How to research e-services as social interaction: Multi-grounding practice research aiming for practical theory

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Abstract

This research on e-services represents a move away from a techno-centric view of e-service to seeing them as embedded in social interaction. The consequences of this focus shift are described in relation to how to conduct such research. The research approach of a large research endeavour, ranging over several years, is described. The research is characterised as practice research with the purpose of creating abstract knowledge aiming for both the practice field (general practice) and for researcher communities (as an addition to scientific body of knowledge). The knowledge result from this practice research has been given the form of a practical theory of e-services, with the intention to be useful for both practitioners and researchers. A practical theory is aimed to be useful in investigating and managing some phenomenon. The e-service research has also applied the epistemological strategy of multi-grounding. Multi-grounding means a combination of empirical, theoretical and internal grounding. The research principles of practice research, practical theory and multi-grounding are described. How these principles are applied in the e-services research is elaborated. Experiences from the use of this research approach are accounted for.

Keywords: E-service, social interaction, practice research, practical theory, multi-grounding

1 Introduction: A research interest for e-services as social interaction

1.1 Systems, technologies or services?

The advent of e-services is not only a result of technological development. There is also a social development underlying the emergence of e-services. This intertwined social and technological development depends on new views of IT use. As Dahlbom (2002) describes about IT perceptions, there is a shift from a systems view towards a

service view. Service means that the use of IT is designed for customers. There is someone outside the service providing organisation that uses the service. We apply here a broad view on services and customers. In this view the concept of customer encompasses paying and non-paying actors, both individual humans (consumers) and companies. This broad interpretation of the customer concept also includes citizens using e-government services.

This research represents an interdisciplinary view on e-services founded in service marketing and information systems. The discipline of service marketing (SM) contributes with an elaborated service perspective (e.g. Grönroos, 1990; Edvardsson et al, 2000; Gummesson 2002). However, concerning electronically mediated services SM seems to apply a too restricted view. The dominating concept is self-service technology – SST (e.g. Dabholkar et al, 2003; Meuter et al, 2000). The term SST is established in service marketing for services provided through the use of IT systems in the interaction between service providers and customers. SST focuses on how the customer and the service provider use IT systems when provided. Essential in the concept of SST in SM is that service providers automate some of their repetitive actions and that the customer through the aid of an interactive use of IT can conduct self-supporting actions (Rowley, 2006). Meuter et al (2000, p 50) define and exemplify the concept of SST as follows: "Self-service technologies (SSTs) are technological interfaces that enable customers to produce a service independent of direct service employee involvement. Examples on SSTs include automated teller machines (ATMs), automated hotel checkout, banking by telephone, and services over the Internet, such as Federal Express package tracking and online brokerage services."

Fundamental to all these typical examples, and the whole meaning of the concept of SST, is that the service providers automate their actions, while the customer makes the job interactively through the use of IT systems in some form and without meeting the service provider "face-to-face".

This orientation of SST also implies a technical view on the customer and service provider interaction. SST is not described as a social interaction in the sense that the customer and the service provider (as social actors) interact with each other through the use of IT systems. Instead SST is described as the customer (as an actor) interacts with the IT system of the service provider. This is done in order to be informed or in some cases to perform actions (e.g. Meuter et al, 2000; Dabholkar et al, 2003, Bitner et al, 2002; Parasuraman, 2000; Rust & Kannan, 2003).

The service orientation is essential in SM, but the SST view on e-services seems to be too restricted to technical interaction and use. A view on e-services as implying social interaction is missing.

The discipline of information systems (IS) has traditionally been rooted in a systems view (Langefors, 1966). This is often based on a management and intra-organisational perspective. An IS is part of an organisation and it is used by its employees. A service perspective means a move away from a traditional systems perspective (Dahlbom, 2002; Mathiassen & Sørensen, 2008). Dahlbom (2002) explains this move from systems to services in the following way: "Information systems are technology support for bureaucratic, factory organizations. Information services are technology support for individuals acting on a market. Information systems are specified and developed in a complex process involving users, and the systems continue to rely on their users for their identity and maintenance. Information services are made available on the consumer market to be bought or discarded. The individuals using

the services are not engaged in developing them; they don't own them and they have no responsibility for them."

When talking about e-services rather than IT systems, there is obviously a crossing of organisational borders. A key aspect is that a supplier is technically providing some service to customers outside the supplying organisation. In the IS discipline there has been an influence from the SST view (e.g. Schultze, 2003; Kaitovaara & Nurminen, 2003). This means a focus on customer – artefact interaction. There are however other views within IS. Goldkuhl (2007) adopts a communication view on e-services. A public e-service is defined in the following way: "A public e-service is, through appropriate information technology, delivered useful messages from governmental agency to citizens, or affordances of communication from citizens to governmental agencies" (ibid p 156). This means a view emphasising communication (social interaction) between provider and customer/client through the use of shared IT means. Mathiassen & Sørensen (2008) has developed a theory on information services based on the paradigm shift from systems to services. In their theory different forms of social interaction (encounters, collaboration) are accounted for.

When moving services from a human-to-human domain to a technical domain, this does not mean that social interaction ceases to exist. A customer using an e-service is at the same time interacting 1) with a technical device and 2) with distant social actors. This follows clearly from the principle of pragmatic duality (Sjöström & Goldkuhl, 2004).

There is a need to research this emerging phenomenon of e-services without

- being technically restricted and leaving out the social interaction between customers and service providers

- applying a too traditional systems view on the use of the IT artefact and neglecting the service dimension

1.2 A social interaction view on e-service: main research interest

What is presented in this paper is part of a larger research endeavour that studies e-services from a social interaction perspective. This perspective makes the underlying social interaction come through when investigating e-services. E-services imply social interaction between customers and service providers and sometime also between different customers. This basic conceptualisation of e-services has been depicted in figure 1.

Three research questions (Hultgren, 2007) have been stated in order to address this research interest:

- What does the use of IT in an e-service context imply?

- What concepts and goals/values are significant for understanding an e-service?

- What additional concepts and goals/values are significant for understanding how a number of e-services can co-exist?

Results from this research endeavour have been presented elsewhere (Hultgren, 2007; Hultgren & Eriksson, 2005, 2006). This includes conceptual development, literature reviews, empirical studies and articulation of knowledge contributions in terms of a practical theory on e-services. The notion of e-service is defined in this research in the following way: "An eService is social interaction between a service provider and a customer - and possibly also between customers - through the use of

the service provider's IT system and with the aim of providing actions and results for the customers." (Hultgren, 2007, p 333).
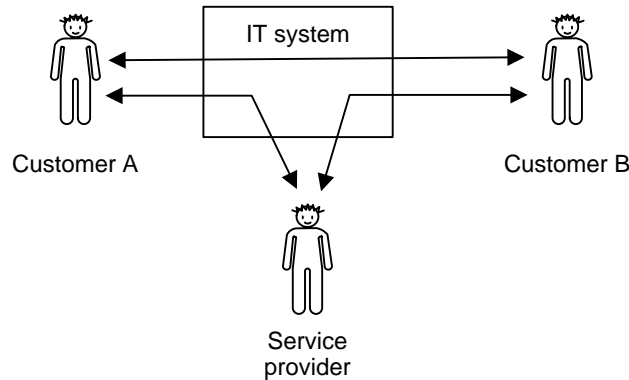

Figure 1: E-service as social interaction between a service provider and different customers (from Hultgren, 2007)

1.3   Purpose and procedure

The purpose of this paper is to elaborate on *how to research* e-services as social interaction. This particular view on IT artefacts needs a research approach that is well adapted to the view. This means that this paper contributes with meta-knowledge concerning e-service research. It does not describe in detail any new knowledge about e-services. As stated above, this has been done elsewhere (Hultgren, 2007; Hultgren & Eriksson, 2005, 2006). Instead it contributes with knowledge on how to conduct research on e-services. This includes also knowledge about ways to express the generated knowledge.

The main research interest in this paper is thus how to conduct research on e-services as social interaction and how to adapt research principles and approaches to this kind of research.

The main research process has been performed as practice research and partially as action research. Different concepts within these research approaches will be discussed. Motives to conduct the research in these ways will be investigated and clarified. The main research study has applied a multi-grounding epistemological strategy. The research-based knowledge has been expressed in terms of a practical theory. The notion of a practical theory will be investigated in relation to e-service knowledge. The research principles of practice research, practical theory and multi-grounding will be presented and discussed in section 2. In section 3 the applied research approach will be presented. The paper is ended in section 4 with some experiences from the research.

This paper should be seen as a clarification and description of a qualitative research approach within IS that can be labelled "multi-grounding practice research". The research contribution of this paper is how to combine these different research principles into one coherent research approach. As meta-research it is of course related to the specific research conducted. This specific research functions as empirical data for the kind of meta-research presented in this paper. The study object of this meta-research is depicted in figure 2.
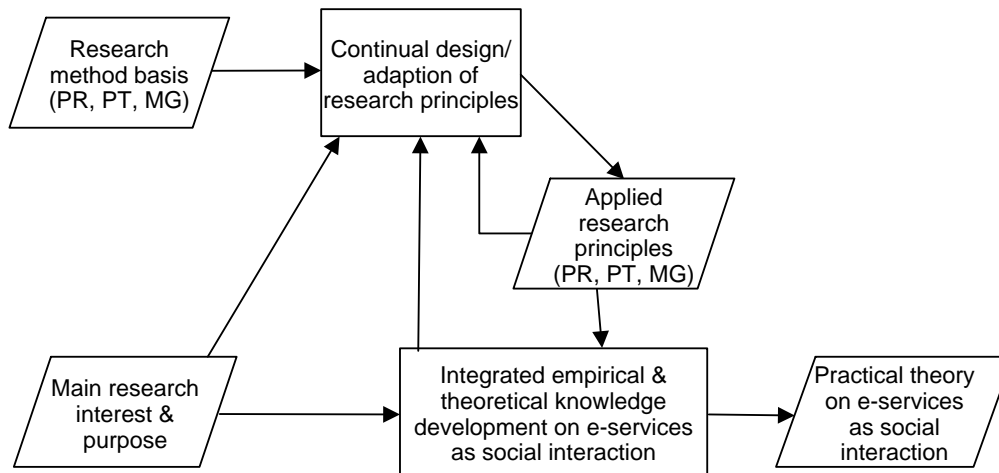
Figure 2: Research objects of the conducted meta-research (contextual view)

The lower parts of the figure describe the main conducted research on e-services as social interaction (from main research interest through empirical/theoretical research process to results in terms of a practical theory). The upper part of the figure describes the research principles applied. This part consists of 1) the research method basis (the basic principles of practice research, practical theory and multi-grounding), 2) the process of designing and adapting research principles to the main research endeavour and 3) the applied research principles. The adaptation is of course governed by the main research interest and is also influenced continually by the main research process.

The main research objects of this presented meta-research are the applied research principles. In section 3 these principles will be described with reference to their use in the main research process. The research principles must be understood in relation the main research purpose (described above in section 1.2), the general research principles of practice research, practical theory and multi-grounding (described in section 2) and the results from the main research (briefly described in section 3.6).

2 Research principles: Practice research, practical theory and multi-grounding

The performed research on e-services has been conducted according to principles of practice research (Goldkuhl, 2008; 2011) and multi-grounding (Goldkuhl & Cronholm, 2010) aiming for a practical theory (Cronen, 2001; Goldkuhl, 2008). The principles of practice research are described in section 2.1 below. The principles of practical theory are described in section 2.2 below. The principles of multi-grounding are described in section 2.3 below. In section 3 the conducted research process is described.

2.1 Practice research

Practice research (PR) is a research approach that aims at creating knowledge for both research communities and the practice field. It is conducted through an inquiry into some local practice. This kind of inquiry (Dewey, 1938; Cronen, 2001) is performed

with an interest of change and improvement. PR is based on an important distinction between local practice and general practice (Goldkuhl, 2008; 2011; 2012). Local practice is what is studied through practice research. PR creates abstract knowledge (based on a situational inquiry into some local practice) that is aimed for general practice and research communities (figure 3). General practice should not be conceived as *one* particular practice. "When talking about general practice we mean *a set of different practices with relevant similarities*" (Goldkuhl, 2011 p 10).

Practice research can be conducted through action research (AR). An established definition of AR is given by Rapoport (1970): "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". In terms of PR, this means that AR aims at a local practice contribution and at a contribution to the research community. As Goldkuhl (2008; 2012) has noted, there is no emphasis in AR to contribute to general practice. In PR, this is stated to be the most important aim; i.e. a general practice contribution. In PR the local practice contribution can be of diverse types. There can just a diagnosis of the studied local practice; but there can also be design proposals and implementation of changes (Goldkuhl, 2008; 2011; 2012). In AR it necessary to have a local practice contribution that comprises change, but this is not necessary in PR. This means that practice research is a broader research approach that encompasses other practice oriented approaches like action research, design research and evaluation research (Goldkuhl, 2011; 2012). Design research (e.g. Hevner et al, 2004) aims at constructing artefacts and assessing their utility. As mentioned, this kind of research can be seen as one kind of practice research. PR can comprise design of artefacts but can also be restricted to studying already designed artefacts and their uses.
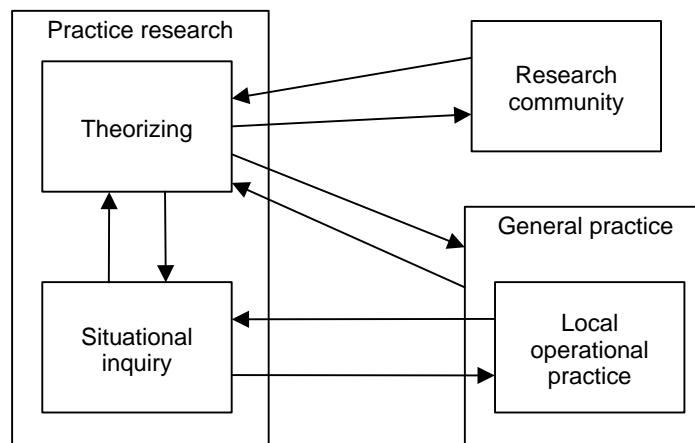

Figure 3: The anatomy of practice research (based on Goldkuhl, 2011).

2.2 Practical theory

Practical theory has been described by Cronen (1995; 2001), Craig & Tracy (1995) and Goldkuhl (2008). Practical theory can be seen as result from practice research. The concept of practical theory has a focus on the *use* of the theory (Cronen, 2001); i.e. a functional view of theory. A practical theory is seen as formalised knowledge aimed to be a support for researchers and practitioners when investigating and im-

proving practices. Cronen (2001 p 26) describes it in the following way: "a practical theory informs a grammar of practice that facilitates joining with the grammars of others to explore their unique patterns of situated actions".

Cronen (2001) asserts that a practical theory is meant to function as grammar in use by different actors (can be both practitioner s and researchers). This follows the wittgensteinian view of grammar as a set of rules to support human action and social life (Wittgenstein, 1953). Practical theory is further described by Cronen (1995 p 231) in the following way: "They are developed in order to make human life better. They provide ways of joining in social action so as to promote (a) socially useful description, explanation, critique, and change in situated human action; and (b) emergence of new abilities for all parties involved".

Important to note is that a practical theory is aimed as both an addition to the scientific body of knowledge and a contribution to the management and improvement of practices (figure 4). Cronen (2001 p 30) motivates the use of a practical theory in the following way: "Its use should, to offer a few examples, make one a more sensitive observer of details of action, better at asking useful questions, more capable of seeing the ways action are patterned, and more adept at forming systemic hypotheses and entertaining alternatives". This makes a practical theory a useful instrument for researchers conducting an inquiry (as part of PR). A practical theory can be a base for practice research; it can emerge as useful conceptualisation during practice research; and it can be result from practice research aiming for both research community and general practice (figure 4).
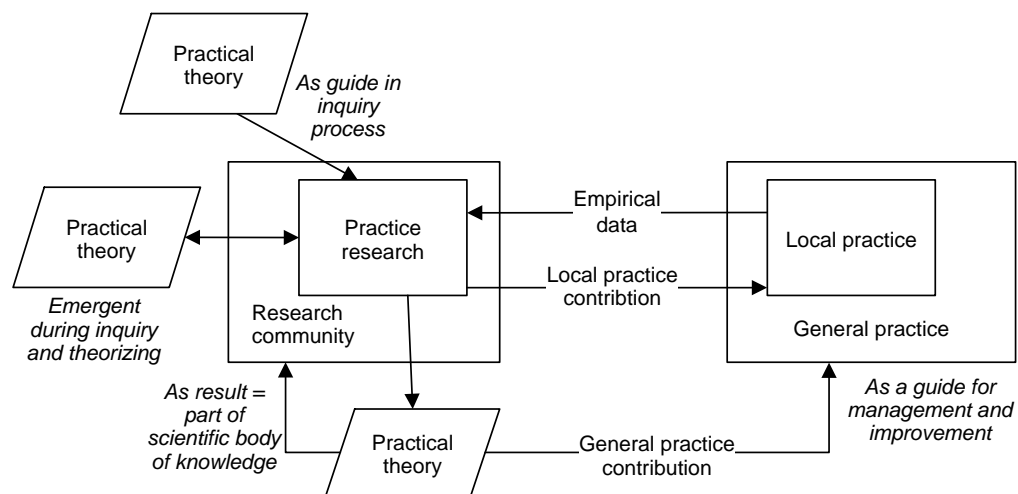

Figure 4: Different roles of practical theory in practice research (based on Goldkuhl, 2008).

The notion of practical theory emphasises that the theory should be used for certain purposes. The theory can be used to better understand a phenomena. This equates the theory purpose of analysis (Gregor, 2006). A practical theory can also be used as a cognitive instrument for design; another theory purpose stated by Gregor (2006). Such theories are nowadays often labelled design theories (Gregor & Jones, 2007).

A practical theory is considered to contain the following constituents (Goldkuhl, 2008):

- Conceptualisations

- Patterns

- Normative criteria

- Design principles

- Models

By *conceptualisations* we mean central concepts, which are used to talk about the phenomena that the practical theory designates. This includes objects, actors/actants, activities and properties of these and relations between them. By *pattern* we mean generalizations about how empirical phenomena tend to work. These patterns are based on principles of intentional action and they thus not normally follow strict deterministic patterns of cause and effect. By *values* we refer to the "good", i.e. how phenomena should be. Such values can apply to both the evaluation of existing phenomena and for designing new. By *design principles* we mean how (good) examples of these phenomena should be designed (in an abstract and general level) in relation to the values described. These design principles are thus more concrete than the values, but not as specific as methods for design. By *models* we mean crystallisations of key aspects of the practical theory in order to serve as analytical instruments. These models can be presented as graphical figures or tables.

2.3 Multi-grounding

Multi-grounding can be seen as an epistemological strategy. It is defined in relation to the epistemological strategy of grounded theory - GT - (Glaser & Strauss, 1967; Corbin & Strauss, 2008). GT is based on data-driven and inductive knowledge development strategy. Grounded means in GT a theory grounded in empirical data. In multi-grounding, a broader grounding approach is adopted. Three kinds of grounding strategies are combined (Goldkuhl, 2004; Goldkuhl & Cronholm, 2010):

- Empirical grounding

- Theoretical grounding

- Internal grounding

Empirical grounding equates the data-grounding of GT. The multi-grounding approach adds to this, theoretical grounding (grounding in external theories) and internal grounding (making the developed knowledge congruent). Figure 5 depicts the three grounding strategies.

One basic idea of GT is to build theory from data. This means that data is used for both generation and validation. In multi-grounding, more knowledge sources are used. External theory as well as the emergent theory in itself can be used in generation processes. The concept of grounding includes both generation and validation. This means that the three knowledge sources (figure 4) may be used in generation and as a means for validation. Another important trait in multi-grounding is the use of recurrent grounding processes (Goldkuhl, 2004; Goldkuhl & Cronholm, 2010). Abstract knowledge (theories, methods) is developed continually through alternating between generation and validation and between the three grounding strategies.
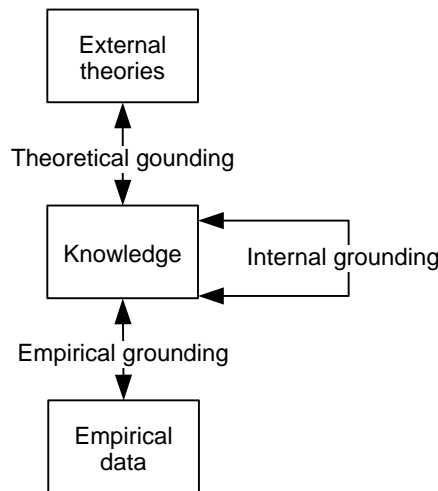
Figure 5: Multi-grounding: Combination of three grounding strategies
(based on Goldkuhl, 2004).

3 The conduct of e-service research as multi-grounding practice research aiming for practical theory

3.1 Basic motivations

The research on e-services has been conducted through multi-grounding practice research. It has been driven by a knowledge interest to clarify e-services as elements of social interaction; see section 1.2 above and Hultgren (2007) and Hultgren & Eriksson (2005, 2006). This means that IT systems and their e-services have been studied with clear references to different actors (customers and service providers). It has been necessary to link messages and processes of IT systems to their human origin and their human destination as parts of communication endeavours.

The overall goal of this research has been to create knowledge that is *useful for practitioners*. This motivates the use of practice research as a research approach and the production of knowledge result as a practical theory. The practical theory aims to be useful for *analysis* as well as for *design* of e-services. The use of the practical theory should contribute to the creation of a *meaningful understanding* of studied/designed e-services. Most parts of this research have been conducted with the aim of improved understanding and better conceptualisation of e-services and have not comprised explicit efforts for design and change. This means that a practice research approach has been the primary approach instead of action research and design research. There have been some elements of support to the design of e-services included in this research (described in section 3.5 below). These parts of the research can be seen as practice research conducted as action research and design research.

The research has been conducted based on the idea of a *continually evolving practical theory*. There have been *recurrent studies* of e-services where *different versions* of the practical theory have been applied as a *conceptual instrument*. The research has been conducted over a long period of several years (from 2002 to 2007) with many planned iterations.

3.2 Multi-triangulation and combined grounding

Triangulation is valued important in social research. There is a classical distinction into data, investigator, theory and method triangulation (Denzin, 1978). All these triangulation strategies have been applied in this research, but we have added more to it. We distinguish between:

- Different types of grounding strategies

- Different base theories coming from different disciplines

- Different types of investigators

- Different types of studied situations/practices

- Different types of inquiries

- Different types of data

- Different empirical objects

These different types of triangulation will be described below. The research has consisted of a combination of *grounding strategies* (figure 6). It has used three types of grounding strategies (see section 2.3 above):

- Empirical grounding

- Theoretical grounding

- Internal grounding

The use of these three grounding strategies has been an important trait of the research process and this makes it as typical multi-grounding approach and not a plain GT application. The roles of internal and theoretical grounding will be clarified in sections 3.3 and 3.4 below.

The practical theory has evolved through different research phases. There have been six distinct versions of the practical theory. In each of these phases all three grounding strategies have been applied. It has not been the case of some defined sequence between the grounding strategies. The different grounding procedures have been applied at several times during the research in order to reach saturation.
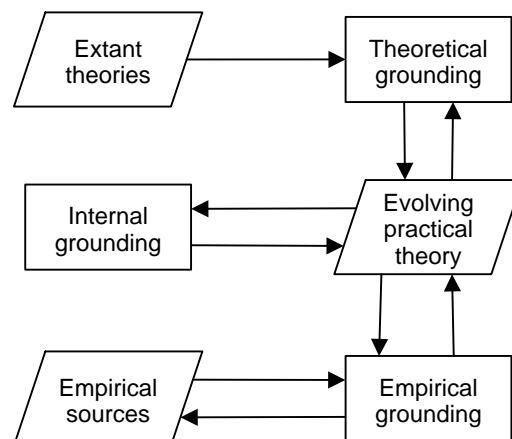

Figure 6: Application of three grounding strategies

3.3 Conceptual refinement through internal grounding

By internal grounding we mean that the practical theory was examined for how utilised concepts relate to each other and how logical and consistent this conceptualisation is. Conceptual modelling was used during the research to continuously analyse concepts and the conceptual congruence of the practical theory. Yet another way to carry out internal grounding was the production of educational materials, lectures and tutorials (see section 3.5 below). Ambiguities, obscurities and conceptual gaps were discovered in those communicative situations.

3.4 Theoretical integration and grounding

The practical theory of e-services should be seen as an inter-disciplinary theory. Besides information systems theories it has used theories from two other areas for its development and grounding: Social interaction (sociology) and service marketing. The main influential theories have been:

- Social interaction/sociology: Communicative action theory (Habermas, 1984) and symbolic interactionism (Blumer, 1969)

- Service marketing: The Nordic School (Grönroos, 1990; Edvardsson et al, 2000; Gummesson, 2002)

- Information systems: IS actability theory (Cronholm & Goldkuhl, 2002; Ågerfalk, 2003; Sjöström & Goldkuhl, 2004; Goldkuhl, 2009)

The e-service theory should be seen as a theoretical amalgamation of these different theoretical perspectives. There are of course discrepancies and incongruencies between these base theories. But there are of course also theoretical affinities and similarities between them otherwise they would not be possible to use in a joint theory development. The social interaction and practice view has been a joining force in the theoretical development and integration. This means that the explication of actors/roles (service providers and customers), the artefact (IT system), the different actions and message types have governed the theory development and how different parts of the base theories have been integrated into a coherent whole. The essential parts in the theoretical grounding have been conceptual and value grounding (Goldkuhl, 2004). The different concepts and values in the practical theory have been related to, and made coherent to the external theories mentioned above. The continual work with internal grounding (conceptual refinement) has contributed to coherent synthesis of these different theoretical perspectives (i.e. the extant theories in figure 6).

3.5 Empirical triangulation and grounding

The main unit of analysis has been *IT system in use delivering e-services*. In empirical studies there have been different *investigators* studying such e-services. The principal researcher (Göran Hultgren) has studied several e-services. There have, however, been several other investigators as well. The evolving practical theory has been used in education in a planned and systematic way. The e-service has been presented in several courses (mainly to master students), and it has been used by students in studies of existing e-services and in some cases in design of new e-services. Some of these students were also working in practice with e-services. It was not only a matter of increasing the number of studied e-services when enrolling students for empirical

work. More important was the possibility to let other investigators use the practical theory as a conceptual instrument in e-service inquiries. The idea behind practice research and practical theory (see sections 2.1-2 above) is to create abstract knowledge that is useful in general practice. Therefore it was very important to test the use of the practical theory by other investigators. This included how they could use the practical theory, their understanding of the theory and of studied e-services and experiences from their inquiries.

We can differentiate between three *studied practices*:

- The use of e-services

- The analysis of e-services

- The design e-services

As stated above the primary study object (unit of analysis) of this research has been "IT system in use delivering e-services". This corresponds directly to first mentioned practice. This primary practice (e-service use) has been studied through the second practice (e-service analysis). E-services have been studied through inspections of user-interfaces/screen documents. These inspections have included the use of the IT artefact in order to reveal different actions. It was necessary to map actions conducted by the customer, service provider and the IT system. The IT system was seen as an agent conducting actions on behalf of some human actor according to IS actability theory (e.g. Ågerfalk, 2003). The different actions conducted by the IT system were classified as performed on behalf of either the service provider or the customer. This means that in some cases the IT system was a service provider agent and some cases the IT-system was a customer agent. This kind of uncovering of different IT-mediated actions as performed by different actors/communicators was fundamental for studying e-services as social interaction. The research aimed at making the communicative actions of providers and customers visible and not blurred as elements of self-service technologies.

One of the key purposes of the developed practical theory was to create a conceptual support to analyse and understand e-services (the second practice). This means that the practical theory has been used and studied when analysing e-services. These are the main applications of the practical theory. There are also some applications of e-service design (the third practice).

There have been three *types of inquiries* following the distinctions above:

- Analysis of existing e-services (own studies by the principal investigator)

- Analysis of existing e-services (student studies)

- Design of e-services (student studies)

Approximately 60 student cases have been conducted. The last version of the practical theory has been tested and used in eight investigations of existing e-services by the principal researcher. The earlier versions of the practical theory have also been used in many similar studies.

Some of the student studies of existing e-services have included active supervision, which means some involvement of the principal researcher in these secondary investigators' studies. In some other student studies there has been no involvement of the principal researcher as a supervisor. Some student cases of e-service design have also been included in the research. These cases contain researcher supervision. These

design studies include thus action research and design research (as special cases of practice research). The principal researcher is here participating in a practice improvement process.

Following these different types of studied situations and inquiries, different types of *data* have formed the empirical bases for this research:

- E-services and the analysis/design of them (e-service accounts)

- Interviews of persons conducting analysis/design of e-services

- Participant observation during teaching and supervision

The eight last investigations of e-services using/testing the practical theory were selected in order to warrant appropriate variations. The studied *empirical objects* (e-services) were chosen based on the following criteria:

- Variation in relations between service providers and customers

- Variation in relations between customers and customers

- Variation in complexity concerning co-existing e-services

- Variation in IT use-situations

- Variation in media (internet vs. mobile phone)

3.6   Practical theory

The core of the developed practical theory is a set of *defined concepts* and *relations* between them. The most essential concept relations are expressed as a *set of rules*; confer the notion of grammar above (section 2.3). Six rules have been stated (Hultgren, 2007; Hultgren & Eriksson, 2005, 2006):

- E-services are supplied in the relationships between a service provider and customers

- E-services imply that actions and results are supplied to the customers

- E-services are supplied through the use of IT systems

- E-services are supplied by means of customers utilising the service provider's IT system

- E-services are supplied in social interaction through the use of IT systems

- An e-service can co-exist with other e-services

The practical theory consists also of *values* related e-services and their use. The concepts/rules and values form a basis for usage in analysis of e-services. A *set of steps/questions* have been generated based on concepts/rules and values to be used during analysis of e-services. One important part of the practical theory is the use of different graphical *models* like e.g. figure 1 above.

The aim of this practical theory is to be used for analysis of existing e-services and also for the design of potential e-services. This means that the broader notion of practical theory has been applicable instead of design theory. The practical theory is possible to use for design endeavours.

4 Conclusions: Experiences from this research approach

The research approach for studying e-services as social interaction was not settled in the beginning of this research endeavour. As a typical example of qualitative research, the approach has emerged during the research process. As described, there has been a fruitful combination of several different research principles (practice research, practical theory, multi-grounding). This elaborated research approach has made it possible to

- Address the stated research questions in an appropriate way

- Develop a practical theory that is trustworthy, meaningful, applicable and useful

- Move beyond a techno-centric view of e-services and reveal different communicative actions conducted by different actors and not restricted to elements of self-service technologies

- Reach a practical theory (including a e-service definition) that is both empirically and theoretically grounded

- Integrate conceptual elements from different theories outside and inside information systems into a coherent whole

- Continually sharpen the conceptual core of the practical theory

- Work stepwise in a controlled and planned fashion with theory development

- Combine researcher-led inquiries with inquiries conducted by other investigators

The development of the practical theory has been based on the views of this type of theory as expressed by Cronen (1995; 2001) and Goldkuhl (2008). As said, the evolved practical theory integrates elements from different existing theories; both within IS, as IS actability theory (e.g. Ågerfalk, 2003), and outside IS, such as communicative action theory (Habermans, 1984), symbolic interactionism (Blumer, 1969) and the Nordic school of service marketing (e.g. Grönroos, 1990). The evolved theory implies a shift from techno-centric view of e-services, as expressed within SST (e.g. Dabholkar et al, 2003; Meuter et al, 2000) to a social interaction service view (Goldkuhl, 2007; Mathiassen & Sørensen, 2008).

The purpose of this paper was not to describe the results of conducted research on e-services as social interaction. As mentioned, this has been elsewhere. In this paper we have clarified how such research can be conducted in an appropriate way. This paper is a piece of example of meta-research within information system. It discusses different research principles and shows how these principles have been adapted, used and combined in a larger research setting. This paper should not only be of value for scholars with a specific interest for a social interaction perspective on e-services. Our belief is that what has been described here should be of value for scholars with a much broader interest for qualitative research in information systems.

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About the Authors

Göran Hultgren (1960 – 2009) was a Senior Lecturer of Information Systems in information systems at Dalarna University Sweden. In 2007 he presented his PhD dissertation in Swedish where he presented his practical theory of e-service, but he did not write so many papers in English on this subject. His research interest was in theories and methods for organizational development in network settings supported by inter-organizational information systems and e-services. He also contributed a lot to the research in informatics in the tourism- and travel- industry, a business that has changed considerably due to the emergence of the Internet and e-services. One of the unique contributions of his research was the way he worked together with the students, and how skilful he was to use his research in education. The practical theory on e-services is a role model for this. The theory was developed in close interaction with the students, and the thesis is used in a number of university courses. Due to his talent for teaching, and his ability to combine research and education he was an excellent scholar. His emphatic and warm personality, a sharp analytical mind, combined with a practical efficiency of getting things done made him a person with a unique set of talents, and he always used them to help other people. He was a friend you always could depend upon. He is no longer here among us, but his memory, ideas and work will remain and always inspire us.

Göran Goldkuhl, PhD, is professor in information systems at Linköping University Sweden. He is the director of the Swedish research group VITS (www.vits.org). He is currently developing a family of theories and methods, which all are founded on socio-instrumental pragmatism; theories as Workpractice Theory, Business Action Theory, Information Systems Actability Theory; and methods for business process modelling, problem analysis, communication analysis, e-service design, user-interface design, information modelling and IS evaluation. He has a great interest in pragmatic and qualitative research methods and he has contributed to the development of Multi-Grounded Theory (a modified version of Grounded Theory) and Practice Research (integrating evaluation research, design research and action research). He has published several books and more than 150 research papers at conferences, in journals and as book chapters. He has published in conference proceedings of ALOIS, ECIS, DESRIST, ICIS, ICISO, ISD, LAP, POEM among others. He has published in journals as Australasian Journal of Information Systems, Business Process Management Journal, Communications of ACM, Communications of AIS, European Journal of Information Systems, Information and Organization, International Journal of Information Systems and Social Change, International Journal of Qualitative Methods, International Journal of Technology and Human Interaction, Journal of Information Technology Theory and Application, Semiotica, Transforming Government: People, Process and Policy, among others.