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Building a Service-Centric Business Model in SMEs in the Business-to-Business Context

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***Abstract*—**Building a service-centric business model requires new knowledge and capabilities in companies. This paper enlightens the challenges small and medium sized firms (SMEs) face when developing their service-centric business models. This paper examines the premise for knowledge transfer and capability development required. The objective of this paper is to increase knowledge about SME's transformation to service-centric business models.This paper reports an action research based case study. The paper provides empirical evidence from three case companies. The empirical data was collected through multiple methods. The findings of the paper are: First, the developed model to analyze the current state in companies. Second, the process of building the service – centric business models. Third, the selection of suitable service development methods. The lack of a holistic understanding on service logic suggests that SMEs need practical and easy to use methods to improve their business

***Keywords*—**service-centric business model, service development, action research, case study

I. Introduction

BUILDING a service-centric business model requires new knowledge and capabilities in companies [1]. This paper uses service development methods in building a service-centric business model for small and medium sized firms (SMEs) that are involved in business-to-business service.

To support companies, to engage with service design as the collaborative process of improving the value of service offerings, requires new knowledge. Companies seem to need information and also education on methods and techniques they can use in development and deployment of service innovations.

In business development, the recent focus has been on service business and how companies can utilize the service logic. The service-orientation approach is seen as the next phase in management of businesses.

Service development and innovation are seen as vehicles for improved business. However, capabilities related to service development and service innovation are not necessarily evolved in companies. Especially, in small and medium sized companies (SMEs), related knowledge may be at infant state.

The shift to service logic requires more research and innovative tools especially in b-to-b services (e.g.[2]). Similarly, SMEs seem to need more research and tools in this field, because previous research has focused on understanding the transformation to service logic in large companies. Therefore, most of the existing findings cannot as such be transferred to the context of SMEs [3]. The management of SMEs is often focused on daily issues and systematic, long-term business development gets less attention [4]. On the other hand, SMEs have some unique advantages.

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For example, SMEs can move faster and adapt more readily to emerging opportunities than large companies [5].

The question, how SMEs can build up their knowledge and capabilities needed in application of service logic and developing their service business, is becoming more significant. This paper enlightens the challenges SMEs face when taking the first steps in development of their service-centric business models.

This paper examines the premise for knowledge transfer and capability development required in service business development and innovation. This is a quasi-conceptual study, which is based on an extensive literature analysis on knowledge transfer and capability development related to service logic. The paper also provides empirical evidence from three case companies.

The objective of this paper is to increase knowledge about SME's transformation to service-centric business models. The need for service-centric business models emerges from the recent literature. This will be discussed further in chapter 2. The paper first looks in the theoretical paradigm shift from industrial logic to service logic, which explains the need for diverse activities. In the light of the service thinking, the paper suggests the learning of service development methods that provide the competences needed to carry out those activities. This will also be elaborated further in chapter 2.

II. Literature Review

Management science aims to discover, how social groups exists and can produce together more than a simple sum of their individual expertis [6]. The theoretical background for scientific management is relatively well known and incorporated in the current mainstream theories in management.

In short, the scientific management views organizations as mechanistic systems [7] in which the predictability and adaptation to external changes is important. Furthermore, managers increase control within the organization and design organizations explicitly to fit forecasted changes. Deterministic and planned behavior assumable leads towards optimal efficient performance and required coordination is achieved through hierarchical structures. The rules and interactions between different parts are set and the system performs the designed activities.

The main contribution of the scientific management was the stability and efficiency approach. [7]-[8] This premise manifests itself in the industrial logic, which is the traditional manufacturing based view on business. Hence, the strategic choices and business models were created under these assumptions. However, neither the business environment nor the behavior of ecosystem is any more stable, predictable, or controllable by a single firm. Different premises are sought.

A. The paradigm shift and its impacts

As part of the theoretical paradigm shift, recent research suggests the transformation from the goods dominant logic (GDL) to service dominant logic [9]. According to the service dominant logic (SDL), service means the application of competences for the benefit of another, and service is in the focus of economic change [10]. Reference [11] suggest that "*As service logic is a logic of value creation and addressing equity in on-going relationships between market actors, the creation of reciprocal value can be considered the basis of business*".

Service logic is particularly challenging for companies who have applied the goods dominant logic. The transformation from the GDL to SDL brings along a shift form the production of the value for the customer to the co-creation of value with the customer [12]. The shift away from the GDL that sees value embedded in products and services (value-in-exchange) to the SDL, where the value is embedded in personalized experiences (value-in-use), is fundamental (e.g.[13]). Value-in-use means that value emerges when the customer uses the service (e.g. [14]). In SDL, value becomes a joint function of actions of the provider and the customer, yet, it is always determined by the customer [10]. Customers both define and create value, and the co-creation experience of the customer is the very basis of value [13]. To sum up, customer value creation and the value-in-use concepts are foundational issues for understanding the service logic.

The service logic puts demands for strong service orientation in the business strategy. A strategy defines an overall direction to a company by specifying the company's mission, vision and objectives. It provides direction for growth and success, and prioritizes investments. The service logic is a strategic issue since it highlights the importance of companies viewing themselves clearly from the customer value perspective, and understanding service as the fundamental basis of all business. Companies need a service orientation in the strategy for an effective value creation [15].

A service-oriented strategy requires a very different approach than the traditional business strategy. While the traditional approach sees that value is embedded in the manufacturing products or services (value-in-exchange) and delivering value means selling to customers. A service strategy instead focuses on customer experiences and value co-creation in the consumption stage (value-in-use). The service oriented strategy emphasizes the service as a relational, co-creative process of creating benefits (see [12]).

A service-oriented strategy means that strategies and business models integrate service provider's processes with the customer's value creation processes (see [11]). The formulation of a service oriented strategy starts by understanding the customer's value creating processes and selecting which of these processes the service company wishes to support. The customer's value creation process can be defined as "a series of activities performed by the customer to achieve a particular goal" [16].

The positioning within the customer's processes defines the support and thus the scope of the value proposition. In other words, planning for the service-oriented strategy is outside-in as it starts from an understanding of the customer's value creating processes, and aims at providing support for better co-creation of value creation (see [16]). It must therefore be recognized that the paradigm shift to service logic, its application in service -oriented strategy and impacts on how companies view business models and their development, have significant changes in companies. Next, the business model concept is elaborated.

B. Business model concept and its evolution

The recent paradigm shift from industrial logic to service logic has also been visible on the recent research on business models. A business model aims to explain with a certain framework, how business ideas and technologies are linked to economic outcomes through variety of functions [17]. The concept of business model emerged heavily on management literature and discussion during the change of this century with the emerging ICT solutions and ebusiness landscape. Even conferences were dedicated solely to business model research in the context of eTransformation. The business model research on that time was heavily based on building business models to run contemporary ebusiness. Reference [18] elaborated the discussion with framework for structuring business model research into sub-domains, provided business model definition framework, components framework, and taxonomies framework. The research suggests variety of ICT related taxonomies for internet and electronic markets that also relied on characterizing and categorizing, and naming the various business actors from customer relationship or technology dimension approaches [19-24]), grouping into types of business models [17] or specifically transactional based ebusiness models [25]. To summarize, the business models of that time were still based mostly on goods dominant logic and on the configuration of actors. The shift towards service logic roused quickly with the growth of the novel service businesses. The strategic premises were still not the starting point, although, reference [26] takes the strategic approach stressing the service oriented strategy perspective on his analyzes on corporate level.

The conceptual framework for studying business models for mobile ICT services [27] led to discussion of which business model design variables and characteristics are important for service point of view, and how design variables relate to each other. This in turn led to a lot of descriptions and further development of business model elements such as the 4 pilars of the business model ontology [28] in which the business model was primarily seen as a revenue model. reference [24] contribute the business model discussion by including innovation into it. They also suggest business model as a tool for mediating the technical and market dimension in value creation process. reference [29] developed their ideas further and suggested a model with nine key elements. Similarly, [21] focused on four basic asset right models and 4 types of assets bringing out the service design and service value.

Reference [30] stated that business model is a blueprint of how a network of cooperating organizations intends to create and capture value in innovative services or products. Earlier, they already had introduced the STOF model for mobile service business [30]. The models introduced here are relatively similar and pinpoints the directions where to look in business development. They do not, however, specify any means to succeed further. The first steps to this direction were made by [32] who introduced business model canvas technique for generating the business models. This technique was pointing to service logic and was actually also partially co-created within the community of enthusiasts.

The short introduction of the evolution of business model concept through definition, classification, component and element groupings, and reference models and ontologies towards the application and operationalization of the concepts show the results of multitude research. Also, reference [33] observes the move away from the buzz-word of the internet boom. Similarly, as a strategy development has provided new opportunities to business companies, business model innovations have already reshaped the industries [34]. While earlier focus of the research was immensely on technological domains, the recent value domain discussion has contributed the progression of business models to become less industry specific. It seems that the descriptive research discussed provides room to more practically oriented research.

C. Service development competences and skills

This paper suggests service logic as new competence domain for business development. Consequently, the engaging collaborative method for companies to improve the value of their products and services requires support in companies. Companies need information and also education on methods and techniques they can use in development and deployment of service innovations. While the previous paragraphs discussed the paradigm change in thinking i.e. increasing service logic emphasis in creating ideal service business, the paper has suggested service development competences as means to achieve those business objectives.

Companies have various choices in building capabilities. They can, for example, buy or rent skills and competences outside the company. This could be short-sighted if not combined with simultaneous knowledge transfer efforts. Training and educating employees, on the other hand, would be lengthy, yet, long-lasting activity. New recruitment of new employees with required skills and competences, again, would require monetary resources and service logic based knowledge. Understandably, smaller companies would have fewer resources in any of those opportunities than larger companies.

The recent collaborative effort [32] in generating more value from the business and improve the design of future organizations by using service logic approach resulted in business model canvas approach. This method operationalizes business development and provides systematic approach and facilitates needed discussions within the value chain.

This paper describes a model for companies in business services to follow in order to build their service-centric business model. The model is based on the notion that business models will help in achieving the innovative service.

Service development competences are distinctive competences, which rely on service theories (knowledge) and their implications in practice [1],[35]. Furthermore, they relate to on both domains: service provider's and customer's domain. The service development skills include variety of methods, models, techniques, and tools that have originated in the past decades in different academic fields. The competences are also based on the understanding of the iterative and processual nature of service development. Several service process models are identified [1], [36]-[41]. Common in all of these is the step phases. For each development phase, a wide variety of service design tools are suggested [36],[40]-[41]. The business practitioners need competencies that combine both business management and design competences [35]. These are the competencies and skills that companies need in constantly changing business landscape. This paper sees this approach as a starting point, yet, not a complete solution. More details are needed. New models are needed.

Reference [17] argues that business companies should open up their business models in order to attract more external ideas in and more internal knowledge out. The evidence provided by this literature review seems to indicate that new competences are needed to tackle the issue of business model development and to ensure its service logic use. This paper argues that there is a gap in between the knowledge and capabilities on, how to build a service-centric business models in companies. There is multitude of research explaining what needs to be done. However, it provides little instructions on how the work could be done. This paper suggests business model development as a logical step after strategy development, yet, before the further operational development.

What can SMEs do in order to get onto bandwagon? The development of business is ever increasingly important and novel competences are needed to complement the existing ones. A recent report [42] on knowledge transfer in service business development evaluated transfer mechanism examples in Finland. These mechanisms included six knowledge transfer mechanisms: 1) training, 2) media, 3) project cooperation, 4) partnerships, 5) infrastructure and resources, and 6) communities. The perspective taken was the intermediary organizations. While this report provided extensive results, it did not focus on the company constraints such as size, experiences, and resources. Further, it did not discuss operationalizing matters. This research draws attention to other means to inquire competences.

To summarize this discussion, the paper looks project cooperation [42] as a means to create service development competences and skills [35] needed to help SMEs to innovate their business to fit better in service business. In order to analyze the knowledge and capability requirements in companies, the research approach is introduced.

The following chapter describes the research strategy and design. Furthermore, the next chapter discusses the methodological choices.

III. Research Design

The present study is an action research based case study. Next, the characteristics of action research, case study and their use in the present study are briefly explained. First, the research strategy is elaborated.

A. Research strategy

A research strategy explains the mission, vision and objectives of the research. Development of a research strategy is an important activity to ensure adequate resources and their available to complete the study in time. The strategy guides the design of the research in order to achieve the set objectives.

This research aims to understand the challenges that SMEs face when transforming their business closer to service logic. Transferring service knowledge to SMEs research project was conducted during January 2011 – March 2012. This paper reports findings from that research. The mission was to build competencies, and capabilities required in service logic mindset. The vision of the research project was to create a model for new competence transfer. The objective of the project was to increase knowledge about SME's transformation towards service-centric business models. Further, the research evaluated the information and education the companies need on service development methods and techniques to improve their business development

The increasing awareness of service business increases the needs in companies. The competence needs are changed due to the service mindset growth. For SMEs, the service business creates opportunities to renew activities, create diverse activities, and increase value creation. Service mindset building, service culture implementation, the learning of service development methods, and service business understanding, are crucial phases in service knowledge transition to companies. The goal of the project was to create and disseminate such a tools and models that ease the SMEs to adopt service business approach and mindset.

The idea of action research was introduced by [43] and several definitions have been provided for action research [44]-[47]. In action research, the purpose is to develop solutions to practical problems and at the same time develop new knowledge. The person involved with conducting action research is, on one hand a change agent in practical problem solving, and on the other hand an academic researcher developing a theory [48]. According to [49] "*action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework*." A researcher faces two goals: (a) to solve a practical problem within an organization, and (b) to generate new knowledge and understanding about other organizations [50]. According to [51] action research consists of: (1) a group of people involved in planning, acting, observing and reflecting upon what had happened, (2) people involved in improving workgroup processes of action, (3) people involved in solving practical problems about which little is known, and (4) at least one report to the organization about what was found. reference [48] distinguishes four types of action research for management:

- Societal action science (the traditional type where researchers help underprivileged groups to solve problems)
- Management action science (where the purpose is to understand organizations, markets and customers better, usually to make an operation more efficient)
- Real-time action science (working in a research project planned for action research)
- Retrospective action science (letting past experience and action through later scholarly reflection become data in a research project)

This research incorporates all and is a combination of the above mentioned action research types.

A case study may apply action research approach or vice versa [52]. The central characteristics of a case study approach are [48]-[53]:

- *Holistic and detailed understanding.* The case study approach consists of a detailed examination of a single phenomenon. A case study reveals the holistic and meaningful characteristics of real-life events, such as organizational and managerial processes.
- *Single and multiple case studies*. Case studies can involve both single and multiple cases. Single case studies are often used and it is proposed that a single case would provide better theoretical insights than multiple-case study based on creating good constructs. On the other hand, multiple-case studies are useful in creating a theory because they permit replication and extension among individual cases.
- *Qualitative and/or quantitative data.* The empirical evidence of a case study may be qualitative, quantitative, or both. The case studies typically include multiple sources of evidence in the data collection: interviews, direct observation, participant observation, documentation, archival resources, and physical artifacts. Each form of empirical data requires its own techniques for collection and analysis.
- *Purpose to provide description, develop theory, or test theory*. Case studies may be descriptive, exploratory, or explanatory. Thus, case studies can be used to accomplish various aims: to offer description, to develop a theory, and test a theory.

B. The research design and selected methods

In this study, data is generated from three case companies. All the selected companies have an intention to, first, transform to and, second, grow in the service business. Furthermore, they are all either currently developing new service concepts or have identified a need to develop service logic based businesses. As such, the case companies are all in different stages in the transformation process.

Case studies and building the business model was implemented in 2011. The three case company participants, their customers, and the members of research team were the co-creators.

With each case company, the operational model was slightly different and by analyzing and comparing various ways of working, the novel service-centric model emerged. With the three selected case companies, the research progress was at best because of their willingness to contribute time and effort to improve and develop their business. However, it followed the basic research flow depicted in fig1.

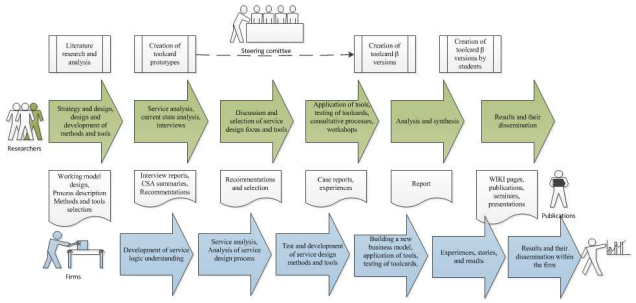

Fig. 1 The research project flow

All of the three case companies mostly functioned according to the goods dominant logic. However, they had noticed already the need for change and envisioned service competence needs. The service logic was seen as basis for competitive advantage and reform internal operations. The case companies saw their customers as important and centric to service development. The case companies were:

A – a software industry company, specialized in environmental company resource planning systems. With the application customers can manage their recycling and waste collection processes from waste collection to handling to invoicing and reporting. The company also provides online web portals and other applications to their customers. The customers are private environmental companies, who transport and handle waste, and also public administrated waste management companies.

B – an independent division within an industrial group, an industrial service solution provider with world-leading positions in compressors, expanders and air treatment systems, construction and mining equipment, power tools and assembly systems. With innovative products and services, it delivers solutions for sustainable productivity.

C – a 5-year-old start-up technology company, which use Bluetooth technology solutions. The business idea is based on collection, analyses, and follow-up of their customers' customer flows

The empirical data was collected through multiple methods: interviews, analysis of the company-specific materials such as strategy, offering, and process descriptions, workshops, discussions, and observations.

Limitations of the research are as follows: The discussion of knowledge transfer and capability development in this paper is limited to service logic and service business development. Further, the discussion is limited to service development methods that provide a solid context-specific areas for analysis. Thirdly, the discussion is limited to SMEs, which have relatively little resources.

Service development and innovation are seen as vehicles for improved business. However, capabilities related to service development and service innovation are not necessarily evolved in companies with the rapid phase of scientific research. Especially, in SMEs, due to the limited resources the related knowledge may be at infant state.

A descriptive multiple case study approach was selected. As discussed earlier, the case study approach allows an investigation of the holistic and meaningful characteristics of real-life events. And also enable detailed examination of examples of phenomena. Multiple case studies approach was chosen because it permits replication, comparison, and extension among individual cases. Further, it enables the development and elaboration of the through complementary aspects of a phenomenon. In this research, empirical evidence is qualitative data and collected through interviews, direct observation, participant-observation, documentation, archival resources, and physical artifacts. The following paragraphs describe the research results in more detailed manner.

IV. Findings From The Research

The research team developed a model to analyze the current state in companies. The purpose of this phase is to show where the case companies are in their service thinking and its application. The data collection included interviews, case company internal materials and observation. The research team contacted and agreed at least three separate workshops with each case company. The first workshop was the individual company kick off: A project plan was co-created and included information such as the company basic information, participants, objectives for the research and business development, a rough schedule of the phases, and anticipated results. The second workshop was dedicated to the analyses of the current state of the business. The research team chose Strategy Diamond model [54] and modified it to fit the context. The model provides holistic and strategic view and as such fits well in the activity. Interviews were selected to collect the data.

The Strategy Diamond model includes the strategic management theory, and integrates five forces that drive a company's evolution. These five forces are: the company's official strategy, basis of competitive advantage, distinctive competencies, strategic actions, and internal selection environment, the position, resources, as well as formulation and implementation of strategy [54]. The model is illustrated in fig. 2.

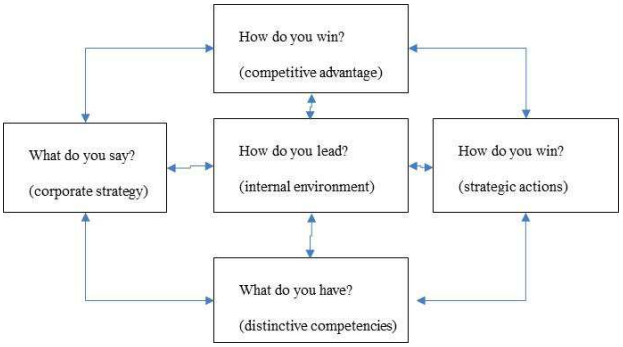

Fig. 2 Strategy Diamond Model (modified [54])

The persons interviewed were responsible for the overall business or service business development. The data collection was based on thematic, semi-structured interviews. The questions dealt with the following subjects: company's strategy and service logic understanding status, customer relationships and customer insight, service development processes, and management and leadership practices.

Typically there were two interviewers: one for conducting the interviews based on the semi-structured questions, and another to take notes during the interview. The interviews lasted for 1 ½ - 2 hours. For the purpose of analysis, interviews were transcribed. For each case interview, a written report was created. The case company status was analyzed using content analysis and categorized in terms of statements given by the interviewees. Each interview team analyzed and summarized the key findings of the interviews (CSA summary). A shortlist was created for discussion purposes.

The strategic diamond model was used to create the thematic interviews. As a result of the interviews, a case company description was created. Further, the advantages and challenges were identified by the researcher team. The analysis information was used later by the research team in selection of methods for each case company. The third workshop included discussion with the results of the current state analysis with the case company. This workshop included also discussion of further information needs, such as suggestions for reading materials, and discussion of the suggested methods..

The findings of the research are discussed next. The first finding is the results of the current state analysis. The summary is provided in table I.

TABLE I
SUMMARY OF THE CURRENT STATE ANALYSIS

Summary of the current state analysis	
Strengths	**Weaknesses**
Active customer collaboration by frontline employees	Weak service mindset across the company
Some signals of early customer involvement in the service	Weak service concept definition and commercialization
Strong focus on customer satisfaction	Service delivery process, roles, and tasks not defined
New service concepts under	More systematic service idea generation
Production-based processes function well	Low level customer participation in new service development
Well-defined portfolio of goods	Clear decision points missing in the service development process
	Scalability and repeatability of service concepts
	Service innovation process not well

Table I shows the lack of understanding of the service logic, which is reflected in strategic thinking, customer relationships, service development processes, and also general management practices.

The second finding of the research, is the developed process of building service-centric business model. The third finding is the selection of suitable service development methods to be used in each development phase. These are elaborated in the table II.

Based on the current state analysis the following process of building service-centric business model was developed (see fig. 3). The process helped researchers to capture the essential information where improvements were needed. It includes four development phases:

1. Capture customer insight
2. Position new idea in the offering
3. Conceptualize new service
4. Service Launch & Scale-up

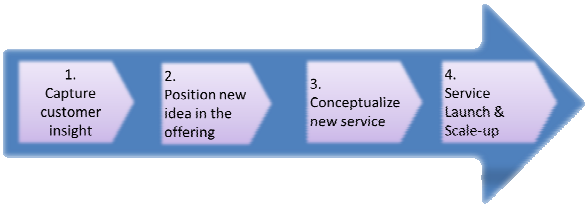

Fig. 3 Process of building service-centric business model

The building of service-centric business models starts with capturing customer insights. This is important because the service logic focuses on customer experiences and value-in-use. After the in-depth capture of customer needs, the service offering needs to be strategically position within the existing value offerings. The next central phase is the solid and practical conceptualization of the new service-centric business model. During this phase, the service-centric business model is built. The last phase is implementation of the developed service business model. This includes the scalability and launch of business model.

The research team evaluated a selection on possible service development methods for each of those development phase.

The premise for the selection of methods was, firstly, easy to use and rapid to apply, and, secondly, the practical and tangible methods in effective building of the service-centric business models (cf. [4]).

For each case company, each phase was evaluated. In discussions with the case company representatives, the selection of improvement areas was identified according to the process. For each of the four phases, the research team suggested a selection of service development methods. These were discussed with the case company representatives. Based on the specific needs identified in the current state analysis, the research team suggested suitable methods to be tested in the case companies. In collaboration with research team and case company, the selection of methods was decided.

TABLE II
THE TESTED METHODS

Phase of the service development process	Service development method	Main source of information
1 phase - Capture customer insight	Service blueprint	Bitner , Ostrom and Morgan 2008 [55], Zeithaml et al. 2008 [41]
	Service story	Nyman et al. 2011 [56]
	Probes	Mattelmäki, T. 2006 [57]
2 phase - Position new idea in the offering	Strategy diamond model	Burgelman et al. 2008 [54]
	Value proposition	[58] Anderson,J.C., Narus, J.A. and
3 phase - Conceptualize new service	Attributes benefits table	Woodruff 1997 [59]
	Business model canvas	Osterwalder & Pigneur 2002, 2010 [28],[32]
	Service story	Nyman 2011
	Service flower	Lovelock & Wirtz 2011 [60]
4 phase - Service launch & scale-up	Service blueprint	Zeithaml et al. 2008 [41]
	Productization document check list	

Table II illustrates the service development methods used during the research.

The practical implications of this research include the versatile outcomes discussed next. Based on the research data, the studied case companies did not have a holistic understanding of service logic. Customer orientation and methods to capture customer insight tend to vary from one company to another. Knowledge of service satisfaction and customer business processes were gathered through traditional structured surveys, key sales activities, and scheduled meetings with customers. Also the operations were based on industrial logic and manufacturing focused. The empirical data on new service development suggested that the case companies emphasized speed and flexibility of creating the service instead of collaborative methods and early customer engagement.

Furthermore, through the testing of the service development methods and as a main outcome of the research includes the following:

1. Service understanding improved in the case companies
2. The case company learned to work with their B2B-customers as well as with their end-customers.
3. The case companies took in the customers proactively into the service development process, which improved the customer understanding and identification of their needs
4. The understanding of customer's service processes was learned and included into own processes. This changed the overall service processes and improved the discussion with customers.
5. Customer-centricity was evident in the language used; the case company representatives learned to communicate better with their customers.
6. Case companies learned to develop and document their service concepts and processes, which formed the basis for the competitive advantage.
7. Case companies learned to approach new customers with service mindset and focusing on the benefits from the customers' point of view.
8. Collaboration in diverse levels and participants increased
9. Tested service development methods for building a service-centric business model were identified

This paper presents a case study research in which three SMEs were analyzed. The case companies represented various industries. The number of cases provided rather limited view. However, the similarities between the firms indicate a strong need for this type of concrete research. The research design and implementation as well as the collaboration with the case companies were fluent. The case companies were enthusiastically involved and genuinely wanted to learn and develop their competencies. The research process and outcomes were usable for the case companies and provided value for all of the participants. The tangible nature of this research provided an original setting.

V. CONCLUSIONS

This study shows that SMEs lack understanding of service logic in general. This is evident and reflected in their strategic thinking, customer relationships, service development processes, and management practices.

The findings of the research indicate that SMEs need practical and easy to use methods. Especially, in the phases 1 and 3 during the service-centric business model development process e.g. to get deeper customer insights and to develop tangible service concepts based on those insights. New kind of practical methods, which can be easily and also rapidly applied by SMEs, are needed to help them in their transformation towards service-centricity.

The following figure shows the elaborated research overview for the development of the service-centric business model. This overview was the outcome of the research. It has been detailed in the earlier discussion.

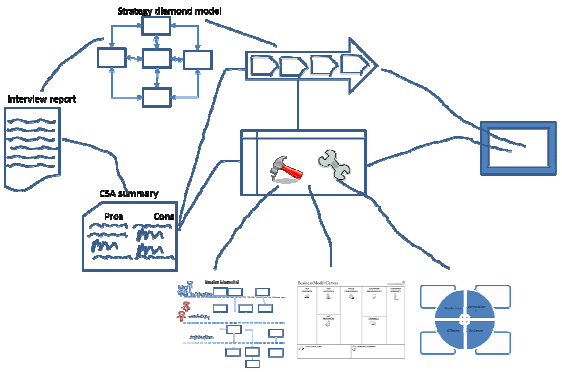

Fig. 4 An elaborated research overview for the service-centric business model development

The research provided opportunities for SMEs to acquire the latest knowledge of the field. And during the research, exploring, testing, and development took place in collaboration and through co-creation between all stakeholders. With tangible methods and guidelines, the case companies learned new service-centric methods, competencies and skills. Especially, the SMEs learned to include customers in their processes. They learned to use these methods and can therefore use them in future. Further, the SMEs' way of working transformed to customer-centric. They sought more interaction with their customers and understood that they can learn from the customers. This is a clear sign of increased value co-creation centricity embedded in the service logic. This in turn evidently shows improved service mindset.

The SMEs transformed their business activities to service logic: The SME transformed into service driven company. Their business is now based on service strategies and understanding of service logic. Further, the customer insights and improved interaction is applied. This means that service is co-created with customers and based on customer needs, tangible benefits, and documented processes. Also, the modus operandi of the SMEs changed: the decision making took more customer understanding into consideration, communication increased, and roles and activities were re-defined.

Based on the research, we suggest that SMEs could build up their service business development capabilities in multiple ways. As with case of any novelty, also service logic, requires versatile analysis. This paper is an attempt to bring forward the possibilities the companies, and especially SMEs face, when novelty takes place in business model development.

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