Review*, Vol. 75, No. 6, November-December, pp. 22-38.
- Lapierre, J. (1997) What does value mean in business-to-business professional services? *International Journal of Service Industry Management*, Vol. 8, No. 5, pp. 377-397.
- Lau, F. (1997): A review on the use of action research in information systems studies. In *Information Systems Research: Information Systems and Qualitative Research*. eds. Lee, A.S., Liebenau, J., and DeGross, J.I., pp. 31-68. Chapman & Hill, London.
- Levitt, T. (1981) Marketing intangible products and product intangibles. *Harvard Business Review*, Vol. 59, No. 3, May-June, pp. 94-102.

- Lipiäinen, T. (2000) *Liiketoiminnan suunnittelu, markkinointi ja johtaminen uudella vuosituohannella (Business Planning, Marketing, and Leading in a New Millennium)*. Kaupunkitohtorit Oy, Gummerus Kirjapaino Oy, Jyväskylä.
- Morral, K. (1996) Measuring new product's worth. *Bank Marketing*, Vol. 28, April, pp. 42-49.
- Nieminen, P. (1997) *IT Department Service as a Product: Benchmarking as Support for Professional Service Product Development – Case Oy L M Ericsson Ab*. Master's thesis, University of Turku, Computer Science, Information Systems, Turku.
- Nieminen, P. and Auer, T. (1998) Packaging of IT services. *TUCS Technical Report*, Turku Centre for Computer Science, No. 190, July, Turku, Finland.
- Rao., P.M and Klein, J.A. (1994) Growing importance of marketing strategies for the software industry. *Industrial Marketing Management*, Vol. 23, No. 1, pp. 29-37.
- Reinilä, I. (1995) *Konsultointiosaaminen ja sen kaupallistaminen ja kehittäminen (Consultancy Know-how, Its Commercialization and Development)*. Working Papers, Helsinki School of Economics and Business Administration, W-119, maaliskuu (March), Helsinki.
- Sempels, C. (2002) The possible contribution of the brand in the process of service tangibilisation. In *Proceedings of the 7th International Research Seminar in Service Management*. pp. 410-422. La Londe les Maures, May, France.
- Shostack, G.L. (1977) Breaking free from product marketing. *Journal of Marketing*, Vol. 41, No. 2, pp. 73-80.
- Shostack, G.L. (1984) Designing services that deliver. *Harvard Business Review*, Vol. 62, No. 1, January-February, pp. 133-139.
- Sipilä, J. (1996) *Asiantuntijapalvelujen tuotteistaminen (Packaging of Professional Services)*. Ekonomia-sarja, WSOY, Porvoo.
- Stowell, F., West, D., and Stansfield, M. (1997) Action research as a framework for IS research. In *Information Systems: An Emerging Discipline?* eds. Mingers, J. and Stowell, F., pp. 159-200. Information System Series, The McGraw-Hill Companies, University Press, Cambridge.
- Susman, G.I. and Evered, R.D. (1978) An assessment of the scientific merits of action research. *Administrative Science Quarterly*, Vol. 23, December, pp. 582-603.
- Turner, A.N. (1982) Consulting is more than giving advice. *Harvard Business Review*, Vol. 60, September-October, pp. 120-129.
- Yin, R.K. (1984) *Case Study Research: Design and Methods*. Sage Publications, Thousand Oaks, CA.

The Internet sources:

<http://www.sonera.com>, accessed January 9th, 2001.

<http://www.sonerajuxto.com>, accessed September 1st, 2000.

<http://www.teliasonera.com>,

accessed February 10th, 2003 and April 25th, 2004.

A selection of internal company documents

Presentation materials and slide sets (2000):

Content description;

Internal marketing slides;

Outcomes presentation; and

Selling/Marketing slide.

Documents (2000):

Business plan;

Contractual documents;

Documents for answers;

Price list;

Project plan;

Marketing document;

Methodological document;

Methodological document (short);

Offering documents; and

Questionnaire document.

Acronyms and abbreviations

ad hoc	For this special purpose
as-is	The existing (initial) state of service processes
AR	Action Research
ASP	Application Service Provision, Application Service Provisioning, and often referred to as Application Service Provider
DOS	Disc Operating System
IS	Information Systems
ISD	Information Systems Development
IT	Information Technology
LAN	Local Area Network
MS	Microsoft
PC	Personal Computer
SLA	Service Level Agreement
SMEs	Small and Medium-sized Enterprises
TCP/IP	Transmission Control Protocol/Internet Protocol
to-be	The defined future (goal) state of service processes, which is based either on incremental improvement or radical transformation.

List of figures

Figure 1:A. A completed research process of the Case IT Consulting Services.	383
Figure 2:A. Action research combined with constructivism.....	386
Figure 4:A. A tentative process of the Case IT Consulting Services.....	399
Figure 5:A. Bundling IT service products.	406
Figure 5:B. Realized steps towards packaged IT consulting services.....	406
Figure 5:C. From the existing IT service to the new IT service product: Case IT Consulting Services.	408

List of tables

Table 5.A. Description of the phases of the packaging of IT services in Case IT Consulting Services.	409
Table 6.A. Advantages of the new IT service product compared with the existing IT service.	414
Table 6.B. Disadvantage of the new IT service product compared with the existing IT service.	415

Personal communications – case discussions

Case entry and exit: March, 2001 - May, 2001

Discussions held in March, 2001 (the first assignment meeting March 15th, 2001) - May, 2001 (end of the AR project, although it continued with piloting and some other phases, supported by Methodology Expert Mika Hyötyläinen)

Researcher: Petteri Kaitovaara (the author)

Project Team (Sonera Juxto Oy, Professional Services/Consulting Team with a participant from Sonera Juxto International):

Hyötyläinen, Mika, Methodology Expert, Sonera Juxto International,
Concept/Service Development; Mäkelä, Riitta, Consultant; Oтра-aho, Ville,
Consultant; Kaitovaara, Petteri (the author as Head of Consulting Team).

Otala, Tuomas, Unit Manager, Sonera Juxto Oy, Professional Services,
several meetings and telephone conversations.

Turku Centre for Computer Science

TUCS Dissertations

25. **Shuhua Liu**, Improving Executive Support in Strategic Scanning with Software Agent Systems
26. **Jaakko Järvi**, New Techniques in Generic Programming - C++ is more Intentional than Intended
27. **Jan-Christian Lehtinen**, Reproducing Kernel Splines in the Analysis of Medical Data
28. **Martin Büchi**, Safe Language Mechanisms for Modularization and Concurrency
29. **Elena A. Troubitsyna**, Stepwise Development of Dependable Systems
30. **Janne Näppi**, Computer-Assisted Diagnosis of Breast Calcifications
31. **Jianming Liang**, Dynamic Chest Image Analysis: New Model-based Methods for Dynamic Pulmonary Imaging and Other Applications
32. **Tiberiu Seceleanu**, Systematic Design of Synchronous Digital Circuits
33. **Tero Aittokallio**, Characterization and Modelling of the Cardiorespiratory System in Sleep-disordered Breathing
34. **Ivan Porres**, Modeling and Analyzing Software Behavior in UML
35. **Mauno Rönkkö**, Stepwise Development of Hybrid Systems
36. **Jouni Smed**, Production Planning in Printed Circuit Board Assembly
37. **Vesa Halava**, The Post Correspondence Problem for Marked Morphisms
38. **Ion Petre**, Commutation Problems on Sets of Words and Formal Power Series
39. **Vladimir Kvassov**, Information Technology and the Productivity of Managerial Work
40. **Franck Tétard**, Managers, Fragmentation of Working Time, and Information Systems
41. **Ján Mañuch**, Defect Theorems and Infinite Words
42. **Kalle Ranto**, Z_4 -Goethals Codes, Decoding and Designs
43. **Arto Lepistö**, On Relations Between Local and Global Periodicity
44. **Mika Hirvensalo**, Studies on Boolean Functions Related to Quantum Computing
45. **Pentti Virtanen**, Measuring and Improving Component-Based Software Development
46. **Adekunle Okunoye**, Knowledge Management and Global Diversity: A Framework to Support Organisations in Developing Countries
47. **Antonina Kloptchenko**, Text Mining Based on the Prototype Matching Method
48. **Juha Kivijärvi**, Optimization Methods for Clustering
49. **Rimvydas Rukšėnas**, Formal Development of Concurrent Components
50. **Dirk Nowotka**, Periodicity and Unbordered Factors of Words
51. **Attila Gyenesei**, Discovering Frequent Fuzzy Patterns in Relations of Quantitative Attributes
52. **Petteri Kaitovaara**, Packaging of IT Services – Conceptual and Empirical Studies

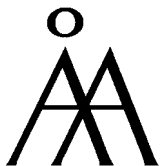
TURKU
CENTRE *for*
COMPUTER
SCIENCE

Lemminkäisenkatu 14 A, 20520 Turku, Finland | www.tucs.fi



University of Turku

- Department of Information Technology
- Department of Mathematics



Åbo Akademi University

- Department of Computer Science
- Institute for Advanced Management Systems Research



Turku School of Economics and Business Administration

- Institute of Information Systems Sciences

ISBN 952-12-1392-2
ISSN 1239-1883